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LOYOLA UNIVERSITY CHICAGO

TEACHERS’ CONCERNS REGARDING THE IMPLEMENTATION OF INTEGRATED THEMATIC INSTRUCTION: A STUDY OF PRIMARY GRADE TEACHERS IN KANISIUS CATHOLIC SCHOOLS IN YOGYAKARTA, INDONESIA

A DISSERTATION SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL OF EDUCATION IN CANDIDACY FOR THE DEGREE OF DOCTOR OF EDUCATION

PROGRAM IN CURRICULUM AND INSTRUCTION

BY

CATUR RISMIATI

CHICAGO, ILLINOIS

MAY 2012
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DEDICATION

I dedicate this dissertation to my family and my professors, especially ..... 

To Jesus & Mary, for all the blessings

To mom and dad, for all the years of love and guidance

To Manuel and Gabriella, for patience and understanding

To Ann Marie Ryan, Ph.D. and David Ensminger, Ph.D., for inspiring me

to work with heart, hand and head.
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ABSTRACT

The purpose of this study was to explore primary grade teachers’ stages of concern and their implementation of an educational reform initiative called Integrated Thematic Instruction (ITI) in Indonesia. The Indonesian minister of education mandated primary grade teachers to implement ITI in 2006. Using a convenience sampling method, 150 Kanisius primary grade teachers participated in the study. The data collection method used was a questionnaire that consisted of three parts: The Stages of Concern Questionnaire (SoCQ), the Integrated Curriculum Implementation Scale, and demographic questions. The data analysis employed in this research were descriptive, a one way ANOVA test and multiple regression. The result of the study revealed that the teachers have unresolved awareness and self-informational concerns with a slight tailing up in the impact-refocusing stage. This study also found that teachers’ degree of ITI implementation was high some five years into this reform initiative. Additionally, there were no differences among the different groups with different attitudes and behaviors related to ITI implementation as measured by the SoC. Administrative support was found to be the most important predictor of the ITI implementation followed by the number of students taught and educational degree. An increase in respondents’ perception of having administrative support and their educational background increased the degree of ITI implementation, while an increase in the number of students lowered the degree of ITI implementation. Recommendations of this study include the need for
administrative support to stimulate the interest of teachers in using ITI, to facilitate a climate conducive to continued use of ITI, to provide the most appropriate type of professional development for teachers, as well as to build a comprehensive system for monitoring, supervising, and scaffolding teachers’ implementation of ITI.
CHAPTER I

INTRODUCTION

Like many other developing countries, Indonesia has undergone significant educational reform in recent decades. However, no major improvements in student achievement have been identified in national exam scores. Recent studies by the Ministry of National Education (MONE) and the Indonesian Department of Education have shown that students are not satisfied with their learning outcomes, there is no significant improvement in their achievement, and they are unprepared for the work force (MONE, 2001b).

These studies identified several factors that cause a lack of quality in Indonesian education. One of the main factors noted was that reform efforts mandated from top levels do not result in frequent changes in classroom instruction. As Guskey (1988) said that although the execution of meaningful and beneficial change in classroom practice sometimes requires only minor changes in the classroom activities of teachers, in many cases it will require a new curriculum. Although these major types of changes can create some opportunities for instructional improvements, they are not always likely to be effectively executed by teachers to enhance learning in the classroom (Chan, Chan, Cheung, Ngan, & Yeung, 1992). The Indonesian government has taken broad measures to clarify and standardize learning objectives in recent years, specifically through legislation known as “Curriculum 2006.”
There is a considerable effort to implement educational reform particularly in teaching practices at the elementary school level that align with the National Education Standard particularly the Process Standard in Decree of Education Minister No. 41/2007, the Content Standard in Decree of Educational Minister No 22/2006 and the Graduate Competency Standard in decree of Educational Minister No 23/2006 developed by the Indonesian Department of Education. These standards support Curriculum 2006 or KTSP (Kurikulum Tingkat Satuan Pendidikan or Curriculum at School Level). The curriculum is a competency based curriculum, highlighting a shared responsibility between school and government and calling for a change in the teaching-learning process. The government set up the standards of competency and basic competencies for students at all levels of education. In order to implement the standards, the schools have to derivate the standards into measurable indicators of learning for students. All the schools throughout Indonesia have to follow the standards and were to have them implemented by the end of the academic year of 2009-2010 (MONE, 2008a). The standards articulate a broad perspective on educational reform from the philosophical underpinnings to a framework for curriculum and instruction within local schools.

Part of this legislation requires that school subject matter be taught according to thematic units in grade 1, 2 and 3 through a method commonly known in the U.S. as Integrated Thematic Instruction (ITI). To effectively employ ITI in the classroom, teachers must work independently and collaboratively to create a planning document that outlines theme focus and interdisciplinary integration. However, according to an investigation by the Indonesian Department of Education, only 13% of teachers
nationwide had completed this document (MONE, 2008a). Although the Indonesian national government has made dedicated efforts toward initiating reform, these efforts are falling flat in daily classroom application. Although the literature provides some answers to support the implementation of the standards, more research must be conducted to provide answer for local reform. This is true because teachers administer the curricular reform and ultimately the degree to which student learning occurs, it is important to know if the standards are being implemented and to understand the concerns of teachers (Rakes & Casey, 2002).

For decades, educators and policy makers have attempted to improve the educational system through many different approaches, but with limited success. Change on a broad scale is systemic, and “systemic change is change that occurs in all aspects and levels of the educational process and that affects all of the people included in this process (i.e., students, teachers, parents, administrators, and community members)” (North Central Regional Education Laboratory, 2002).

Fullan (2001) noted there are two major problems facing schools, one is fragmentation and the other is overload. Fullan said that not only schools are facing unstable and uncertain environments; they also encompass the additional burden of having a number of unnecessary changes in both policies and practices. On the one hand, these changes have the potential to raise the level of concern of school faculty and take their attention away from their primary obligation to teach. On the other hand, depending on the quality and the degree of dependability of the changes implemented across an organization are not, in many cases, uniform (Hall & Hord, 2001).
According to Cohen and Ball (1990), such changes may include inequity in the classroom. Based on issues such as: (a) uncertainty in the environments, (b) unwanted and uncoordinated policy changes, (c) poor degree of commitment of implementation, and (e) inequity in the classroom, the purpose of this study was to investigate the concerns of primary school teachers in the implementation of ITI and to investigate whether or not teachers’ backgrounds have any relationship to their concerns. The argument in most curriculum reform is that the largest share of responsibility for implementation and improvement was placed on the classroom teachers (Cavelti, 1995). Moreover, to date we have found no empirical research regarding teachers’ concerns about curriculum policy implementation, in general, and teachers’ understanding of ITI implementation, in particular, in an Indonesian context.

The integrated thematic instruction was selected as the subject of this study for several reasons. First, only a small percentage of students’ experience contextual learning in their study, the majority receive the instruction based on subject matter. As a result the rate of retention and drop outs is quite high especially for the first graders (MONE, 2008a). Second, the retention and dropout rates are worse in remote areas that have little to know kindergarten instruction (MONE, 2008b). Third, the majority of students expect their first learning experiences to take place during primary school; as a result, due to this notion, those students are not prepared to enter primary school and learning is an obstacle in some required subjects (language, civics, social studies, science, and religion). Another obstacle is “local content curriculum” (LCC), which requires pupils to study other subjects, including, local language, arts, etc.). The consequence of
which is that pupils have to develop simultaneous skills in some subject matters unfamiliar to them (Sweeting & the Early Grade Project Task Team, 2000). Finally, the current Indonesian government report shows that teachers’ understandings of core primary subjects remain low, i.e., Indonesian Language (51.5%); social studies (38.3%); sciences (43.5%); and math (36.5%) (MONE, 2003f). Although the Indonesian government has committed to, financially and educationally, increasing the quality of human resources through curriculum reform since the 1990s. This researcher found no related study that had examined the effects of national curriculum reform policies on the teachers’ concerns on the work of teachers in classroom.

Curriculum integration has become an essential theme in discussions on school reform during the past 10 to 15 years (Carnevale, 2004; Erickson, 2001). Educators involved in curriculum integration have become aware of the impact of this approach to education. Martin-Kniep, Feige and Soodak (1995) stated that well thought out integration can help students to "understand the connections between apparently disparate bodies of knowledge and better appreciate the inherent complexity of the world we live in" (p. 227). Erickson (2001) stated that the aim of the integrated curriculum was “to cause students to integrated their thinking at a conceptual level by seeing the patterns and connections between transferable and connections between transferable, conceptual ideas and the topic under study” (p. 69). Many educators have observed how an integrated curriculum can inspire students' focus and engagement (Hargreaves & Moore, 2000).

Curriculum integration is not a new idea, but it has been restated. There are two possible reasons for integrating curriculum. The first reason has to do with the current
demand on the work force, and the second reason concerns the pedagogy. The work force of developed nations has changed substantially during the past years. Miller and McCarten (1990) argued that not only are blended fields, such as biophysics and ethnohistory, becoming more common, but also that the most significant research in these fields is happening in the areas where these disciplines overlap. For example studies by particle physicists on characteristics of fundamental components of matter have become relevant to cosmologists as they attempt to understand the beginning and evolution of the universe (Haseltine, 2002). Therefore, using curriculum integration is believed to be able to prepare students for the increasingly broader and more complex demands on people-skills in the workforce.

In terms of the second reason, pedagogy, Gaff (1989) says that it has been shown that learning is more effective when knowledge is structured into relevant units. Additionally, Perkins (1991), states that most students are capable of memorizing and understanding concepts superficially but they lack in great part the ability to transfer knowledge from one discipline to another. Therefore, the proponents of curriculum integration have suggested the use of the integrated curriculum to provide the chance for students to develop deeper understanding, transfer across subjects and have greater appreciation of the relevance of their education into their life (Fogarty, 1991a; Jacobs, 1989). Although no one asserts that the interdisciplinary approach would solve all problems or difficulties faced by the present education system, given the shifting demands in the workforce and abilities to live a satisfying life, and the lack of relevant
and transfer of learned skills, the benefits of curriculum integration promise worthwhile options.

**Statement of the Problem**

While there is a great deal of literature that claims student learning outcomes and assessment have been successfully implemented at specific institutions, there is little information regarding day-to-day implementation (Schifter, 2002). The literature suggests that “effective improvement on a large scale cannot even be approximated as long as policymakers, education leaders, and research continue to treat systemic change as afterthought. Systemic change involves modifications that amount to a cultural shift in institutionalized values” (Adelman & Taylor, 2007, p. 55). There is little evidence of research for how school teachers intend to move from where they are to where they want to go. The lack of attention paid to implementation, policy analysts are inclined to present the results of “what works” to teachers and then leave the problem of implementation to them (Cohen, 2004). Therefore, in the absence of evidence of the intensity of institutionalization, particularly in the parochial private education system, there is a need to empirically examine teachers’ concerns about the implementation process, including the context within which the change is to take place.

According to Hall and Hord (1987, 2001), school teachers will have differing thoughts, feelings, attitudes, and perceptions – framed as “concerns” – about the adoption and use of innovations such as ITI in the classrooms. Consequently, school administration must also understand that not every teacher will automatically appreciate the innovation and new demand of the curriculum, or the value of using the ITI to support
their teaching efforts. It is very natural for the individuals involved in an innovation to have both positive and negative questions, feelings, and emotions, regarding a new system or process (Holloway, 2003).

As a result, there is a need to frame the process within the context of a change theory that provide a better understanding of the individuals involved in the implementation of the innovation. While a number of potentially relevant models exist, the Concerns Based Adoption Model (CBAM) seems to be appropriate to be used in evaluating the implementation of ITI for teachers. The CBAM (Hall, George, & Rutherford, 1979; Hall & Hord, 1987, 2001) is a conceptual framework that describes, explains, and predicts probable teacher concerns and behaviors throughout the implementation of the innovation. This model has been used in various researches and widely accepted in educational research and it maintains a participant-based focus on understanding an individual’s attitudes, perceptions, thoughts and considerations toward using a new innovation (Adams, 2002; Ansah & Johnson, 2003). Initially, the model was framed by way of observations of K-12 teachers and college professors as they adopted and implemented educational innovations (Hall & Hord, 1987). The central assumption of CBAM is that any implementation of innovation involves an organization that cannot change until the individuals within it have implemented the innovation (Hall & Hord, 1987, 2001).

To examine the personal side of change, the CBAM uses various levels of user concerns related to the adoption of a new innovation via what is known as “Stages of Concern” (SOC) (Hall & Hord, 2001). The SOC defines the potential users or adopters’
concerns, as “the composite representations of thoughts, feelings, preoccupations and considerations given to a particular issue or task. According to Hall & Hord (1987), “all in all, the mental activity composed of questioning, analyzing, and re-analyzing, considering alternative actions and reactions, and anticipating consequences is concern” (p. 59). Moreover, concerns are believed to have “a powerful influence on the implementation of a change, and they determine the kinds of assistance that teachers find useful” (Hord, Rutherford, Huling-Austin & Hall, 1987, p. 30).

The SOC examines user concerns and categorizes four broad stages of concern involving the unrelated or unconcerned (users’ concerns tend not to be tied to the innovation at all), personal or self (users’ concerns have an egocentrism to them), task or management (users’ concerns become more intensively related to their job), and impact (users’ concerns focus on the effect of the innovation) questions that individuals confronted with a new innovation.

Furthermore, these four categorization can be expanded into seven specific categories of concern (unrelated-awareness, self informational, self-personal, task-management, impact-consequence, impact-collaboration, and impact-refocusing) that provide more detailed description of the type of concerns that an individual might have when confronted with a new innovation (see Table 1).

According to Hall and Hord’s (1987, 2001) SOC theory, “an individual’s concerns change as the user become more skilled in the use of an innovation, sequentially from unrelated, to self, to management, to impact concerns” (Fuller, 1969; Hall & Hord, 1987; 2001; Hall, George, & Rutherford, 1979). Moreover, these authors also argued that
<table>
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<th>Stage of Concern</th>
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<tr>
<td>Refocusing</td>
<td>Stage 6: <strong>Refocusing</strong> Exploring the possibilities of an innovation, even considering major changes or replacements with an alternative. An individual at this stage will have definite ideas about options, additions or replacements for the innovation. An Expression of Concern Might Be: I have some ideas about what would work better.</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Stage 5: <strong>Collaboration</strong> The focus is on using the innovation with like-minded colleagues. An Expression of Concern Might Be: How can I work with others using this innovation?</td>
</tr>
<tr>
<td>Consequence</td>
<td>Stage 4: <strong>Consequence</strong> Consideration is on the impact of the innovation on students, including student outcomes and performance. An Expression of Concern Might Be: How is my use of this innovation impacting student learning?</td>
</tr>
<tr>
<td>Management</td>
<td>Stage 3: <strong>Management</strong> The focus here is on the actual tasks of using the innovation. Issues related to scheduling, time demands, organizing and managing the innovation are forefront. An Expression of Concern Might Be: I seem to be spending all my time formatting materials to use.</td>
</tr>
<tr>
<td>Personal</td>
<td>Stage 2: <strong>Personal</strong> The individual is worried about his or her ability to meet the demands of using the innovation and how the innovation might affect his or her role. Individuals may also be concerned with recognition, rewards, policies, and conflicts with existing structures. An Expression of Concern Might Be: How will using this innovation affect me?</td>
</tr>
<tr>
<td>Informational</td>
<td>Stage 1: <strong>Informational</strong> Individuals are generally aware of the innovation and are interested in learning more about it. An Expression of Concern Might Be: I think I would like to know more about it.</td>
</tr>
<tr>
<td>Awareness</td>
<td>Stage 0: <strong>Awareness</strong> The individual has little or no concern or involvement with the innovation at this time. An Expression of Concern Might Be: I am not concerned about it.</td>
</tr>
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*Note: Adapted from Hall & Hord, 1987, p. 60.*
User concerns (e.g. the psychological aspects of emotions, perceptions, attitudes, and feelings) related to the adoption of new instructional method appear to be developmental meaning that the earlier concerns (lowered in intensity) must be addressed first before later concerns can exist (increased in intensity). (as cited in Petherbridge, 2007, p. 7)

Moreover, the expression of an individual concerns is not static. Hall and Hord (2001) explained that it is possible for an individual to articulate concerns at more than one stage simultaneously.

For example, an individual can have personal concerns about the innovation will affect his daily work, and impact concerns regarding how the innovation will change the way he works with his students. Ideally, the intensity of concerns moves from personal concerns to impact concerns and it is possible for personal concerns to increase during later stages of the innovation adoption process, causing backward movement. To understand the individual’s concerns about the innovation involves identifying the peak stage that is currently as the most intense for that individual and thus becoming the focus of the individual’s energy and time. (Hall & Hord as cited in Petherbridge, 2007, p. 8)

In examining user concerns about ITI, a descriptive model for examining teachers’ intensity of the type of concerns and the amount of ITI implementation and selected characteristics that may influence the implementation were proposed for this study. Based on a review of the literature, a study of selected demographic variables
Background of the Study

Considering the important role of teachers in implementing curriculum reform and reviewing the history of the curriculum reform in Indonesia, it’s apparent that teacher involvement in curriculum decision making at the school level has been low. This could be for a number of reasons however it is primarily because of the use of a centralized curriculum that has been made mandatory by the government since Indonesia proclaimed its independence in 1945. Teachers have taught according to the curriculum mandates of each region (MONE, 2008b). MOEC (1998) stated that for more than 20 years, Indonesian educational policies, particularly in the developing of curricula for primary and secondary education have focused on enhancing the overall quality of life through a centralized system.

For example, the reform of basic education in the 1990s at the national level comprised various areas, including: expanding basic education; enhancing science and technology; improving the quality of textbooks and teachers’ guides; developing the effectiveness of in service teacher...
training; promoting a conducive, school and classroom environment; and decentralizing the curriculum. (Utomo, 2005, p. 1)

However, with respect to curriculum development in Indonesia, Theisen, Hughes and Spencer stated that “these educational reforms, which continued into the 1990s, actually limited the effectiveness of curriculum planning and implementation” (as cited in Utomo, 2005, p. 1).

The current Indonesian education reform has been directed towards decentralization. The administration’s goal is to design an education program that more adequately prepares students for the job market, providing the human resources necessary to ensure national development (MONE, 2008b). In this context, educational decentralization reform in Indonesia is not only a requirement for financial assistance, “it also involves the designation of control of the schools to local level and a greater intention to redistribute power, increase efficiency, and create greater sensitivity to local cultures” (Utomo, 2005, p. 2). Fuhrman and Mallen (1990) argues that curriculum reform is primarily about control and empowerment, where control is the mechanism for increasing the efficiency of the educational system and empowerment addresses teacher competence and commitment.

The most recent curriculum reform in Indonesia is called Curriculum 2006 or Kurikulum Tingkat Satuan Pendidikan (KTSP-curriculum at school level). This is a Competence-Based Curriculum (CBC) that was initiated by the Ministry of National Education (MONE) in 2000. CBC provides a new standard with which to create a working mechanism regarding curriculum decision-making in schools. This curriculum
had been piloted in several provinces at selected schools and implemented gradually in the academic years from 2001/02 to 2005, by replacing the current national curriculum, which was put into practice in 1994. The result of the 1994 pilot study was the revision of the curriculum in 2006. Therefore the new curriculum is called 2006 Curriculum or Kurikulum Tingkat Satuan Pendidikan (KTSP – Curriculum at School Level). The implementation of KTSP required the presence of competent educational personnel in all regions who were able to translate the curriculum documents into practice. Following the curriculum, the Indonesian government through its National Department of Education launched the National Education Standard through Government Regulation No 19/2005. These standards contain eight standards to conduct the content taught, graduate competency, process of teaching-learning, learning assessment, education and non education staffs, facilities, managerial, and financial.

As a consequence, teachers will have greater flexibility in assigning curricula at the classroom level. The teacher’s role in curriculum decision-making at individual schools will require a greater level of expertise. Teachers with qualified training and teaching experience will be assumed able to carry out the curriculum for students who are socially and culturally different. (Utomo, 2005, p. 2)

It is well-known that the teacher’s role and level of expertise in curriculum reform is often limited to classroom implementation, without the opportunity to participate in the development of a new curriculum. In a related study of school autonomy in Indonesia, Bjork (2001) has shown that teachers and administrators currently enjoy a small amount
of autonomy although it was previously denied, but the impact of curriculum reform has not yet produced any meaningful changes in terms of the quality of education. The study also confirms that school stakeholders have not acknowledged the change and do not fully understand their responsibility in educational decision-making (Bjork, 2001).

Moreover, a current Indonesian government report on the implementation of KTSP states that based on experiences in several pilot schools.

Reform responsibilities at the provincial, district and school levels all remain unclear, particularly those relating to how teachers interact with the curriculum policy in the classroom, plan and develop the learning programs; implement and manage the teaching learning process; interpret the evaluation results in order to improve learning programs; diagnose any learning difficulties; and design strategies to help learners facing difficulties. (MONE, 2008, p. 25)

Several studies in educational reform have shown that certain factors have a significant impact on teachers’ understanding or comprehension of change: time (Moreno, 1999); teachers’ expertise (Bandura, 1977); teachers’ understanding of learning materials (Sparks, 1997); and years of teaching experience (Tell, 2000). In addition, Cuban (1993) found that none of the four types of curricula: official (government); taught (teacher); learned (student); and tested (government) were truly synchronized, leading to a significantly reduced impact of curriculum reform. Edwards (1993) supports this idea that the problem between what is intended in the national curriculum and what is being implemented in the classroom results from local educators not having a sense of
ownership in the curriculum reform. Fullan and Hargreaves (1992) argued that reform
would not be successful until education leaders and teachers own the change process,
accept the change, and have a working knowledge of how to implement the change.

Therefore, transferring the power of responsibility from the central government to
local governments in decentralization context, in general, and national curriculum reform,
in particular, need time for all related stakeholders, in this case primary school teachers,
to accept the change with appropriate knowledge and skills. According to LaRocco and
Murdica (2009), “Public policies that aim to improve the quality of education in our
schools often bring change, and the need to implement innovations not only at the
organizational level but also at the individual teacher level” (p. 3). Considering the
increase in needs; the complex, systemic, and revolutionary nature of the change; and the
central role of teachers in the implementation process, it is important to critically examine
how teachers’ concerns describe the implementation of mandated transformational
change of teaching and learning.

While a number of studies have examined the concerns of individuals adopting
new innovations from many vantage points, existing research does have limitations. One
issue is the role of demographic variables such as age, gender, and experience on the job
(as a teacher) in relationship to their expressed concerns. In examining the concerns of
innovation adopters, Hall, George and Rutherford (1979) note that traditional
demographic variables have no significant relationships with concerns; however, when
examining computer-related innovations, several authors have found that demographic
variables can correlate with concerns (Adams, 2002; Sells-Lewallen, 2000; Martin,
Furthermore related research regarding teaching innovation in technology often notes correlations between age, gender, experience, and computer use. Therefore, it is likely that for the adoption of ITI as a teaching innovation, demographic variables may be predictive of user concerns (Kagima & Hausafus, 2000).

Hall and Hord (2001) observed that conditions (such as academic discipline background and administrative support) and interventions (e.g., professional development) associated with the implementation effort are more likely predictive of concerns than traditional demographic variables (e.g., age and gender) and should be explored. Some research suggests that different academic discipline areas have differentiated ways of knowing and doing (Jones, Zenios, & Griffiths, 2004; Neumann, Parry, & Becker, 2002), and these contextual differences may have an impact on the intensity of adopters’ concerns (Adams, 2002). Another variable, the administrative support, is often cited as a key primary barrier for faculty implementing innovation such as integrating technology into learning (Butler & Sellbom, 2002; Frey & Donehue, 2003; Jones, Lindner, Murphy, & Dooley, 2002; Pajo & Wallace, 2001) and may have an impact on teachers’ concerns. Additionally, literature examining the diffusion of innovations has noted the value of peer influence as a variable; that is, if a colleague is using an innovation, then it may increase the awareness and use of the innovation of the current nonuser (Goldfield, 2001; Kozma, 1978; Rogers, 1995). However, what has not been examined, are other demographic factors important in particular instructional innovation (ITI) that may influence implementation.
While few studies examine the role of demographic relationships and the level of users’ innovation concerns, some studies have researched other factors such as prior experience with the innovation (Todd, 1993) and professional development (Adams, 2002; Casey, 2000) that may influence the levels of users’ concerns. These studies found positive correlations between prior experience and training with task and impact concerns, however, the methodology was limited to the small sample sizes (Todd, 1993), convenience sampling (Adam, 2001) and self selected sampling (Casey, 2000). Most studies have relied on the use of qualitative strategies as the method of inquiry and descriptive statistics to examine the relationships between the users’ innovation concerns and specific demographic variables. There are no studies about the relationship between the users’ concerns and collective demographic variables particularly on thematic integration. Additionally, while relevant literature make a number of recommendations for appropriate interventions based on the examination of the intensity of user concerns (Hall & Hord, 1987), this has not been specifically applied to the implementation of ITI in a primary education context.

**Research Questions**

The objectives of this study were to investigate the concerns of primary school teachers regarding ITI implementation, the degree of ITI implementation by primary school teachers in their classrooms, the differences (if any) between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC, and the relationships (if any) between primary school teachers’ demographic backgrounds including their individual data (years of teaching,
prior ITI use, ITI professional development, academic background, class size, and employment status) as well as their organizational data (administrative support, colleagues using ITI, and school setting) and the amount of ITI implementation in their classrooms. Therefore, the research questions used to guide this study were as follows:

1. What are the stages of concern of primary school teachers regarding the implementation of Integrated Thematic Instruction (ITI)?
2. To what degree do primary school teachers implement ITI in their classrooms?
3. Are there any significant differences between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC?
4. Are there any significant relationships between primary school teachers’ demographic backgrounds including their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) as well as their organizational data (administrative support, colleagues using ITI, and school setting) and the degree of ITI implementation in their classrooms?

**Significance of the Study**

Studies of Indonesian educational reform show that with the previous national curriculum(s) (1994 and 2004), teachers and administrators reported enjoyment in implementing the government mandated curriculum. Yet, the impact of school reform has not yet produced any meaningful changes in terms of the quality of education (Bjork,
In addition, research and reports, to date, have provided no in-depth study of teachers’ concerns about the implementation of ITI, although they are considered key stakeholders in implementing the national curriculum reform. This study, on the other hand, was focused on teachers at the primary school level and limited to the use of ITI. It was designed to generate preliminary findings on teachers’ concerns in primary schools in implementation of ITI, and it sought to contribute to theory and reform practice in two ways.

First, this study will contribute by enriching the perspective of curriculum implementation in general and ITI in particular by adding a small body of existing literature on how teachers make sense of the policy implementation through their prior knowledge, expertise, values, beliefs, and experiences (Spillane, Reiser & Reimer, 2002). It also considers that teaching is an ongoing process of growth for both teachers and students (Paris, 1989). Fullan (1992) argued that change does not exist merely in observable alterations in behavior, but is also a personal developmental process.

Secondly, this study provides insight into policy implementation approaches by clarifying how the new curriculum can be adapted during the implementation process (Berman & Pauley, 1975; McLaughlin, 1976; McLaughlin, 1987), and how the curriculum can be shaped by the evolving teachers’ demographic backgrounds (Fullan, in Jackson, 1992). Although curriculum policies historically have flown down from authoritative sources through the medium of the school (Pinar et al., 1995), schools have become an intermediate place of reform in which teachers’ voices have not been fully involved in the reform (Hargreaves, 1996). In addition, some scholars such as Meyer,
Ramirez and Rubinson, and Ramirez and Boli agree that schools are products of the nation state, and usually were created in the process of consolidating those entities (as cited in Cohen & Spillane, 1992, p. 7).

Thirdly, the study will offer an instrument to measure the degree of ITI implementation by Indonesian primary teachers. The instrument is called the Integrated Curriculum Implementation Scale (ICIS). It was developed based on thematic instruction characteristics from the thematic instruction handbook developed by the Indonesian Minister of National Education in 2009. Even though thematic instruction is mandated by the Indonesian government, the National Education Department nor any other educational institution has developed an instrument regarding the implementation of ITI in classrooms by primary teachers. Therefore, the ICIS will serve as a tool to be used by educational institutions including the national government for monitoring and evaluating ITI implementation in classrooms.

**Limitations of the Study**

Because the current study used a convenience sampling method, the sample may not accurately represent all primary grade teachers in Indonesia, it is not reasonable to assume that results based on this sample will directly generalize to all teachers working in Kanisius primary schools or in other primary schools in Indonesia. I caution readers when applying interpretations made from the study’s findings to elementary teachers working in Kanisius primary schools outside of DIY province and to primary school teachers in general. A second limitation is that because of time constraints it was not possible for this researcher to interview the teachers to collect more in-depth data concerning their
practice related to the implementation of ITI, some practices being used by teachers may not have been accurately represented on the questionnaire. Finally, cultural norms within the Indonesian society may have contributed to an increase in socially desirable responses regarding ITI practice. However, despite these limitations, the study did collect useful and valuable data on teacher perspectives on the implementation of the use of ITI within the national curriculum.

**Definition of Terms**

The following are descriptions of terms utilized in the entire study:

1. **Innovation**: generic term for any program, process, or practice – new or not – that is new to a person (Hord et al., 1987, p. 3).

2. **Concern**: the composite representation of the feelings, preoccupation, thought, and consideration given to a particular issue or task as operationalized on the Concern Based Adoption Model (CBAM) (Hall & Hord, 1987, p. 58).

3. **Integrated thematic instruction (ITI)** is instruction using themes to connect multiple subject matters in order to provide students with meaningful experiences. Themes serve as the main idea or main schema which guides the central conversation between the teacher and his or her students (Poerwadarminta, 1993, as cited in MONE, 2009, p. 7).

4. **National curriculum**: A set of plans and regulations regarding the aims, content and material of lessons and the method employed as the guidelines for the implementation of learning activities in order to achieve education objectives (MONE, 2003e, p. 7).
5. Curriculum development: National education standards for the pursuit of national goals and the curriculum at all educational levels and types of education is developed (by the government) according to principles of diversification, adjusted to the units of education, local and learner’s potential (MONE, 2003e, p. 21).

6. Competency Based Curriculum (CBC): A series of plans and regulations pertaining to standardized-students’ competence, i.e., the least amount of learning required to be achieved, expertise for each type of material taught, and how it should be achieved according to the local and potential conditions (MONE, 2003h).

7. Curriculum 2006: A national curriculum in which the content is suitable for students’ needs and potential and it is to be designed appropriately in order to meet national demands as well as local concerns. In order to address diverse local needs, the government transferred its power of curriculum development to each provincial level up to twenty percent (developed by local governments). Eighty percent is allocated for core subjects and is developed by the central government. The percentage indicates a time allocation devoted to national as well as local curriculum (MOEC, 1989, Article 37).

8. National education: Education based on Pancasila and the 1945 Constitution; it is rooted in the religious values and national cultures of Indonesia, and is responsive to the needs of an ever-changing era (MONE, 2003e, p. 6).
9. National education standard: The minimal criteria for the education system in the whole jurisdiction of the Republic of Indonesia (MONE, 2003e, p. 7). The Decree explains further, “(1) National education standard consists of the standard of the content, process, graduate outcomes, educational personnel, facilities and equipment, management, funding, and educational assessment, which should be improved systematically and regularly; (2) national educational standards are used as a guideline for the development of curriculum, development of educational personnel, provisions of facilities and equipment, management, and funding” (MONE, 2003e, p. 21).

10. Classroom teacher: A teacher (especially in primary school) who teaches whole subjects such as mathematics, science, Indonesian language, social studies, civics, physical education and government approved religious education (Islam, Christianity, Protestantism, Hinduism, and Buddhism), and.

11. Subject teacher: A teacher (especially in secondary school) who teaches a specific subject matter, such as Civics, Indonesian language, English, Mathematics, History, Geography, Economic, Sociology, Biology, Chemistry, or Physics.

12. Local government: The provincial, district, and the central government (MONE, 2003e, p. 8).

13. Pancasila is the official philosophical foundation of the Indonesian state. It consists of two Sanskrit words, “panca” meaning five, and “sila” meaning principles. As Indonesia’s state ideology, it was formulated by the Indonesian
nationalist leader Sukarno. It comprises five inseparable and interrelated principles: belief in one supreme God, just and civilized humanity, unity of Indonesia, democracy guided by consensus and social justice for all. Pancasila was established when Indonesia became independent in 1945 and has served as a catalyst in addressing diversity in Indonesia as multi-ethnic, multiracial and multi religious state which serves its 238 million people in 17,508 islands with 300 ethnic groups, 5 religious affiliations and 587 languages and dialects spoken.

14. MONE: abbreviation for the Ministry of National Education.

15. Primary education: Education in the form of Elementary School (Sekolah Dasar/SD) and the Islamic Elementary School (Madrasah Ibtidaiyah/MI) or other equivalent form, as well as Junior High School (Sekolah Menengah Pertama/SMP) and Islamic Junior High School (Madrasah Tsanawiyah /MTs), or other equivalent forms (MONE, 2003e, p. 6).

CHAPTER II

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Chapter II provides the reader with a review of the literature as it pertains to teachers and integrated instructional reform and an analysis of the Concern-Based Adoption Model (CBAM). This chapter will consist of three sections; first, an overview of the Indonesian mandates of ITI in content and process standards, as well as the characteristics of integrated instruction in Indonesia. Second, I will provide an in-depth literature review comprised of five subsections: (1) Need for curriculum reform, (2) Effort made toward curriculum reform in Indonesia, (3) History of curriculum reform in Indonesia, (4) Aspects influencing curricular reform implementation, and (5) Integrated curriculum. It will also provide a discussion of the literature as it applies to the historical factors that drove curricular change in Indonesia, specifically and broadly in the international context. The third section focuses on conceptual factors of CBAM and how it impacts integrated instructional reform in an international and Indonesian context.

Section One: Indonesian ITI Mandates (Process and Content Standards)

The implementation of ITI at primary schools in Indonesia is a mandate from the government through the Regulation of MONE No 22/2006 about Content Standards for elementary and secondary education. It says that:

The standards specify the scope of minimum content and minimum competency level needed in order to achieve minimum competency on a
certain level and type of education. The curriculum structure of elementary schools (SD/MI) consists of the substance of learning pursued within one level of education for six years from grade 1 to 6. (p. 6)

Moreover, the standard specifies the following provisions: (1) the curriculum for SD/MI contains eight subjects, local content and self-development; (2) the substance of Science and Social Studies in SD/MI is in the form of integrated science and integrated social studies; (3) the instruction in grade 1-3 is carried out through a thematic approach, while instruction in grade 4-6 is implemented through a subject matter approach.

Table 2

*The Structure of Curriculum at Elementary School Level (SD/MI)*

<table>
<thead>
<tr>
<th>Component</th>
<th>Grade and Time allocation</th>
<th>1&lt;sup&gt;st&lt;/sup&gt;</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt;</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt;</th>
<th>4&lt;sup&gt;th&lt;/sup&gt; – 6&lt;sup&gt;th&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Religious education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 hours</td>
</tr>
<tr>
<td>2. Citizenship education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 hours</td>
</tr>
<tr>
<td>3. Indonesian Language</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 hours</td>
</tr>
<tr>
<td>4. Mathematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 hours</td>
</tr>
<tr>
<td>5. Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 hours</td>
</tr>
<tr>
<td>6. Social Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 hours</td>
</tr>
<tr>
<td>7. Arts, Culture and Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 hours</td>
</tr>
<tr>
<td>8. Physical Education, Sport and Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 hours</td>
</tr>
<tr>
<td>B. Local Content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 hours</td>
</tr>
<tr>
<td>C. Self Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 hours</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>26 hours</td>
<td>27 hours</td>
<td>28 hours</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

*Note:* From Content Standard, MONE Regulation No 22/2006, p. 8

The demand to implement ITI is also stated in the Process Standard of Regulation MONE No 41/2007. It says that “the process standard for elementary and secondary education includes planning for the learning process, the implementation of learning
process, assessment of learning outcomes and supervision of the learning process” (p. 3) and that “Thematic learning approach is used for students in grade 1 to 3” (p. 10).

Moreover, it states that the teaching methods used by teachers should promote an atmosphere of learning so that students will be supported in achieving basic competency or a set of indicators that have been determined. The selection of teaching methods should be adapted to the situation and condition of the learners, and the characteristics of each indicators and competencies to be achieved in each subject.

In order to support teachers in implementing the ITI, the government provides a guideline about the characteristic of thematic instruction as the approach of learning at the primary level (MONE, 2009) as follows:

1. **Student-centered Learning.** Thematic instruction treats the students as the center of learning, this is in a line with modern learning approaches that position students more as the subject of learning who take the main role in the learning processes and teachers work as facilitators of the processes.

2. **Provide Direct Experiences (Hands-on Learning).** Thematic instruction can give students direct experiences. Through these experiences, students encounter something tangible (concrete) as a basis to understand more abstract things.

3. **Subject Integration.** In thematic instruction, the separation among subjects is not apparent. The focus of learning is on themes that most closely connect with students’ daily lives.
4. **Whole Learning.** Thematic instruction presents concepts from various subjects in a single process. Thus, students will be able to understand these concepts as a whole. This is important to assist students in problem solving encountered in everyday life.

5. **Flexibility (Responsive).** Thematic instruction is flexible in which teachers may connect teaching materials from one subject with other subjects, even connecting with students’ life and the environmental surroundings schools and students.

6. **Variety of Assessment.** Students have an opportunity to optimize their potential according to their interests and needs.

7. **Using the Principles of Engaged learning.** Learning is conducted in various ways such as role play, games, discussions, and the like. The aim of all instructions is that students enjoy their learning (for detailed explanations see MONE, 2009, p. 9).

**Section Two: Review of the Literature**

**Need for Curriculum Reform**

Globalization has increased economic competition among nations in the world. In order to be able to compete in the international arena, national policies in many developing countries are driven to reform most aspects of social life including education. Sahlberg (2006) stated that “it is generally assumed that to increase economic competitiveness, citizens must acquire knowledge, skills and attitudes necessary for civic success and the knowledge-based economy” (para 1). Furthermore, Rivera (2003)
explained, “Many significant changes that have taken place in the curricula of most
developing countries in decades past could be attributed to the twin metonymic
conditions of greater internationalization of market economies and globalization of the
cultural economy” (in Pinar, 2003, p. 553). Economic competitiveness is generally
accepted as a valid measurement for evaluating a country’s level of economic prosperity
(Sahlberg, 2006). Reich (1991) has argued for the importance of education to achieve the
economic prosperity of the nation in the 21st century, that acquiring information skills,
i.e., system thinking, has significance as a new set of principles for the curriculum of the
future. System thinking pertains to a “symbolic analysis” that is the type of knowledge
and skill required in innovative knowledge-based forms of production (as cited in Guile,
2003).

Furthermore, the emerging needs of innovative knowledge-based production
involve the introduction of occupational structures based on more integrated forms of
theoretical and practical knowledge and skills. Education, science and innovation
become the most important drivers of a country’s long term economic prosperity and
national competitiveness. The future education and economy becomes “technology
driven” meaning technology becomes the force to create a competitive advantage in
operations (Tapscott, 1995). Technology and innovation are necessary in every aspect of
today’s life for coordination, organization and management. Information skills, for
example, would be critical to future economic and educational success (Bates, 1995).
This means that a country’s educational reform efforts can be economically driven and
result in power and control over teachers and curriculum (Kirst, 1987).
This economic drive and the demand of rapid growth in a globalized economy have impacted countries educational policies and development. Carnoy (1999) argues that the changes in global economy have impacted education in competitiveness-driven reforms that aim to improve economic productivity by improving the quality of employees such as improving teachers’ salaries. Furthermore, he states that this reform can be classified into four categories: (1) decentralization: giving greater autonomy to the local authorities, (2) standards: giving benchmarks of the academic expectation from the central government to the local schools, (3) improved management of resources such as universalizing access to schoolbooks, peer-tutoring and utilizing communications technologies, and (4) improved teacher recruitment and training.

The implementation of regional autonomy through curriculum decentralization has gained popularity among developing countries. Decentralization is appealing and there is currently a trend in some countries shifting their education system toward decentralization by transferring the powers and decision making from central government (MONE) to local governments, communities and schools. Most of these countries have experienced the drawbacks of centralized education such as unclear decision making, inefficiency in fiscal and administrative matters, and poor quality and access to goods and services (World Bank, n.d.). Theoretically, decentralization will improve efficiency, transparency, accountability and responsiveness. Specifically, in education area, decentralization will encourage participation, improve coverage and quality, and reflect better local priorities as well as efficiency. In some cases (particularly in East Asia), it seems that decentralization is motivated by the need to improve service delivery to large
populations and the recognition of the limitations of central administration due to geographic and psychological distance from most citizens (Kalin, n.d.). In Indonesia, for example, decentralization has become a mechanism for delivering public services and goods, as well as for implementing governmental functions and duties. Chapman (2005) predicted that decentralization would become one of the dominant issues of the next decade, particularly in the area of education in developing Asia.

Demands for the latest curriculum reform, which follows logically the restructuring of the administration of a new system of government, relate to recent political and economic trends coupled with some basic social and demographic facts. Indonesia, a country made up of about 17,508 islands, nearly 6,000 of which are inhabited, the five biggest stretching across some 3,200 miles of Equatorial Ocean, is the fourth most populous country in the world. With 238 million people who are ethnically and linguistically diverse, Indonesia is a unitary state, which is considered to be the best form of government to maintain national unity and national integration. Despite its diversity and size, Indonesia has one of the most centralized forms of government in terms of its social, political, and economic systems (Purwadi & Muljoatmodjo, 2000). A priority of the educational reform of 2000 in Indonesia was to restructure central education programs to offer the provinces a combination of flexibility in implementation and accountability in meeting the standards.

The same concepts drive the need of education policy reform in Indonesia. There had come a time in Indonesian curricular reform when the autonomy of education took place through a number of policy revisions ranging from laws regarding national
education (Law No. 2, 2003) to government regulations about privatizing public universities with a new status (“BHMN” or State Owned Legal Entity). Subsequent laws No. 32 of 2004 on Regional Governance and No 33 of 2004 on Fiscal Balance between central and local government, set the stage for, concepts, systems and patterns of education, education funding; and the authority outlined in the education sectors for central and local levels. Moreover, all this legislation regarding decentralization implies that the authority to implement and manage education shall be transferred from the national government to local districts or municipal government levels. This decentralization captured new directions in management education sectors with reference to the division of authority between central and local government (provincial and district/city) and financial balance between central and local governments. The study of social sector decentralization in Indonesia showed that regional governments supervised public schools, although teachers and curricula were still subject to the authority of the national government (Malo, 1995).

District educational units, in return, would be required to achieve a national standard (MONE, 2000, 2003e). As stated in the current Indonesian decentralization Law No. 22 of 1999 (which was revised and replaced by Law No 32 of 2004) and Republic Indonesia Government Regulation No. 25 of 2000, district levels in the provinces are given greater freedom in spending local funding, as they see fit (Government of R.I., 1999a, 2000). Yet this transferring of tasks and administrative responsibility does not necessarily mean a general shift in power from the central government to the provinces. Lauglo (1995) states that local regimes are generally only
given the role as the implementer of the decisions have been made by the central government. Hurst explained that

the process of decentralization implies the transfer of certain functions from a small group of policymakers to a small group of authorities at the local level. The central government retains responsibility for other types of matters considered to be part of a national policy agenda. (as cited in Utomo, 2005, p. 15)

Additionally, Fiske (1996) stated that “Subordinate levels of a hierarchy are authorized by a higher body to make decisions about the use of the organization’s resources” (p. 11). However, in some places there is inconsistency about the implementation of those organization structures, Utomo (2005) argues that “decentralization of decision making particularly in developed countries faces the contradictory pressures of centralization and decentralization, i.e., increased government control over policy and direction versus more responsibility for implementation, resource management and evaluation at the local level” (p. 15). Consequently, the implementation of the reform becomes more complex, challenging and demanding as Hopkins (1998) argued, “The task of balancing centrally derived change and locally developed improvement has proved in practice most difficult” (p. 1040).

**Efforts Made Toward Curriculum Reform in Indonesia**

Curriculum reform policies of 1994 indicate the government’s attempt to adjust to global trends and to give the local districts greater autonomy at the provincial level in order to meet their needs and reflect their local conditions. The implementation of the
recent local curriculum in 1994 for the Universal Nine-Year Basic Education (UNYBE) program was one of the government’s efforts to increase the quality of all types, levels, and channels of education. The participation of every school’s stakeholders and each district’s personnel brought a major change in the administrative structure of curriculum development at the provincial level. School stakeholders—teachers, principals, and professional staff at both the regional and the district levels of government—became involved in the planning of their local curriculum (UNDP, 1994; UNESCO, 2003).

Similar to the 1994 curriculum, the term of Competency Based Curriculum which was introduced in the year 2000, tailored the development of the new curriculum in Indonesia. The new curriculum is called Curriculum of 2006, also known as Kurikulum Tingkat Satuan Pendidikan (KTSP), which translates to Curriculum at School Level, and was designed by the central government and structured around two main goals: The first is to retain the same level of quality education for all students – in each school and in every region of Indonesia; the second is to prepare students to compete in the global marketplace (MONE, 2000). The first goal is set to retain the same level of quality education for all students through the national curriculum, such as national testing, to become a source of the government’s accountability to the public. This type of quality assurance, in terms of providing a comprehensive education product, is the government’s responsibility in preparing its citizens for the international workforce.

Moreover, Educational Law No.20 of 2003 states that the implementation and carrying out of education are the responsibility of the government, society, and each student’s parents (MONE, 2003e). Therefore, the national curriculum should provide a
“minimum standard” of students’ learning experiences, so that every citizen, regardless of background, has the opportunity to master a fundamental amount of knowledge and ability. Every citizen must meet these minimum learning requirements so that they are able to participate as active members of a community, as well as members of a nation and country.

The new curriculum attempts to increase educational quality by catering to the types of desired learning relevant to local, national, and even global contexts. The learning competency desired is the combination of knowledge, skills and abilities that the student is expected to understand and apply in daily life. It incorporates many forms of learning experiences. It addresses a diverse range of each pupil’s abilities, available learning facilities, and the various cultural regions of the country. The government’s efforts to improve the quality of education relate directly to the question of whether schools in general, and schools specifically in Indonesia, perform in ways that enhance the skills and competence necessary for life in the global arena. According to Levinger (1996), “Schools often perform in ways that defeat the development of necessary cognitive competencies for life in a global era. The disjuncture between the real lives in and out of school diminished the transferability of knowledge across environments, settings, and contexts. Yet, such transferability is critical in an era of rapid change” (p. 12).

Therefore, in order to meet the challenges of the 21st century, students need to acquire the collection of skills required to enhance the development of human capacity and outlook correspond with adaptability, knowledge transfer, and problem solving
processes (Levinger, 1996). Levinger argued that “human capacity development implies an individual’s ability including skills, attitudes, and behaviors, to perform tasks, which are necessary to survive and prosper, and is a by-product of participation in opportunities that are both available and accessed (as cited in Utomo, p. 21).

For the above reason of preparing students to participate in the global arena, then the second goal of the new curriculum effort is “the implication of a homogenized global market through the application of the human capital theory in education” (Utomo, 2005, p. 21). Economic productivity becomes the measurement of educational development. According to Spring (1998), the government establishes the output, or product, of schooling. Schools, through market competition, are motivated to find the best means of producing the type of student desired by the government.

Education becomes the business entity to produce the labor force suitable with the current demand of the market place. Schultz (1961) argued education is purposed to both improving the choices available to every individual and providing the type of labor force necessary for personal development and economic growth. Modern theories, according to the development of human capital theory, perceive education as the technique for improvement, which in turn, has human skill as an economic value for society at large. Education is not only providing children with the ability or knowledge they need to keep pace with global changes but also helping them exploring new talent in order to make effective use of innovation while maintaining the social wealth established by past generations (Feinberg & Soltis, 1998).
The History of Curriculum Reform in Indonesia

This section describes curriculum reform in Indonesia. It discusses curriculum development in an historical context, the curriculum development approach, the latest curriculum reform and aspects that influence the school stakeholders to consider new reform efforts.

History of Indonesia Curricular Reform. Curriculum reform has had a steady presence in the history of Indonesia since 1945. The following table describes 64 years of curriculum reform in Indonesia followed by a discussion of goals and objectives of such reforms over the years.

Table 3

History of Curriculum Development in Indonesia

<table>
<thead>
<tr>
<th>Year</th>
<th>Name of Curriculum</th>
<th>Main Features</th>
<th>Change made</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>Curriculum 1952</td>
<td>Lesson Plan</td>
<td>Content suitable with daily life</td>
</tr>
<tr>
<td>1964</td>
<td>Curriculum 1964</td>
<td>Education Plan</td>
<td>Pancawardhana - Five Core Subjects</td>
</tr>
<tr>
<td>1968</td>
<td>Curriculum 1968</td>
<td>Moral education, basic knowledge, special skills</td>
<td>Enhancing intelligence and skills</td>
</tr>
<tr>
<td>1975</td>
<td>Curriculum 1975</td>
<td>Procedure of instructional system development and unit of study</td>
<td>Stressing the order of teaching procedure</td>
</tr>
<tr>
<td>1984</td>
<td>Curriculum 1984</td>
<td>Subject of learning was taught through student active learning method</td>
<td>Revised Curriculum of 1975</td>
</tr>
<tr>
<td>1994</td>
<td>Curriculum 1994</td>
<td>Content based – a large amount of content should be mastered by students</td>
<td>From quarter to semester system</td>
</tr>
<tr>
<td>2004</td>
<td>Curriculum 2004</td>
<td>Competency Based</td>
<td>Students are active learners</td>
</tr>
<tr>
<td>2006</td>
<td>Curriculum 2006 or KTSP</td>
<td>Competency Based</td>
<td>Schools have more autonomy</td>
</tr>
</tbody>
</table>
Curriculum development in Indonesia has been centralized and involves different agents at the pre-school, primary, and secondary levels of the education system. This has been the practice since Indonesia proclaimed its independence in 1945. These agents contribute to the recommended curriculum at different levels of specificity (Thomas, 1991). The word “agents” refers to “groups or individuals that may take part in the curriculum decision, such as individuals or members in the parliament, non-government organizations (NGO), scientists, scholars, higher education consortia, government and private institutions, community leaders or community figures” (Utomo, 2005, p. 23).

These agents in determining the curriculum examine the content in order to determine its political significance and the kind of expertise necessary for making decisions about the content and the competencies needed of a particular subject. They are responsible for all decisions regarding all core subjects in the national curriculum, such as religious education, moral education, mathematics, science, Indonesian language, etc. At the level of curriculum implementation, a classroom teacher decides which objectives to pursue (i.e., indicators of learning) and which methods of instruction to use to achieve them.

One of the agents from the administrative hierarchy is the nation’s parliament. Other agents oversee the series of educational organizations within the department of MONE or within the private-school foundation, including individual schools and classroom teachers. Interaction among these agents in determining the contents of the curriculum can differ from one subject to another. Other related groups, such as teachers’ unions, parents, and industrial organizations, used to voice their concern about
curriculum matters, but did not participate in the process. The agents are responsible for evaluating the national curriculum; on both internal and external sites. The government, i.e., the Curriculum Development Center (CDC) and the Directorate General of Primary and Secondary Education, is still responsible for the internal sites. Government involvement is usually through activities such as collecting the data from the educational setting through monitoring and meeting teachers and parents. External sites work through related groups; among these are the teachers’ union (PGRI or Persatuan Guru Republik Indonesia), parents and industrial organizations.

In Indonesia, educational change happens in order to make education more relevant, effective and appropriate to the needs of the government. In 1947 the country introduced its first national curriculum with its “Rencana Pelajaran” or Learning Plan (Tilaar, 1995, pp. 251-270). The main feature of this curriculum was an emphasis on the formation of human character of a sovereign and equal nation. After the “Rencana Pelajaran,” in 1952 Indonesia made improvements to its national curriculum and changed its name to “Rencana Pembelajaran” or Lesson Plan 1952. The hallmark of this curriculum was for each lesson to pay attention to the content associated with everyday life.

In 1964 the government again perfected the system of education in Indonesia. This time, the curriculum was named as Rencana Pendidikan or Education Plan of 1964. It focused on the development of “pancawardhana” or five core subjects, moral, intellectual, emotional/artistic, craft (skill), and physical activities. Curriculum 1968 was the revision of curriculum 1964 by changing the structure of education from
Pancawardhana into the moral education based on Pancasila, basic knowledge and special skills. The instruction was directed toward the activities to enhance the intelligence and skills as well as toward healthy and strong physical development of the students.

The Curriculum of 1975 generated instructional planning and procedure protocol that was known as Prosedur Pengembangan Sistem Instruksi (PPSI) or procedure of instructional system development. The background of curriculum development is Management by Objective (MBO). Material taught, method and the instructional objectives were written in the PPSI, the interrelated and integrated system of instruction consisting of one sequence, a progressive design tasks for individuals in the study (Uno, 2007). This PPSI served as guideline procedures for teachers to establish the unit lessons. This era is known as Satuan Pelajaran or the Unit of Study period in which each lesson of a unit was specified into general instructional objectives, specific instructional objectives, learning material (content), learning tools and media, teaching learning activities and evaluation.

The Curriculum of 1985 carried out the process skill approach. This curriculum was called as Kurikulum 1975 yang Disempurnakan or Revised Curriculum of 1975. Students were the subject of learning through active learning from observing, classifying, discussing, and reporting the findings of learning. This model was called Cara Belajar Siswa Aktif (CBSA) or Student Active Learning Method.

The Curriculum of 1994 rolled over efforts to integrate previous curricula. Curriculum of 1994 was made and implemented in accordance with the Law No.2 of 1989 about the National Education System. This had an impact on the learning time
division system, from a semester system into a quarter system. With the quarter system, one year was consisted three phases or periods of learning time and this was designed to provide opportunities for students to be able to receive quite a lot of lesson materials within one academic year.

There were some traits that stood out from the application of the curriculum of 1994: (1) the division of stages in schools with a quarter system; (2) learning in schools tended to emphasize subject matter (subject matter oriented; (3) teachers were expected to select and use teaching strategies that involved students' in active learning mentally, physically and socially; (4) teaching was formed from the concrete to abstract, from less to more difficult and from simple to more complex materials; (5) the repetitions for difficult materials were needed to consolidate understanding. During the implementation of the 1994 curriculum, there some problems arose, such as students overloaded with heavy materials to be learned for each subject, and subject matters were considered to be too difficult to be mastered because they were less relevant to students' level of thinking and less significant to be associated with everyday life applications.

The Curriculum of 1994 was revised again in response to structural changes in the administration from centralization into decentralization governance as a logical consequence of the implementation of Law No. 22 and 25 of 2004 on Regional Autonomy. This era was characterized by the development of the new curriculum called Competency Based Curriculum (CBC) or Curriculum of 2004. CBC is set of plans and arrangements concerning the competence and learning outcomes to be achieved by students including assessment, teaching-learning activities, and empowerment of
educational resources in the development of school curriculum (MONE, 2002). CBC was developed to enhance the knowledge, understandings, abilities, values, attitudes and interests of learners, in order to achieve proficiency, accuracy and success of learning.

The latest reform in curriculum in Indonesia was Curriculum of 2006 which was a revision of curriculum of 2004 (CBC). Still competency based, this curriculum is called Kurikulum Tingkat Satuan Pendidikan (KTSP) or Curriculum at the School Level. KTSP is a form of implementation of Law No. 20 of 2003 concerning the National Education System which is translated into a number of regulations including Government Regulation No. 19 of 2005 on National Educational Standards. This regulation provides direction for organization and management of education at local schools by carrying out eight standards namely content standards, the standard of process, competency standards, standards for educators and non-educators personnel, standards for learning facilities and infrastructure, management standards, financial standards and assessment education standards. There are fundamental differences between CBC of 2004 and KTSP of 2006 regarding school autonomy. The latter gives local schools full authority in running their education plan by referencing established standards, ranging from the education goal and objectives, vision, mission, structure and curriculum content, study load, and education calendar to the development of syllabi and daily lesson plans.

Although the curriculum has undergone changes as much as seven times over the last 64 years, the centralized model of curricular regulation is still characterized by the concentration in the system’s central levels of government of the principal regulating key mechanisms, i.e., the production of the curriculum, decisions about the goals and contents
of education; the circulation of textbooks, that is to say the control over the forms of representation of those goals and contents; and the system of supervision, meaning the fundamental mechanism to control the relationship between the policies proposed at the central level and those implemented locally at school level. Accordingly, it is possible to represent the ways in which the central government monitored the institutional educational process. In the development of the 1994 curriculum, for example, the government moved toward a drastically different role for the central government. Responsibility shifted to the provincial level of MONE for, among other things, delegating the development of student assessment, teaching modes, adaptation of core subjects in the national curriculum, and Local Content Curriculum development.

**Competency-based curriculum as a part of Kurikulum Tingkat Satuan Pendidikan.** Starting with the development of curriculum 1994, Indonesian education shifted toward competence-based to pace with the rapid challenges in the society. Teachers were expected to enhance their teaching for the broader objectives, improving the quality of education. However, the implementation of the curriculum was not successful; especially at the primary level where teachers were used to be given precise instructions what they should do in the classroom. Meanwhile the competence based approach required teachers to be more flexible and creative in interpreting the teaching guidelines into their classrooms. The main problem was that the planned teachers' guides did not provide teachers with comprehensive information about how the curriculum should be implemented. Utomo (2005) indicated that
Teachers' concerns were compounded by school inspectors who, rather than providing support and training, were critical, which lowered teacher morale and caused confusion. Teachers, as a consequence of having little opportunity to understand the curriculum, relied heavily on the available textbooks for daily teaching rather than trying to understand the curriculum. (p. 27)

The curriculum 1994 was not successfully being implemented because of some reason. It was overloaded in content and too difficult for the students to incorporate; there was no connection with the students’ life, experiences and surroundings such as human rights, moral education, health and nutrition education; and the information about Indonesian history was needed to be revised (Blazely, 1999; Boediono & Sweeting, 1999).

In some ways, the competency-based teaching and learning was not really a new paradigm. For example,

The curriculum of 1964 and 1968 were intended to be competency-based emphasizing the development of skills by learning through the environment. Conversely, the 1975 and 1984 curriculum reforms emphasized content based curriculum and this resulted in many pupils not knowing anything, or not being able to perform certain skills to help them gain a job by the time they left school. Therefore, the 1975 and 1984 curricula were more concerned with pupils’ understanding of the content coverage in the curriculum, than providing them with appropriate “life
skills.” The government educational policy from the year 2004 continued to advocate decentralization and competency-based teaching and learning. (Utomo, 2005, p. 27)

Decentralization can bring some benefits such as democratization in education and participation of local communities. However, on a practical level, it means a shift from the old practices that have been used in the school system. Implementing new instruction means specifying new learning goals, content, learning experiences and evaluation. Teachers frequently view curriculum change as requiring more work while they are already overloaded. Practicing different ways of teaching require learning new teaching skills and competencies through a series of professional development seminars and workshops. However, accomplishing change was difficult when the existing culture and habits for many years was through “diktat” or written summary of lecture (Kompas, 2004).

The development of curriculum in Indonesia considered public hearings to learn public opinion regarding curriculum needs in the future. For example, the development of the KTSP, considered the aspect of both local context or local needs, and global or international context. Moreover, students’ diversity and differences, needs, interests, ability, social, and cultural conditions were considered in the implementation of current national curriculum” (Utomo, 2005). However, the main challenges facing the current curriculum reform still remained unsolved particularly in relation to the issues of curriculum design and curriculum implementation. Regarding curriculum design, several issues involved a divergence of opinion with regard to educational philosophy among key
stakeholders. Furthermore, there is no clear determination about the needs of the environment, the different levels and types of education; and the minimum basic learning competencies for all levels and types of education.

Concerning the curriculum implementation, “it is a fact that the vast expanse of Indonesia’s geography made effective countrywide curriculum implementation very difficult, especially as the comprehensive curriculum reform incorporated all aspects of the teaching and learning process: teachers, materials and facilities, and role of society” (Utomo, 2005, p. 30). Answering the above problem, Indonesian government conducted a pilot study by assigning some schools to implement the new curriculum. The pilot study gave opportunity for the school teachers to practice innovative teaching learning strategies as well as to build a work mechanism to support teaching.

**Aspects Influencing Curricular Reform Implementation**

Competency Based Curriculum as a part of Kurikulum Tingkat Satuan Pendidiken (translation: Curriculum at school level) or CBC in KTSP, is flexible in its implementation, giving more autonomy to local schools to determine their own direction. Schools have greater autonomy over curriculum decisions. However, the challenge facing by schools including the availability of faculty members and staffs who are competent and experienced. Many schools lack of qualified personnel according to their credential and teaching experiences (Utomo, 2005). Some other aspects that influence schools to implement reform in the classrooms are time, teachers’ expertise, teacher involvement and years of teaching (Utomo, 2005).
**Time.** Regarding the curriculum implementation policy, all parties involved must have common understanding and perception. Moreno (1999) states that “there is a need for common and basic understandings among all participants through discussions to ensure that all stakeholders understand clearly what is written in the curriculum and to promote collaborative work among them” (p. 569). However, in the process of this change, schools have been strongly resistant to any reorientation that is different from what has been done before (Utomo, 2005). If curriculum change does occur, it is not a slow and almost imperceptible process; “attempts to make practicable certain ideal visions of personal growth, social life, or intellectual activity have run head on into institutionalized manifestations of school life when they use traditional and all too limited modes of conceptualizing their concerns” (Apple, 1973, p. 19). In this aspect, the curriculum provides clear guidelines within a particular society and plays an important role in contemporary educational reform (Pinar, Reynolds, Slaterry & Taubman, 1995).

To follow a new model of curriculum change, all stakeholders need sufficient time because the change will occur at the personal level and those involved should have enough time to understand and accept the changes. Pritchett (1993) agreed that the degrees of success of the changes are dependent upon the individual perspective accepting the change. Such curriculum change has also created teacher concerns and anxiety during its implementation (Utomo, 2005). Research conducted by Adleman and Walking-Eagle (1997) found that teachers need time in order to comprehend the purpose of the innovations, review the outcomes that might be expected, discuss the proposed new approach among their colleagues, and practice using the innovations themselves.
In addition, the implementation process was getting more complex because there is not enough time for preparation and practice. Concerns among teachers were becoming more apparent when the innovations required them to update knowledge and skills in rapid time frame (Adleman & Walking-Eagle, 1997). Time matters. According to Coleman, giving enough time to teachers will give them opportunities to transfer information and to develop both social and intellectual capital (in Fullan, 2001). Coleman (1990) says that:

…termed ‘social capital’—to help produce citizens who have the commitment, skills, and disposition to foster norms of civility, compassion, fairness, trust, collaborative engagement, and constructive critiques under conditions of great social diversity. Schools also need to develop intellectual capital—problem solving skills in a technological world—so that all students can learn. (p. 17)

The recognition of a time line is essential for the effective implementation of curriculum change (Hord et al., 1987). Teachers should accept the essential changes in clear ways so they will be able to have a sense of ownership of the reform. By doing so, they will be able to perform as agent of change who pass the innovations to their students. However, Fullan and Stiegelbauer (1991) gave some comments regarding the time for curriculum change implementation as follow:

First, the length of time taken to come to a decision to actually reform is too long; second, not all schools are involved in the reform, nor do all schools expect to be improved by the reform; and third, it takes three, six,
or even eight years to achieve the results expected from the reform, but these results are still fragile. (pp. 17-18)

Therefore, time is a key aspect in implementing curriculum change and an essential ingredient for its effectiveness (Hord et al., 1987). Providing time for acceptance and for practice of the changes can develop teacher self-efficacy and reduce teacher concerns and anxiety.

**Teachers’ expertise.** The process of implementing curriculum change needs teacher’s expertise about the reform. Reform would be if both the administration and the faculty understood the change process, accepted the changes, and had a willingness to adopt it. Fullan and Hargreaves (1992) argued that change involves a teacher’s acceptance of and preparation for the change. It also affects a teacher’s perceptions of his or her expertise. In this aspect, Bandura (1977) said that teachers are considered to be self-efficacious. Self-efficacy is how teachers feel about themselves when experiencing change.

In response to this self-efficacy, Bandura (1977) noted that efficacy expectations were a major determinant in people’s choices of activities: how much effort they spend and how long they will keep trying in stressful situations. Teacher efficacy regarding the curriculum reform affects the teachers themselves, a teacher’s acceptance of it, and a teacher’s understandings of the results of the change (Charalambous & Philippou, 2010). Therefore, the need for teachers’ expertise in curriculum reform implementation is critical.
Teacher involvement. In the area of curriculum reform, teachers are the main actors for its successful implementation. They have the responsibility to deliver the curriculum in their classrooms. However, their role, expertise and involvement in the change is often limited to the classroom, with no real opportunity to participate in the process of the new curriculum development (Cavelti, 1995). Teachers were not involved in the decision-making and their voices and participation were not invited.

More detail, Cuban (1993) emphasized the impact of the teacher’s personality on the curriculum. Cuban claimed there were four different types of curricula: official (government); taught (teacher); learned (student); and tested (government). The claim was that typically none of the four curricula were truly synchronized and thus the impact of any curriculum reform was significantly reduced. According to Edwards (1993), “Local educators did not have a sense of ownership in curriculum reform and often remained comfortable with their own efforts at improving education” (pp. 85-88). Therefore, Sarason (1990) said that teachers should not be blamed for the negative consequences of the reform efforts.

Administrative support. Teachers’ attitudes and behaviors certainly impacts reform implementation. Their participation in the development of school policies, including curriculum, and the execution of such policies was critical to teachers believing that their expertise and opinions were valued by the school administration. Teachers need to be empowered by providing them with opportunities to develop curricula and work cooperatively with other school stakeholders such as administrators on school and/or district policy, and providing them meaningful access to relevant professional
development. Shen (1998) argued, “Administrative support was defined as providing the aforementioned empowerment opportunities” (pp. 81-84). Similarly, Tell (2000) noted, “Teachers, regardless of their years of experience, need the opportunity to develop their expertise as educators” (pp. 1-8).

Some experts (Barth, 2001; Moss & Fuller, 2000; Hope, 1999) agreed that teachers will perform better in reform implementation when they are given significant support from administrators. Teachers have greater commitment to their profession when their administrators invited them into discussions. “These administrators trusted their teachers, as demonstrated by teacher participation in curriculum development (Barth, 1002, pp. 443-449). Hope said that “principals mired in the top-down administrative approach experienced higher teacher attrition rates than those who engaged teachers in the decision-making process” (pp. 54-56). Similarly, Moss and Fuller (2000) argued, “Administrators who supported teachers by giving them their trust developed teachers who became innovative in the classroom” (pp. 273-274).

However, innovation is not always a good thing. Russell (1999) reviewed 355 studies produced from 1928 to 1998, and showed that there are no significant differences between comparison groups with direct instruction over videotape, interactive video, or satellite – be they tele-courses or television – with on-campus, in-person courses. Students were compared on test scores, grades, or performance measures unique to the study and consistently, based on statistical tests. Another example, in the Indonesian context, would be the use of computers in learning in remote areas where there are not enough resources available in low-income rural areas.
Integrated Curriculum

The term integrated curriculum can be frequently found in many literatures. Along with varied definition for integrated curriculum, its application and interpretation is not applied consistently. There is no single definition and interpretation that “fits for all.” Therefore, it is important to look at some definitions and uses if integrated curriculum before looking on its benefits and obstacles.

Integrated curriculum definition. The literature on integrated curriculum exposes an enormous number of different definitions and a great diversity of detail implied by these definitions. They range from a simple to more complex definitions of curriculum integration levels on a continuum. The use of term is also varied, some literatures said “integrated curriculum,” while some others called “curriculum integration,” “interdisciplinary curriculum,” or even simply “integration.” The most direct definition was proposed by Moss and Noden (1995) that curriculum integration "generally refers to making connections between and among the various subject areas" (p. 358). More detailed, Martin-Kniep, Feige, and Soodak (1995) stated that integration "generally refers to any putting together or relating of things, either conceptually or organizationally" (p. 228). According to them, there were four types of integration: "(1) integration of content; (2) integration of skills/processes; (3) integration of school and self; and (4) holistic integration" (p. 230). Moreover, Gehrke's (1998) definition was more descriptive and generalized in scope: “Curriculum integration is a collective term for those forms of curriculum in which student learning activities are built, less with concern for delineating disciplinary boundaries around kinds of learning, and more with
the notion of helping students recognize or create their own learning” (p. 248). Harris and Alexander (1998) and Lake (1994) particularly exposed the term interdisciplinary curriculum and the term integrated curriculum are the same. However, Harris and Alexander made a fascinating differentiation between intra-disciplinary and interdisciplinary curriculum. They said that intra-disciplinary integration was referred to integration of closely connected subject matter, such as language arts and social studies, both classified as topics in humanities or science and technology. Meanwhile, interdisciplinary integration was the integration of subject areas from different disciplines, such as social studies and mathematics or language arts and science.

Another expert, Drake (1993) distinguished between terms of multidisciplinary, interdisciplinary and trans-disciplinary integration. Multidisciplinary integration looked at the same topic from a number of different subject areas, but each discipline’s tenets are still apparent. Interdisciplinary integration identified particular skills and ideas, which were similar among different subject areas, and developing those skills and ideas. The broader purpose of trans-disciplinary integration is to explore knowledge that relates to the “real” world. In her writing, Lake (1994) concluded that the definitions showed the purpose of an integrated curriculum (i.e., preparing students for a life of learning, which required obtaining skills, which would not be found in separate, fragmented subject matter.

Continuing the discussion about the purpose of curriculum integration, Dressel (1958) argued that “the purpose of curriculum integration is to provide opportunities for students to make connections between skills, knowledge, concepts, environment and
themselves, and to use these connections to relate to the real world and solve complex and interconnected problems” (as cited in Taft, 2007, p. 9). Dressel did not see curriculum integration as merely subject connection. He stressed the importance of students being able to make new relationships.

Furthermore, the literature also showed the various level of curriculum integration implementation. Jacobs (1989) differentiated six types of curriculum range from discipline-based content, parallel disciplines, multidisciplinary, interdisciplinary, integrated day to complete integration. The continuum from discipline-based content contains no attempt at integration to complete integration in which the curriculum is carried out of the students' daily lives and experiences. Similarly, Bullough (1999) summarized the five designs developed by Alberty in the 1940s. They ranged from type one, based on separate subjects to type five, based on integrated curriculum which was used without application of any traditional structure. The most detailed and comprehensive integration curriculum continuums were proposed by Fogarty (1991b) who distinguished between ten levels of integration. The extreme on one side of the continuum was the fragmented model, in which the disciplines were traditionally separated. The amount of integration depth increased as the continuum moved from the fragmented model to the networked model, in which the student creates connections between internal and external networks of associations. From the ten models of integration, Fogarty divided into three general categories: (1) integration within single disciplines, (2) integration across several disciplines, and (3) integration within and across learners. She defines the aim of integration as follows: “to help young minds
It can be summarized that one definition and one specific level of curriculum integration would not be practical, considering the reality of teaching in various settings and environments. Deciding which one to use, would allow flexibility to move along the continuum while retaining the essence and spirit of curriculum integration. Kysilka argued that

The 'new language' of curriculum is descriptive of ways to plan and organize the curriculum in order to bring meaning to the curriculum – a means of making the curriculum more connected to what is happening in the real world. For the curriculum to become more meaningful to learners, they need to see a connection between what they are learning in school and what information, skills and knowledge they use in real life situations. Since real life content is not segregated into its respective pieces, 'integrationists' contend that the way in which students should learn content in school is not in segregated, unrelated bits and pieces, but as a whole body of related information which is then utilized appropriately in daily life activities. (as cited in Taft, 2007, p. 11)

Thematic Integrated Instruction (ITI) is the implementation of integrated curriculum (Sukayati, 2004). Integrated Thematic Instruction (ITI) or Thematic Integrated Instruction (TII) can be “a powerful tool for reintegrating the curriculum and eliminating the isolated, reductionist nature of teaching around disciplines rather than
experience” (On Purpose Associates, para. 4). Thematic instruction is a part of integrated curriculum that incorporates using a theme as the “conceptual glue” for students, strengthening bonds to knowledge across curricula. It has become one of the reform recommendations in the educational field in the United States in order to prepare the national work force to compete in the global economy (Czerniak, Lumpe & Haney, 1999). There is a need to restructure instruction that connects within or across disciplines. By making connections among subject areas or within the sciences, students will develop a deep understanding of the content (National Research Council, 1996). However, this national call for integrated and thematic instruction does not always make its way to the classroom (Hurd, 1991). Subject matter has traditionally been taught in schools as a separate stand-alone subject. Integration rarely exists between subject matters (e.g., Social Studies, Mathematics, Language Arts) into one theme or within a subject matter. History, Economics, and Geography are generally taught as separate courses instead of being integrated under the umbrella of Social Studies.

ITI is “the organization of a curriculum around macro themes that integrate basic disciplines like reading, math and science with the exploration of a broad subject such as communities, rain forest, river basin, the use of energy, and so on” (On Purpose, Associates, n.d., para 1). In teaching and learning thematically, instruction is organized around thematic units or projects. Generally speaking, a thematic unit is a collection of learning experiences that assist students in relating their learning to an important question (Freeman & Sokoloff, 1996). Themes serve as the organizational framework of the curriculum; and concepts, skills and strategies are taught around a central theme that is
intended to give meaning and direction to the learning process (Freeman & Sokoloff, 1996; Perfetti & Goldman, 1975). Similarly, Poerwadarminta (as cited in MONE, 2009) defines thematic instruction as integrated instruction using themes to connect subject matters in order to provide students with meaningful experiences. Themes are the main idea or main schema which becomes a central conversation among teacher and students (p. 7).

**Pedagogical rational for curriculum integration.** The idea behind curriculum integration in general or ITI in particular is the “whole process learning premise” in which people will acquire knowledge best when learning is in the context of a coherent “whole,” and when they are learning in the real world. Students experience education in a personal way. Whether they are aware of it or not, they receive and make connections of learning experiences from various subjects into their personal and daily lives. Learning should make sense with the realities from the world around. This holistic educational approach has sought to balance cognitive development with emotional (affective) development, hence the “integration” of experience. Miller states that “holistic educators propose that education must give students the opportunity – and the skills – to integrate academic learning with personal meaning and purpose” (as cited in Wang & Shih, n.d., p. 2). Education involves the freedom of learning to provide the learners to maximize their development on intellectual, emotional, social, physical, artistic, creative and spiritual as a whole. Rousseau stated that “children needed to be able to express themselves to develop into well-balanced and free-thinking individuals” (as cited in Cook, 2004, p. 82).
In holistic education, the teacher’s role is not as a person of authority who leads and controls but rather is seen as “a friend, a mentor, a facilitator, or an experienced traveling companion” (Forbes, 1996, para 22). School is the place where students and adults work together toward the same direction. Cooperation is the norm, rather than competition. Thus, many schools (and teachers) incorporating holistic beliefs may choose to directly aid each student in this process by providing curricula that are well-organized in content as well as in experience. Teachers can work together in various curricular planning teams.

Moreover, MONE (2009) describes three foundations for implementing thematic instructions: philosophical, psychological and juridical. Philosophically, thematic instruction is influenced by three educational philosophies namely progressivism, constructivism and humanism. Progressivism emphasizes that the learning process should build on students’ creativity, giving more activities in the natural environment and connecting learning with students’ lived experiences. Constructivism views direct experiences as a key in learning. Knowledge cannot be transferred directly from teacher to students; it is the result of human construction through interaction with their object, phenomena, experiences, and environment. Humanism sees students from their unique, potential and motivation. The psychological basis for thematic instruction involves the psychological development of students. Psychological development is needed to determine the appropriate scope and amount of material provided to students based on their developmental stage. The juridical basis for thematic instruction includes various government regulations supporting the implementation of thematic instruction in
elementary schools, especially Regulation No. 20/2003 establishing the Indonesian National Education Standard.

**Benefits of curriculum integration.** Thematic instruction usually occurs within an entire grade level of students. Teachers of all the different subjects taught in that particular grade, work together as a team to design curriculum, instructional methods, and assessment around a pre selected theme (Perfetti & Goldman, 1975). It provides a clear focus for instruction while allowing for differentiation of experiences for learners according to individual interests, needs, and stages of development. Furthermore, it contributes to the development of problem-solving and decision-making abilities by its consistent emphasis on skills and processes of generating personal knowledge. However, ITI requires initial design work, plus a substantial restructuring of teacher relationships and class schedules. The model puts the teacher in the role of decision maker about what is to be included in the curriculum and how it is to be implemented. This approach relies on teachers who have a deep understanding of curriculum as a learning process and can see ways to connect learning with key concepts.

Literature also offers some advantages for implementing curriculum integration. Basista and Mathews (2002) believed in the benefit of integration between science and mathematics, "science provides rich contexts and concrete phenomena demonstrating mathematical patterns and relationships. Mathematics provide the language and tools necessary for deeper analysis of science concepts and applications" (p. 359). Saeki, Ujiie, and Tsukihashi (2001) report for the Curriculum Council of Japan, stated "that cross-curricular, integrated learning helps students cultivate a 'zest for living', to make
discoveries and to solve problems independently" (p. 418). The phrase "zest for living" is an important reminder that John Dewey believed that education should be engaged learners. Meanwhile Hargreaves and Moore (2000) argued "that curriculum integration allows teachers to address important issues that cannot always be neatly packaged into subjects, that it develops wider views of subjects among students, that it reflects the 'seamless web' of knowledge and that it reduces redundancy of content" (p. 91). More detailed, Erickson (2001) summarized a number of advantages of an integrated curriculum.

The benefits of concept-based integrated curriculum: reduces curricular fragmentation; provides depth to teaching and learning; provides teaching and learning focus; engages students in active learning; challenges higher levels of thinking; helps students connect knowledge; addresses significant problems, issues, concepts; forces an answer to the relevancy question, "Why study these facts?"; draws on multiple styles of learning. (p. 70)

Similarly, Beane (1997) summarized some of the advantages of using curriculum integration, "With its emphasis on participatory planning, contextual knowledge, real-life issues, and unified organization, curriculum integration provides broad access to knowledge for diverse young people and thus opens the way for more success for more of them" (p. xi).

Not only were the benefits of curriculum integration discussed in the literature, but there were also descriptions of successful implementations of this method of teaching (National Mathematics Advisory Panel, 2008). Some researchers found that learning
science in a contextual, community-linked approach to integration has been successful and sustained over a considerable time frame (Cumming, 1994; Drake, 1998; Fleming, 1993; Lawton, 1992; Levak, Merryfield & Wilson, 1993; Reeves, 1999; Stephens 1991). Curriculum integration is proven to promote success in learning language when it combines Literacy, Language and Numeracy (LLN) teaching within an occupational context (Casey, Cara, Eldred, Grief, Hodge, Ivanic, Jupp, Lopez, & McNeil, 2006; Hargreaves, Earl, Moore, & Manning, 2001) or language arts with social studies (Johnson & Janisch, 1998; Papai, 2000). Moreover, integrated curriculum improves students engagement (Lee & Smith, 1995; Marks, 2000).

The Math-in-Career and Technical Education (CTE) research study, conducted by the National Research Center for Career and Technical Education (NRCCTE), tested a model of curriculum integration to improve CTE students’ mathematical understanding. There are statistically significant differences between students who received instruction based on the Math-in-CTE model and those students who received the regular CTE curriculum (Johnson, Charner, & White, 2003; Stone, Alfeld, Pearson, Lewis, & Jensen, 2006).

In a study of teachers, Czerniak, Lumpe and Haney (1999) reported that 36% of teachers reported using the thematic approach almost every day and 42% reported using it several times a week. Additionally, the study by Crawley and Salyer (1995) showed that teachers generally valued thematic instruction and believed that it would help students learn science.
In the Indonesian context, some research showed similar findings that thematic instruction improves students’ achievement (Rosadi, 2009; Suhadjj, 2008). The findings of the research by Citrawathi, Adnyana, and Maryam (2010) on 398 second grade students from 10 private and public elementary schools in Buleleng Regency, Bali, showed that developing thematic instruction at elementary schools with health themes was useful to quicken the improvement of students’ healthy living behaviors.

**Obstacles to curriculum integration.** In some cases, integrated curriculum is becoming another burden for teachers (Hunter, 1996). The implications of this reform recommendation for teachers (pre-service and in-service) and professional development are not easily accepted (Czerniak et al., 1999). Teachers are expected to teach in ways they never experienced before. If teachers have never experienced ITI, they may hold beliefs about ITI that in turn would limit the success of the reform. The relationship between teachers’ beliefs and reform efforts demonstrate that teachers’ beliefs have a powerful impact on their intention to adopt the new teaching strategies (Czerniak & Lumpe, 1996).

Successful implementation of integrated curriculum must consider the various levels and phases of integration that might be possible in a school. Curriculum integration is not a goal unto itself, but it is more a means toward the creation of integrated thinkers (Jacobs, 1991). It is important to keep in mind that integrated curriculum might face some obstacles in its implementation. According to Jacobs (1991), the largest obstacle to curriculum integration is that people try to do too much. She suggested a phased action plan for implementing curriculum integration in a school.
Another study was conducted by Gehrke (1998) who after enthusiastically reporting on the increase of publications (including national standards documents; coalitions, networks and organizations; books in print; journal articles and curriculum in use) on curriculum integration was disappointed when looked for examples of curriculum integration in practice.

Evidence of integrated curriculum in use rather than in advocacy is somewhat depressing – if one supports curriculum integration. Even though all the books may be having a significant effect on beginning teachers' use, the research evidence on general teacher use is not as healthy, especially at the secondary schools. Research by Arredundo and Rucinski surveyed principals of middle schools in the state of Missouri about their schools' curriculum integration and discovered that only about 37 per cent claimed any level of use in their schools. (p. 253)

She also claimed that the more rural the school and the lower the socio economic of the students, the less likely the schools were to use integrated curriculum at all. Moreover, a study by Czerniack (1996) found that many of the teachers in a 15-month-long program of integrating science into the curriculum did not overwhelmingly adopt an integrated curriculum.

Wallace and Wildy (1995) describe a case study of physic teachers who presented barriers to the implementation of a new physics syllabus with constructivist underpinnings. The researchers expected that teachers teaching the new syllabus would provide pupils with opportunities to construct personal and social meaning of the subject
matter. The teacher initially experimented with a more context-based approach, however, the researchers observed a return to an emphasis on content coverage over understanding and teaching towards the examination. Another study by Weilbacher (2001) details the study of the decision-making process of four middle school teachers who first decided to use integrative approaches in their classrooms and later stopped or reduced their use of curriculum integration in favor of more traditional curriculum planning. The challenge is the time it takes to plan, implement, assess, and defend integrated curriculum without supportive school environments.

In addition, Kysilka (1998) also expressed her concern that “the integrated curriculum movement in the United States is currently more rhetoric than activity” (p. 207). There were not many classrooms employing curriculum integration. Looking at another setting in Canada, advocates of Science-Technology-Society-Environment (STSE) education also expressed their disappointment with the lack of response from teachers and administrators in the use of curriculum integration. The objective of STSE education is facilitating students with the opportunities to build relationships between their studies in science and technology, and society and the environment. However, the study conducted by Bencze, Di Giuseppe, Hodson, Pedretti, Serebrin, and Decoito (2003) discovered that instead of promoting STSE issues, most official curricula is proponents to business orientation, promoting industrial production and consumption. Those above observations, point to a number of obstacles faced by supporters of integration. Other concerns such as time, resources, collegial support, and assessment practices were related to teacher’s implementation of the instruction.
The substantial time required by teachers to prepare and collaborate toward integrated curriculum implementation becomes a common concern. Kysilka (1998) discussed the reluctance of teachers to get involved with curriculum integration because of the huge time commitment. Another issue was the lack of content knowledge. The success of using curriculum integration depends on the strength of the teacher’s background (Martin-Kniep et al., 1995). The financial support necessary to implement interdisciplinary courses successfully is another factor (Meier, 1996). A final consideration for successful implementation was the organizational structure particularly in form of collaborative team needed for curriculum integration as it was stated by Martin-Kniep et al. (1995).

In addition to these obstacles, another common concern was the substantial content of the course. "The content-packed nature of some syllabi severely restrict opportunities for meaningful discourse on learning and problem solving because teachers simply cannot make room for it to happen" (Kirkwood, 2000, p. 533). Furthermore, the next concern was the connection between content coverage with assessment. Kysilka stated that:

as long as teachers are held responsible for the achievement of students on standardized tests, they will resort to familiar methods of teaching and be careful about using curriculum integration, as they cannot control the learning environment in an integrated program as they do in chalk and talk classes. (as cited in Taft, 2007, p. 27)
Research by Rosadi (2009) in Malang, Indonesia revealed that some obstacles faced by teachers in implementing ITI include the lack of clear guidelines from the Indonesian government on how to practice ITI in the classroom, the standards are not constructed in integrated thematic curriculum (subject matters are still separated). The guidelines on how to assess students’ learning using thematic approach are unclear and there is a lack of attention from principals, curriculum leaders and school superintendents regarding ITI. Teachers also stated that they face difficulties in developing themes to connect subject matters (Citrawathi, Adnyana, & Maryam, 2010).

While there are a number of research studies on integrated instruction, in the context of methodology, almost all of them employed a qualitative approach or action research. Therefore it is imperative that a quantitative approach be used to further address this issue. This section provides an overview of educational reform in the global arena as well as the curricular change in Indonesia and it is important to ground this research within an acceptable theoretical framework. In the next section, I provide the background and history of the Concern Based Adoption Model and show how this model could positively impact future curricular change in Indonesia and abroad.

**Section Three: Theoretical Framework**

This section provides the theoretical framework used to guide the study, specifically the theory of Concern Based Adoption Model (CBAM). Among others, this model is believed to be suitable for this study because of its focus on the individual as an initial center of change. It was designed for the study of the adoption of any new educational innovation (Hall, George & Rutherford, 1979).
Concerns Based Adoption Model (CBAM)

Concern Based Adoption Model (CBAM) is a conceptual framework that describes, explains, and predicts probable teacher concerns and behaviors throughout the implementation of the innovation (Hall, George, & Rutherford, 1979; Hall & Hord, 1987, 2001). It was developed by Hall, George and Rutherford (1979) and Hall and Hord (1987, 2001) based on previous work done by Frances Fuller (1969) who originally introduced the terms of “concerns” to name one’s feelings and perceptions. Fuller, in her work with pre-service teachers, proposed a model for teacher education based on understanding a teacher’s unrelated concerns (focused on completely different things), self concerns (focused on personal questions about the innovation), task concerns (focused on the management of the innovation), and impact concerns (focused on students using the innovation). Fuller defined concerns as “the emotions, perceptions, attitudes, and feelings people experienced when confronting a new innovation” (as cited in Petherbridge, 2007, p. 44).

Based on Fuller’s (1969) earlier work, Hall, George, and Rutherford (1979) continued to study the concerns proposed by Fuller (1969), by identifying stages of concern (SoC) and adding two other dimensions within the model called the level of use (LoU) and Innovation Configuration (IC). LoU is “the patterns of innovation use that result when different teachers put innovations into operation in their classrooms and IC describes the behaviors of the users of an innovation through various stages” (Hord et al., 1987, pp. 13 & 54).
According to Hall and Hord (2001), there are some assumptions and assertions underpinning the CBAM work.

1. *Change is a process and not an event.* There is a process involving in implementation educational innovations. A one-time announcement will not affect change. Change is a process which requires time in which people and organizations move as they come to understand and use the new ways.

2. *Significant differences surround the development and implementation of an innovation.* The CBAM differentiate the term “development” and “implementation.” Development is the actions taking in creating the innovation, whereas implementation includes the steps to learn how to use it.

3. *Change is highly personal experience.* To change something, someone has to change first. The first step of change process is to develop a picture of how each staff member, as an individual, experiences the change process.

4. *Innovations come in all size and shapes.* Innovations do not necessarily represent something major, new or dramatically different. It can be something introduced previously or something new at all, can be products or processes, and can be single innovation or more.

5. *Interventions are the actions and events that are key to the success of the change process.* People tend to focus on the innovation and its use, whereas they need to think about the actions that influence the process. How small it is, interventions such as one-to-one support for someone using the innovation, can make the difference.
6. Although both a top-down and bottom-up change can work, a horizontal perspective is best. All of the members work as the whole team in a system, need to recognize themselves as part of a system, and understand the others in the system.

7. Administrator leadership is essential to long-term change success. In order to have a successful change effort, support from administrators is a must.

8. Mandates can work. When mandates have clear priorities, good communication, training, coaching and time for implementation, they can succeed.

9. The school is the primary unit of change. The school staff and leaders become the key organizational unit for making a change. In the university level, this unit may be at the departmental or college level.

10. Facilitating change is a team effort. All school stakeholders including administrative leaders, support staff and instructors all play a role in the success of a change.

11. Appropriate interventions reduce the challenges of change. Change can be painful, and frustration and grief must be addressed, but there are ways to facilitate change to reduce these challenges.

12. The context of the school influences the process of change. Physical features (such as size, resources, policies) and the human factor (such as the attitudes and beliefs of the individuals) of the context affects the change process (Hall & Hord, 2001, pp. 4-17).
The CBAM model provides tools for measuring the process of implementation such as standards-based education reforms. One tool, the Stages of Concern (SoC), focuses on understanding an individual’s personal concerns about the change. Hord et al. (1987) argued that “being concern about change is universal even though the nature of change varies from person to person” (p. 30). There are three procedures for assessing concerns. The first and most practical is face-to-face informal conversation. It is more appropriate for gathering information from individuals. The second procedure is the open-ended statement. This procedure is more formal than the conversation method and usually is not used with one person. It is more appropriate to soliciting information from groups. The third way to assess the concern is the Stages of Concern Questionnaire (SoCQ), a quantitative, 35-questions Likert scale instrument. This measurement is most often used with groups. The power of this questionnaire is that it was constructed to apply to all educational innovations (Hall & Hord, 2001, pp. 56-79). Understanding the personal reactions, feelings, perceptions and attitudes of individuals – defined as “concern” – going through the change can provide significantly help in the planning of interventions that take into account the personal side of change. For specific interest to this study in assessing the concerns of individuals, the Stages of Concern (SoC) dimension of the CBAM model will be used by employing the third procedure (SoCQ).

Moreover, individuals faced with implementation change progress their concerns by having different focus on topics and questions on their use of the innovation as they move through the Stages. At the beginning of the program, users initially ask questions that are self-oriented and not typically about the innovation or their role in the innovation,
such as “What is it?” and “How will it affect me?” (Hall & Hord, 2001). Once these intrinsic issues are answered, questions become more task-oriented; for example “How do I do this?” (Hall & Hord, 2001). Concerns at this point have to do with feeling of inadequacy, self-doubt about the knowledge required or uncertainty about their situation they are about to face. After the task-oriented issues are resolved, individuals now can focus on the impact of the change, asking questions such as “Do my students like this innovation?” and “Is there something that could work better?” (Hall & Hord, 1987). As individuals now become more involved and more comfortable in their setting and innovation, their concerns focus on logistics, preparation of materials, coordination and scheduling (Hall & Hord, 1987). Ultimately, individuals can become concerned about how their implementation is affecting others and about how they can improve themselves as users. Sample questions made by individuals who have intense concerns are “Are they learning what they need to know?” and “Is there something that will work even better?” (Hall & Hord, 1987). Individuals who have no opportunity to work collaboratively with others might never have this level of concern, many users “will never have this intense concern at stages 5 or 6” (Hall & Hord, 1987, p. 32).

This developmental nature of concerns is not absolute and surely does not occur on each individual in similar pattern. Hord et al. (1987) argued that “the pattern and intensity of individuals concerns are directly affected by the kind of innovation and the amount of assistance provided” (p. 32). It is possible that in self concerns will be most intense early in the implementation process and decline with time, and task concerns will rise. Only after task concerns have been reduced in intensity can impact concerns be
expected to emerge. Those four developmental nature of concerns dimensions – unrelated, self, task, and impact – represent the situation that they are not “mutually exclusive” (Hord et al., 1987, p. 30). It means that an individual can have some degree of concern at all stages at any given time, that one of these areas will take precedence, becoming her or his peak stage of concern.

Those four, more broadly defined stages of the SoC (unrelated, self, task and impact) are the reflection of seven categories of concern (awareness, informational, personal, management, consequence, collaboration, and refocusing) and the derivation of several research studies on educational innovations (Hall, George & Rutherford, 1979). According to the SoC model, the concerns are called stages because usually there is developmental movement through the implementation process. It means that the concerns of individuals change in a logical progression as users become more skilled in the use of an innovation, sequentially from unrelated, to self, to task or management, to impact concerns (Fuller, 1969; Hall & Hord, 1987; Hall & Hord, 2001; Hall, George & Rutherford, 1979).

**Concerns Based Adoption Model as a Model for Change**

The concept and result of this study will be based on a specific approach called the “concern-based approach” (Hall & Hord, 1987, p. 5). This approach is derived from a conceptual framework known as Concern-Based Adoption Model (CBAM), initially introduced on 1973. A precondition for this approach is that an effective user understands how he or she perceives change and adjusts what he or she does accordingly (Hall & Hord, 2001). In the education context, in order schools to improve, teachers
must change. For teachers to change, there is must be promising innovations that they develop or implement or adopt and, when necessary, adapt. Historically, it appeared that teachers are “provided with various workshops, materials, and other resources based on the needs of others rather than on an understanding of teachers’ need” (Hall & Hord, 1987, p. 5). The teachers are left to struggle and discover through trial and error what the innovation is about and how to use it effectively. When concern-based approach is used, administrators and teachers work collaboratively to address teachers’ emerging needs. In short, CBAM model provides a set of concepts and tools for individuals in the process of change, how to respond to their needs and how to support their professional and personal growth to the use of worthwhile innovations.

The literatures on change usually portrait the models of change and the role of the change agent but “not directly address the specific detail about the attitudes and behaviors to be used by the users of the innovations” (Hall & Hord, 1987, p. 40). Havelock’s extensive study on research and change model development (as cited in Hall & Hord, 1987) differentiated three different perspectives for understanding change: the Social Interaction Model, the Research, Development, and Diffusion Model, and the Problem Solving Model. The CBAM model complements those models by understanding the dynamics of teachers’ behaviors and styles. However, the CBAM model does not address all the complexities of the change process. It is also without bias. Roger argues that

a primary criticism of innovation diffusion and adoption literature is its 

pro-innovation bias e.g., the assumption that the innovation occurring in a
given context is the “right” innovation and that the change facilitator is there to ensure the diffusion of the particular innovation across that context, whether or not it is the right innovation (as cited in Petherbridge, 2007, p. 49).

No change model, including CBAM, is completely free of this bias. The fact is that the innovation supporters has such strong bias in favor of the innovation, that he or she may not see its limitation or weaknesses and continues to promote it nonetheless. She or he is focused on change in the system, potentially not questioning the value of the change.

The SoC dimension of the CBAM model, derived from extensive research on educational innovations, stresses to the fact that a decision to change (or not to change) truly does occur at the individual level, as “in the end, each individual determines for herself or himself whether or not change will occur” (Hall, George, & Rutherford, 1979). Individuals are different, people do not behave collectively. It means that every person reacts differently to a change, it is up to him or her to decide if the choice to engage with innovation will work for him or her. This may be fit perfectly in any contexts where the participants have power in their own right (Birnbaum, 1988). In Indonesia’s current reform era in which teacher autonomy and academic freedom are at issue and respect for individual teachers’ concerns regarding innovation is paramount, the selection of an appropriate, participant-based change model is important (Sashkin & Egermeier, 1992; Wolski & Jackson, 1999). Even though the innovation (i.e., ITI) is mandated, it is the teacher, after all, in the end, who must visualize him or herself on how to use the
innovation in his or her instructional and scholarly work (Green, 2000). Hall and Hord (1987) state that "policymakers, administrators, and others will have point of view that must be considered, but in the end, how teachers feel about and perceive the change will in large part determine whether or not change actually occurs in classrooms" (p. 53).

The CBAM framework reiterates those worked in the implementation of the innovation that change is a process (not an event), that it is a highly personal experience that involves developmental growth in reactions, feelings, perceptions and attitudes, and that it is applicable in mandatory educational settings. Specifically about the Stages of Concern, its greatest strengths is that it “acknowledges and gives a precise language for the reactions, feelings, perceptions and attitudes individuals have when experiencing a new program, practice, or technology” (Petherbridge, 2007, p. 50). It stresses the importance of the personal side of change, particularly from the perspective of the “front line” users such as teachers. Additionally, this model “empowers people to make change while supporting their rational assessment of needs and means and, perhaps more important, bringing them together to deal with change as an organized group” (Sashkin & Egermeier, 1992, p. 15). The SoC helps make sense of the change process, and provides some concrete tools for moving that process along and continually evaluating the progress of the change as it impacts both individuals and the organization (Horsley & Loucks-Horsley, 1998). Dooley argues that when determining the diffusion of an innovation within an educational context, a natural place to start is with the individuals involved, as appropriate professional development activities and interventions cannot be designed, nor should they be designed, without an understanding of user concerns (as
cited in Petherbridge, 2007, p. 50). Importantly, the SoCQ instrument has strong “psychometric qualities” (Hall & Hord, 1987, p. 69) and can provide both baseline and post-intervention data that help monitor the innovation process and guide follow-up support (Horsley & Loucks-Horsley, 1998).

Measuring individual’s concerns using the SoC is both simple and complex. It is quite easy to understand one’s concern by assessing the difference between self, task, and impact concerns. However, the complexity emerges on the interpretation of concerns, as “one thinks more about the seven different SoC, their interaction, the possible combinations of less and more intense stage, and the implications that result from considering the dynamics of the arousal and the resolution of concern intensity over time” (Hall & Hord, 1987, p. 70). All the school stakeholders should aware that while some of them may be in the impact stage of concerns, many others new to the innovation are still in the personal stage. Resistance is natural, and they will do better to provide appropriate interventions for supporting individuals involved in the change by respecting individuals’ concerns, as opposed to labeling individuals with lower stages of concerns as resistors or laggards (Horsley & Loucks-Horsley, 1998). Horsley and Loucks-Horsley clearly express the importance of the stages of concern component of the CBAM framework as a way to view and manage change within organizations.

**Factors Influencing Concerns**

Various studies from different fields has found the conceptualization of the SOC useful in identifying the concern of those involved in an innovation and has presented findings about some of the characteristics of users (e.g., age, gender, amount of training,
departmental support) that may influence the concerns, as well as has provided some information for developing interventions in the process of implementing an innovation (Adams, 2002). According to a number of studies, an individual’s concerns will differ in strength depending on a variety of factors, such as his or her use of the innovation, participation in professional development activities related to the innovation (Hall & Hord, 2001), years of teaching, and class size.

**Related professional development.** Some studies and articles examining innovations in educational settings have been emphasized with the SoC, providing the researchers, in each case, with a way to examine the perceptions of the individuals involved in a change process, and in a number of cases, identifying certain characteristics, such as the amount of training received, that may influence the intensity of a certain stage of concern (Adams, 2002; Casey 2000; Dusick & Yildirim, 2000). For example, using a variation of the SoCQ, Adams (2002) found a positive correlation between attendance at faculty development activities and an increase in innovation usage in teaching. In this study, related professional development will be defined as any formal training experience (e.g., workshop, seminar, program, conference) that increases knowledge or skills in how ITI can be used in the classroom. The importance of professional development is frequently emphasized in relevant literature. Two studies (Butler & Sellbom, 2002; Frey & Donehue, 2003) revealed that the lack of professional development opportunities can be a primary barrier to the adoption of a variety of instructional technologies. Investment in innovation cannot be fully effective unless
faculty members receive the training they need to utilize innovation appropriately into their instructional activities (Dusick & Yildirim, 2000).

**Administrative support.** According to the CBAM model, administrative staff members play an important role in change process. They should understand the concerns of teachers because the implications for faculty support and development strategies may help resolve lower level, personal concerns and intensify higher-level impact concerns. For example, if there is a relationship between low administrative support and high personal concerns, then intervention strategies that strengthen administrative support may be pursued as a way to move teachers from personal to impact concerns. As Dusick (1998) states, “although the teacher may have control over some environmental factors (classroom setup, for example), a supportive administrative staff and support staff, are critical to encouraging the adoption of innovation” (p. 131). In this study, the concept of administrative support will be defined as the perceived supportiveness of school administrators (principal) in administrative positions by the teachers.

The role of peers in the change process may be important for the teachers who are considering the use of an innovation. Literature examining the diffusion of innovations has noted the value of peer influence as a vital variable; that is, if a fellow instructor is using the innovation, it may increase the awareness and use of the innovation by others (Baldwin, 1998; Rogers, 1995). Staff development literature even suggests that one of the best ways to support a “non-user” instructor in using technology is to pair him or her with a “user” of technology (Hope, 1997).
**Colleagues using innovation.** In this study, the concept of colleagues using innovation is the number of a teacher’s colleagues who are using or have used ITI to support their instructional practices. As noted earlier in the literature review, Rogers (1995) defines peer influence as opinion leadership, where individuals in a group are able to influence other’s attitudes. Opinion leaders, which may sometimes be, but are not always, early adopters, hold a type of informal leadership and are unique in their influence on their social system’s communication infrastructure.

Early adopters are respected leaders who are often quick to recognize the potential of an innovation (McLean, 2005) they are adventurous, but sufficiently skeptical to recognize good innovations from poor ones. Using Rogers’s (1995) definition of innovation as "anything perceived as new by an individual or group" (p. 11) and diffusion as “the process by which an innovation is communicated…among members of a social system” (p. 10), innovativeness is the degree to which an individual shows an affinity for a particular innovation in comparison to other members of their social system (McLean, 2005). In this case the persons in this category influence the adoption of curriculum change as the change agent who attempts to persuade to adopt innovation because as opinion leaders, they have more influence on the diffusion effect than persons in any other adopter category.

**Prior instructional use.** For the purposes of this study, prior instructional use will be defined as any prior use of integrated instructional strategies. In relevant literature, there seems to be clear, positive relationships between attitudes toward innovation and the amount of experience in using innovation (Ansah & Johnson, 2003;
Todd, 1993). In a study of pre-service teachers by A. A. Koohang in 1987, attitudes toward computers were found to be significantly related to prior computer experience (as cited by Petherbridge, 2007). In Woodrow’s (1991) study examining four different computer attitude scales with 98 pre-service teachers in a computer class, word processing experience correlated significantly with more positive computer attitude scores.

**Years of teaching.** According to Baldwin (1998), the longer an instructor has been teaching, the more likely he or she is familiar with teaching via class notes sketched out on a legal pad. For some faculty members, lecturing from notes on a legal pad may still indeed be a reality (Baldwin, 1998). The notion that year’s experience in teaching and one’s attitude toward using innovation is mixed. When examining faculty members’ computer self-efficacy (or computer confidence) at a Research I, land-grant institution (n=176, response rate of 58%), Kagmina and Hausafus (2000) found that faculty who had more than 10 years of teaching experience were less confident in utilizing electronic communication in their courses, implying that older, more experienced faculty members are less computer confident. However, a survey conducted by Learning in a Technology Rich Environment (LITRE) at NCSU in the spring of 2003 (n=1790, 55% response rate for 983 participants), found no relationship between a faculty member’s years of teaching and the number of technologies the faculty member used in his or her courses.
**Class size.** The LITRE survey (North Carolina State University, 2004) found that faculty members in small upper-level courses were the most likely to use in-class technologies (such as electronic presentations) and outside of class technologies (such as LMSs and electronic communications). Based on the LITRE (2004) findings, it is plausible that course size may affect an instructor’s concern about the use of innovations.

All the studies discussed in this third section of the literature review concerning the use of Stage of Concern as the framework in the United States and relevant to the current study are summarized in Table 4. Table 5 reflects studies conducted outside the U.S. using a similar framework.

**Summary**

As noted in the literature review, there is a need for curriculum reform in Indonesia that addresses the movement in educational arenas as the result of economically driven reform in the global context by shifting its direction from centralization toward decentralization. Although the positions on successful implementation of the decentralization policy in the global arena can be seen as conflicting, there are some arguments for decentralization that range from free-market disciples who encourage diversity, autonomy and choice in an educational market to the idea of giving more freedom instead of prescribed curriculum to teachers as professionals (Leat, 2007). However, some studies revealed that considerations need to be taken in account for any educational movement to be able to be implemented successfully.
### Table 4

**Summary of Studies Utilizing SoC as a Framework in the United States**

<table>
<thead>
<tr>
<th>Author, Title</th>
<th>Year &amp; Publication</th>
<th>Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Faircloth, Smith &amp; Hall. FSC Teachers Stages of Concern Regarding National Standards</em></td>
<td>2001 Journal of Family and Consumer Sciences</td>
<td>Family and Consumer Science (FSC) teachers in Georgia, N = 193. Descriptive statistics</td>
<td>Validity evidence for using CBAM instrument especially SoCQ for the implementation of the National Standard in PCS.</td>
</tr>
<tr>
<td><em>Todd, N.I. Faculty concerns as gateways to teacher competency with computer technologies</em></td>
<td>1993 Proceedings of Selected Research and Development</td>
<td>Higher education faculty in college of education working with pre service teachers; small convenience sample (n=26), descriptive statistics.</td>
<td>Another validity evidence of using CBAM. Prior experience using innovation (computing technology) influenced stage of concern.</td>
</tr>
<tr>
<td><em>Ansah &amp; Johnson Time will tell on issues concerning faculty and distance education</em></td>
<td>2003 Online Journal of Distance Learning Administration</td>
<td>Randomly selected n = 334 in 3 universities. Manova analysis for each concern across the universities. No exploration of concerns relating with professional development, administrative support, peer use, and locations.</td>
<td>Evidence of concerns theory validity in higher education innovation context and that the prior use impacts concerns (the longer utilization is associated with higher order concerns).</td>
</tr>
<tr>
<td><em>Adams, N., B. Educational computing concerns of postsecondary faculty</em></td>
<td>2002 Journal of Research on Technology in Education</td>
<td>Stratified convenience group sample (n=589) at a post-secondary institution with 3 types of users: professionals, intermediates, novices. Scoring the SoCQ based on the raw data. Looked at the influence of age, gender on the level of concern. Unclear explanation of data analysis method (descriptive).</td>
<td>Significant correlations were found between gender, age and higher order concerns. Faculty members in academic task areas described as “hard” had higher order concerns than those described as soft. Used Martin’s Computing Concern Questionnaire (CCQ) with the same theoretical basis as SoCQ.</td>
</tr>
<tr>
<td><em>Martin, J., B. Stages of concern in the development of computing expertise</em></td>
<td>1989 Unpublished doctoral dissertation, University of Florida.</td>
<td>Students who were users and nonusers of computers. Factor analysis &amp; Pearson correlation was used for the reliability test. Anova was used for the differences of the amount of computing experiences across the SoC groups. Unclear data analysis.</td>
<td>Validation of concerns theory for computing. Concern theory was appropriate framework for assessing the computing concerns for individuals with varying amount of computing experience. Significant correlations between experiences, education, gender, age and the sequence and the intensity of concern stages. Developed the CCQ to measure computing concerns.</td>
</tr>
</tbody>
</table>
### Table 5

#### Summary of Studies Utilizing SoC as a Framework Outside the United States

<table>
<thead>
<tr>
<th>Author, Title and Location</th>
<th>Year &amp; Publication</th>
<th>Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christou, C., Eliophotou-Menon, M., &amp; Philippou, G. Teachers’ concerns regarding the adoption of a new mathematics curriculum: An application of CBAM. (Cyprus)</td>
<td>2004 Educational Studies in Mathematics</td>
<td>Longitudinal study of concerns renew curriculum, comparison of four groups 655 teachers in 100 elementary schools, focus on math curriculum and textbook use implementation</td>
<td>Most concerns are at the task stage, significant differences in concerns data based on years of teaching not the implementation level.</td>
</tr>
<tr>
<td>Hargreaves, L., Moyles, J., Merry, R., Paterson, A. S. F., &amp; Esarte-Sarries, V. How do elementary school teachers define and implement “interactive teaching” in the National Literacy Hour (NLR) in England? (England)</td>
<td>2002 ERIC Document Reproduction Service No. ED 466444</td>
<td>Comparative assessment of groups over 8-month period, 15 teachers, focus on assessing implementation of interactive teaching in literacy</td>
<td>Few differences between focus and comparison groups except in the areas of interaction and questioning.</td>
</tr>
<tr>
<td>Cheung, D., Hattie, J., &amp; Ng, D. Reexamining the stages of concern Questionnaire: A test of alternative models. (Hong Kong)</td>
<td>2001 Journal of Educational Research</td>
<td>Comparative analysis of 4 alternative SoC models, 1,622 teachers, focused on the empirical information about concerns construct to test the reliability and construct validity of the questionnaire.</td>
<td>Reframe 7-stage SoCQ to 5-stage SoCQ, questions first stage in original model</td>
</tr>
<tr>
<td>Antonopoulou, E. Evaluation of teacher implementation and concerns regarding the cross thematic curriculum framework for compulsory education in Greece: Implications concerning Junior High School students’ perception of their science learning environments (Greece)</td>
<td>2009 Thesis from The University of Texas at Dallas</td>
<td>Longitudinal mixed methods research in assessing 15 Greek science teachers’ concerns and 274 students, Focus on the implementation of cross thematic curriculum and learning environments.</td>
<td>Self concerns were most prevalent according to the CBAM. Teaching and innovation experience did not affect concern types or intensities. Students in the use-group scored significantly higher in all scales of the CLES compared to students in the non-use group.</td>
</tr>
</tbody>
</table>
Another reason for the differences of opinion regarding the implementation of integrated instruction as an innovative method of teaching is the evidence of both successful and unsuccessful implementation. Studies showed that the decision making of four middle schools teachers who first decided to use integrative approaches and later stopped or reduced the use of it and shift back to more traditional curriculum planning (Weilbacher, 2001). The issue of time without supportive environments was the main cause of this drawback. Also, from the chapter, the literature shows that teachers are the key factors for the movement.

It is important to understand teachers’ perceptions and attitudes toward the reforms that have been studied by researchers using CBAM theory as a theoretical framework especially regarding the utilization of its SOC dimensions. Their studies examined teachers’ concerns toward the innovation especially in the integration of technology into instruction in higher education and the relationships of the concerns with teachers’ demographic background.

The literature also showed that the idea of integrated (thematic) instruction is not new in educational settings throughout the world, however there is not adequate research regarding the implementation of integrated instruction especially in the use of thematic units that integrate subjects as a whole. Other studies reviewed in the literature related the concern of teachers with their selected demographic factors (years of teaching, prior instructional use, prior professional development, administrative support, colleagues use and class size). However, some personal demographics (such as academic background, class size and status of employment) and administrative demographics (such as school
setting) were not taken into account especially related with the real implementation in the classrooms. Thus, this study assists in filling the gap in the literature in understanding teachers’ concern regarding the integration of instruction in the form of thematic units, the real implementation in their classroom, the relationship between selected demographic factors (individual and organizational) and the implementation, and the differences of the implementation across the stage of concern level. This study was intended to confirm what has been done before and to explore the factors and the innovation execution that have not been researched, to date.

More importantly, the research utilizing the SOC took place primarily in English speaking countries and some countries in Asia; however, this study was conducted in Indonesia as this country continues to allocate significant resources to its education. Findings from this study, which seeks to understand the concerns of teachers undergoing the adoption of the new ITI, can support schools undergoing the ITI adoption process by providing adequate support. The instrument developed from this research regarding the implementation of ITI will be useful for monitoring and supervision of the innovation implementation for many all involved.
CHAPTER III

METHODOLOGY

This study explored primary grade teachers’ stages of concerns toward the implementation of Integrated Thematic Instruction (ITI), the degree of ITI implementation in their classrooms, the differences (if any) between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC, and the relationships between primary school teachers’ demographic backgrounds including their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) as well as their organizational data (administrative support, colleagues using ITI, and school setting) and the degree of ITI implementation in their classrooms. The results of this study concerning teachers’ concerns, the implementation in their classrooms and the influence of their demographic backgrounds to the implementation assisted the utilization of proper professional development to support teachers’ implementation of ITI. The steps of the study were as follows: preparing the questionnaire, executing the survey, describing and analyzing the data: averages, variability and relationship, and discussing the findings.
Research Design and Methods

This research employed a non-experimental research design, specifically a cross-sectional descriptive design using a survey methodology for data collection. In non-experimental research designs, “there is no manipulation of an independent variable and no random assignment to group by the researcher” (Johnson & Christensen, 2008, p. 43). It means that this research design studies the world as it naturally occurs. The researcher measured the degree of relationship between variables. A non-experimental design was chosen because it fits with the research questions in which the researcher intends to examine the relationship between variables that cannot be manipulated. A cross-sectional design was appropriate for this study because the data can be collected from the respondents at a single point in time or brief time period (Johnson & Christensen, 2008). The main benefit of a cross-sectional study is that the data can be collected from various kinds of people or multiple groups in a short time. The descriptive purpose of the design allowed the researcher to describe and explore relationships between variables. The survey method of data collection allowed for information to be collected from the population using a questionnaire, thus, improving the efficiency of data collection (Borg & Gall, 1983).

Population

The population of this research was primary grade teachers in Indonesian schools who currently taught first, second or third grade students and employed ITI as part of their responsibility. Primary grade teachers were defined as classroom teachers at the first through third grade who teach whole subjects such as mathematics, science,
Indonesian language, social studies, civics, physical education, and in some cases religious education (Islam, Christianity, Protestantism, Hinduism, and Buddhism). The exact total size of the population was unknown. Other groups such as teachers in higher grades, principals, assistant principals, and staff who were not primary grade teachers were excluded from the study population.

**Sample**

This study employed a convenience sampling method in which the participants were selected because of their accessibility and convenience (Johnson & Christensen, 2007). Within Indonesian schools, all primary grade teachers were nationally mandated to implement ITI in their classrooms. The Kanisius Foundation, primary grade teachers in DIY Province were a sample of primary grade school teachers easily accessible to the researcher, for this reason this group of teachers became the sample from which potential participants would be recruited. The information from 2010 census data conducted by the Task Force of Keuskupan agung Semarang (Archdiocese of Semarang-AOS) indicated 151 potential participants. In order to determine the minimal number of respondents needed for a 95% confidence interval the researcher consulted the “Table for Determining Sample Size from a Given Population” (Krejcie & Morgan, 1970, p. 608), using the number of potential participants (151) as the “population”, the table indicated a number of 113 participants were needed for a 95% confidence interval for this convenience sample. Given the 2010 census data the researcher decided to recruit all 151 potential participants in order to maximize her response rate. In addition the researcher conducted two power analyses in order to determine the necessary number of participants
given an estimated medium effect size. According to Cohen (1992), the factors pre-determined in order to estimate an adequate number of participants to ensure proper power for a study are as follow: the alpha level is set at .05, the effect size is medium and the power is set at .80. In order to obtain proper power for an ANOVA analysis with seven groups a minimum N of 32 was required. The minimum N needed for proper power for a regression analysis with three independent variables is 76, and a minimum N needed for proper power of a regression analysis employing six independent variables is 97 (Cohen, 1992). The results of the power analysis confirmed the need to recruit all 151 potential participants as such no sub sampling was conducted from the convenience sample of primary school teachers working in Kanisius schools in DIY province.

The researcher recruited all potential participants from the 46 Kanisius schools in the DIY province. Table 6 shows the distribution of the delivered and returned questionnaires. The researcher received 150 completed questionnaires for a response rate of 99 percent.

Table 6

*Distribution of the Delivered and Returned Questionnaires*

<table>
<thead>
<tr>
<th>Regency/City</th>
<th>Kulon Progo</th>
<th>Bantul</th>
<th>Gunung Kidul</th>
<th>Sleman</th>
<th>Yogyakarta</th>
<th>DIY Province</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S  T</td>
<td>S  T</td>
<td>S  T</td>
<td>S  T</td>
<td>S  T</td>
<td>S  T</td>
</tr>
<tr>
<td>Potential</td>
<td>7 21</td>
<td>8 24</td>
<td>7 22</td>
<td>9 30</td>
<td>14 54</td>
<td>46 151</td>
</tr>
<tr>
<td>Returned</td>
<td>7 21</td>
<td>8 23</td>
<td>7 22</td>
<td>9 30</td>
<td>14 54</td>
<td>46 150</td>
</tr>
<tr>
<td>Response Rate (%)</td>
<td>- 100</td>
<td>- 96</td>
<td>- 100</td>
<td>- 100</td>
<td>- 100</td>
<td>- 99</td>
</tr>
</tbody>
</table>

*Note: S: Number of Schools, T: Number of Teachers*
Setting

The research was conducted at 46 Catholic schools of the “Kanisius” Foundation in Yogyakarta, Indonesia. These schools were located in five different regions of Daerah Istimewa Yogyakarta (DIY) Province or Special Province of Yogyakarta, namely, Yogyakarta Municipality, Kulon Progo Regency, Sleman Regency, Bantul Regency and Gunung Kidul Regency. This setting was chosen because they were implementing the national standards and there was not any comprehensive research about the implementation of the ITI in that area. Below, Figure 1 shows the map of Indonesia where DIY province is located.

![Indonesia Map](http://siteresources.worldbank.org/INTINDONESIA/Resources/Projects/288973-1118033888998/1218077-1150284192230/2654894-1150284704434/Atlas.pdf)

**Figure 1.** Indonesia Map

The following is information about DIY Province, gathered from the final main report on March 31, 2005 by the Special Province of Yogyakarta’s local government in cooperation with the Regional Development and Poverty Reduction Program (RDPRP). The Special Province of Yogyakarta is one of 33 provinces of Indonesia. It is located in the center of Java Island. The Special Province of Yogyakarta is bordered by the Indian
Ocean to the south and the Province of Central Java to the north, west and east. The population data of DIY Province is shown on Table 7 below.

Table 7


<table>
<thead>
<tr>
<th>Regency/Municipality</th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kulonprogo</td>
<td>13.84</td>
<td>12.78</td>
<td>11.89</td>
</tr>
<tr>
<td>Bantul</td>
<td>23.07</td>
<td>23.93</td>
<td>25.03</td>
</tr>
<tr>
<td>Gunungkidul</td>
<td>23.98</td>
<td>22.35</td>
<td>21.48</td>
</tr>
<tr>
<td>Sleman</td>
<td>24.63</td>
<td>26.79</td>
<td>28.89</td>
</tr>
<tr>
<td>Yogyakarta</td>
<td>14.48</td>
<td>14.15</td>
<td>12.71</td>
</tr>
<tr>
<td>D.I. Yogyakarta</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Urban</td>
<td>22</td>
<td>44</td>
<td>58</td>
</tr>
<tr>
<td>Rural</td>
<td>78</td>
<td>56</td>
<td>42</td>
</tr>
</tbody>
</table>


In general, the educational facilities for elementary and junior high schools have been evenly distributed in all the sub-districts, but their quality is different. The low quality of education is caused by internal factors, such as limited educational infrastructure and facilities, low quality of teachers, a weak educational system, as well as by the external factors of minimum roles of the community, parents, and the government. There is still a discrepancy between the educational facilities in the Urban Agglomeration of Yogyakarta (UAY) and those outside the UAY. Besides, the educational management system is weak, meaning that there is less coordination among the institutions concerned. The Urban Agglomeration of Yogyakarta itself becomes the center of universities where the students come from all over Indonesia. Figure 2 illustrates the area of the research.
Figure 2. Daerah Istimewa Yogyakarta Map

Broadly, education in Indonesia is carried out both by government and private schools. In 2008, DIY province had 5,119 schools from kindergartens to senior high schools in which 2,025 were primary schools from 1st to 6th grades with 23,545 teachers who served 307,317 students. The number of junior high schools with 7th to 9th grades was 506 with 13,110 teachers serving 124,375 students. Meanwhile, in the general senior high schools from 10th to 12th grades, there were 208 schools with 7,217 teachers who taught 60,771 students. In vocational senior high schools, there were 194 schools with 67,281 students and 7,283 teachers. In higher education, DIY province recorded 10 public higher education institutions with 4,355 tenured professors serving 86,024 students.
and 117 private higher education institutions with 17,444 lecturers. Tables 8 and 9 below illustrate the data about education in DIY province.

**Table 8**

*Number of Schools under Department of Education Supervision by Level of School and Regency/City in DIY Province 2008-2009*

<table>
<thead>
<tr>
<th>Level of School</th>
<th>Kulon Progo</th>
<th>Bantul</th>
<th>Gunung Kidul</th>
<th>Sleman</th>
<th>Yogyakarta</th>
<th>DIY Province</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten – Public</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Kindergarten – Private</td>
<td>328</td>
<td>511</td>
<td>589</td>
<td>478</td>
<td>206</td>
<td>2,112</td>
</tr>
<tr>
<td>Elementary – Public</td>
<td>294</td>
<td>273</td>
<td>436</td>
<td>382</td>
<td>111</td>
<td>1,496</td>
</tr>
<tr>
<td>Elementary – Private</td>
<td>61</td>
<td>73</td>
<td>53</td>
<td>117</td>
<td>79</td>
<td>383</td>
</tr>
<tr>
<td>Junior HS – public</td>
<td>36</td>
<td>48</td>
<td>59</td>
<td>54</td>
<td>16</td>
<td>213</td>
</tr>
<tr>
<td>Junior HS – private</td>
<td>32</td>
<td>38</td>
<td>47</td>
<td>49</td>
<td>42</td>
<td>208</td>
</tr>
<tr>
<td>Senior HS – public</td>
<td>11</td>
<td>19</td>
<td>11</td>
<td>17</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>Senior HS – private</td>
<td>6</td>
<td>16</td>
<td>13</td>
<td>31</td>
<td>36</td>
<td>102</td>
</tr>
<tr>
<td>Vocational HS – public</td>
<td>9</td>
<td>13</td>
<td>10</td>
<td>8</td>
<td>7</td>
<td>47</td>
</tr>
<tr>
<td>Vocational HS – private</td>
<td>25</td>
<td>23</td>
<td>20</td>
<td>42</td>
<td>37</td>
<td>147</td>
</tr>
<tr>
<td>Special Ed. – public</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Special Ed. – private</td>
<td>6</td>
<td>12</td>
<td>5</td>
<td>25</td>
<td>5</td>
<td>53</td>
</tr>
<tr>
<td>Total</td>
<td>810</td>
<td>1,029</td>
<td>1,250</td>
<td>1,207</td>
<td>555</td>
<td>4,851</td>
</tr>
</tbody>
</table>


**Table 9**

*Number of private Elementary Schools, Classes, Students, Teachers and Ratio of Students to Teachers by Regency/City in DIY Province 2008-2009*

<table>
<thead>
<tr>
<th>Regency/City</th>
<th>Schools</th>
<th>Classes</th>
<th>Students</th>
<th>Teachers</th>
<th>Average of Schools</th>
<th>Ratio of Students to Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kulon Progo</td>
<td>61</td>
<td>367</td>
<td>5,210</td>
<td>544</td>
<td>85</td>
<td>9</td>
</tr>
<tr>
<td>Bantul</td>
<td>73</td>
<td>523</td>
<td>11,234</td>
<td>862</td>
<td>154</td>
<td>12</td>
</tr>
<tr>
<td>Gunung Kidul</td>
<td>53</td>
<td>327</td>
<td>5,015</td>
<td>474</td>
<td>95</td>
<td>9</td>
</tr>
<tr>
<td>Sleman</td>
<td>117</td>
<td>842</td>
<td>19,723</td>
<td>1,461</td>
<td>169</td>
<td>12</td>
</tr>
<tr>
<td>Yogyakarta</td>
<td>79</td>
<td>749</td>
<td>21,943</td>
<td>1,299</td>
<td>278</td>
<td>16</td>
</tr>
<tr>
<td>DIY Province</td>
<td>383</td>
<td>2,808</td>
<td>63,125</td>
<td>4,640</td>
<td>165</td>
<td>12</td>
</tr>
</tbody>
</table>

*Note: Source: Central Bureau of Statistics of DI Yogyakarta Province, 2009.*
Data Gathering/Instrumentation

The Concern Based Adoption Model is a research-based model used to analyze teachers’ attitude and behavioral changes regarding their implementation of an innovation. The model has three dimensions namely Stages of Concern (SoC), Level of Use (LoU) and Innovation Configuration (IC). This study utilized the first dimension of the model as the measurement of teachers’ attitude toward the ITI implementation. Therefore, a questionnaire as the survey instrument was used to collect the data. It consisted of three parts. The first part is the Stages of Concern Questionnaire (SoCQ) developed by Hall and Hord (2001) that would be aimed at measuring one of the independent variables, the respondents’ peak or the most intense level of concern associated with the use of ITI.

The first part of the instrument was used to describe the affective side of change – teachers’ people reactions, feelings, perceptions, and attitudes (Hall & Hord, 2001, p. 81) about their implementation of the innovation. The permission to employ the questionnaire, to modify it by replacing the word “innovation” with the words “integrated thematic instruction (ITI)”, and to translate it into Indonesian language were obtained from the Southwest Educational Development Laboratory (SEDL) in Austin, Texas, as the current holder of the copyright. There were 35 questions on this part (items1 through 35) of the questionnaire.

The second part was questions and scales created by the researcher asking the respondents about the implementation of ITI in their classrooms following the guidelines of the Indonesian national standards about the characteristics of thematic instruction.
This part was called the Integrated Curriculum Implementation Scale (ICIS). There were 28 questions on this part (items 36 through 63) of the questionnaire.

The last part of the questionnaire asked for the respondents’ demographic background, including their individual data: years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status as well as their organizational data like administrative support, colleagues using ITI, and school setting. There were 13 questions on this part (items 64 through 77) of the questionnaire.

**Independent Variable: Stage of Concern Level and Demographic Backgrounds (Individual and Organizational)**

The independent variables in this study measured the stage of concern level as well as the individual and organizational background aspects of the respondents. The first independent variable was the peak (highest) level of teacher’s stage of concern (unrelated, self, task, impact) regarding the implementation of ITI. SoCQ portrays this relative intensity level of the stages of concern of primary grade teachers. It contained 35 items using an eight point Likert rating scale, which ranges from 0 as “irrelevant” to 7 as “very true of me now.” Since its creation and validation, this instrument has been widely used by many researchers in a variety of educational settings, including recent studies examining the instructional innovations in educational reform (Faircloth, Smith & Hall, 2001; Newhouse, 2001; Petherbridge, 2007; Rout, Priyadarshani, Hussin, Pritinanda, Mamat, & Zea, 2010). Therefore, in this study, the use of the SoCQ did not need to be validated because it is a standard instrument that has been widely used and accepted by
many researchers in various settings “across nationalities and cultures for many years in which concepts and items are validated appropriately to this time” (Newhouse, 2001, p. 9) as well as the fact that this study followed the procedures suggested by the authors of the instrument.

Initially, the SoCQ was developed and tested at the Research and Development Center for Teacher Education (RDCTE) at the University of Texas at Austin in the 1970s (Hall, George & Rutherford, 1979). The procedure of its development included reviewing the literature, developing lists of statements describing concerns about innovation based on the earlier work of Fuller (1969): writing the items, sorting the questions by a panel of judges, reducing 544 potential items into a 195 item prototype, administering the prototype to 366 individuals and running a factor analysis (Savage, 1992). From the result of item correlation and factor analysis, seven factors emerged and became the seven stages of concerns (awareness, informational, personal, management, consequence, collaboration and refocusing) within four stages of concern (unrelated, self, task and impact). Using the result of the factor analysis, the RDCTE staff developed a 35 item questionnaire created from the most heavily loaded items for each of the seven categories within four stages of concern. These seven levels of concern are organized into a model to show a relative intensity pattern of an individual’s concerns. It means that a higher intensity is in correspondence with a higher level of concern while a lower intensity is in correspondence with less concern. For instance, a person with a high intensity at Stage 1, informational, indicates that she or he has a strong need to have more information about the innovation. Meanwhile, a person with a low intensity at the same
stage indicates that she or he has less concern or little or no desire to have information about the innovation.

The reliability of the SoCQ showed that it has an acceptable internal reliability coefficient, meaning that the items constituting a measure relate to the same phenomenon (O’Sullivan, Rassel & Berner, 2003). Based on the Cronbach Alpha’s item analysis for internal reliability measurement for the seven categories (from stage 0 to stage 6) of the SoCQ, it resulted in a low reliability alpha coefficient of .64 for unrelated, .78 for informational, .83 for personal, .75 for management, .76 for consequence, .82 for collaboration and .71 for refocusing (Hall et al., 1979, p. 11). According to the standard in social science literature, alphas of below .60 are considered as unacceptable and alphas above .70 are considered as acceptable reliability (Neill, 2004). The SoCQ reliability is not extremely high but they are acceptable (Petherbridge, 2007).

The validity of the questionnaire was initially measured by the RDCTE staff using inter-correlation matrices and interview data. The result showed that the scores of the SoCQ related to each other and other variables. The correlation matrix from the work in 1974 indicated that SoCQ measured consistently with the hypothesis as expected (Hall et al., 1973). From two correlation analyses, Hall et al. (1979) demonstrated evidence for the validity of the stages. The first showed that 83% of the items had higher correlations with the stage they had been assigned than with the total score of the instrument and the second analysis indicated that 72% had higher correlation with the stage to which they had been assigned than with any other stage (Ansah & Johnson, 2003).
For the SoC data interpretation and analysis according to the guidelines in the technical manual for scoring and interpreting the information gained from the SoCQ, the SoCQ can be used to construct individual or group concern profiles by taking the raw score for each stage and converting the scores to percentiles to draw the profile plot showing the pattern for the profiles’ interpretation and description (Hall et al., 1979; Hall & Hord, 2001). A total raw score can be computed as shown in Table 10.

Table 10

**Raw Score Computation**

<table>
<thead>
<tr>
<th>Developmental Dimension</th>
<th>Stages of Concern</th>
<th>SoC Stages</th>
<th>Raw Score Computation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Refocusing</td>
<td>Stage 6</td>
<td>Items 3 + 12 + 21 + 23 + 30</td>
</tr>
<tr>
<td></td>
<td>Collaboration</td>
<td>Stage 5</td>
<td>Items 6 + 14 + 15 + 26 + 35</td>
</tr>
<tr>
<td></td>
<td>Consequence</td>
<td>Stage 4</td>
<td>Items 7 + 13 + 17 + 28 + 33</td>
</tr>
<tr>
<td>Task</td>
<td>Management</td>
<td>Stage 3</td>
<td>Items 4 + 8 + 16 + 25 + 34</td>
</tr>
<tr>
<td>Self</td>
<td>Personal</td>
<td>Stage 2</td>
<td>Items 1 + 11 + 19 + 24 + 32</td>
</tr>
<tr>
<td></td>
<td>Informational</td>
<td>Stage 1</td>
<td>Items 5 + 10 + 18 + 27 + 29</td>
</tr>
<tr>
<td></td>
<td>Awareness</td>
<td>Stage 0</td>
<td>Items 2 + 9 + 20 + 22 + 31</td>
</tr>
</tbody>
</table>

Moreover, Hall et al. (1979) suggested that graphic representation of percentile scores can provide interpretation of SoCQ data; however when using statistical analysis procedures, the use of raw scores is preferable. For group data, the authors recommend using the peak stage of concern. The peak stage of group concerns can be determined by combining individuals’ data obtained from the average scores for each stage of the
individuals in a group. From the percentile figures, SoCQ profiles can be plotted to identify the peak or the most intense stage of concern (Hall et al., 1979). For this study, descriptive statistics were used to convert raw scores to percentiles to illustrate the stage of concern profile of the teachers regarding the implementation of ITI. The interpretation of the profile using the percentile was used to show the ranges of the relative intensity of concerns from 0 (the lowest) to 99 (the highest). Meanwhile, as the authors suggested, raw scores were used for statistical analysis.

On a practical level, all respondents may have all seven concerns; some concerns are more intense than others for certain individuals at certain times (Hall & Hord, 1987). Hord et al. (1979) stated that, “the stage or stages where concerns are more (or less) intensity will vary as the implementation of change progresses” (p. 30). Teachers’ concerns may change or move to the higher or lower level as time goes by. The change of participants’ concerns may happen because of the influence of “participants’ feelings about an innovation, their perception of their ability to use it, the setting in which they are involved, and most of all the kind of support and assistance they receive as they attempt to implement the change” (Hord et al., 1987, p. 43). Therefore, Hall et al. (1979) stated that as individuals adopt an innovation, they move through seven stages of concerns from the self-concerns to-task concerns and finally to impact concerns.

The second dependent variable was demographic backgrounds including personal data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) and organizational data (administrative support, colleagues using ITI, and school setting).
**Individual demographic backgrounds.** Individual demographic background questions included the aspects of years teaching at the elementary education level, prior ITI use, ITI related professional development, academic background, class size, and employment status. Each of these aspects is elaborated in the following sections.

*Years of teaching at the elementary education level.* Years of teaching at the elementary education level was defined as the number of years the teachers had taught at an elementary school. In order to obtain an interval level measure, the respondents were asked to answer the number of years they taught.

*Prior ITI use.* Prior ITI use was used to determine prior integrated thematic instructional use as measured by the number of years the teacher had taught using the integrated thematic instructional approach to support his or her instructional practices. This measured the amount of ITI used. It excluded the experiences with any other type of integrated approach rather than the thematic instructional unit, specifically. This was due to the fact that the thematic unit must be taught in “theme” instead of just merely combining subject matters as an interdisciplinary approach (e.g., integrated social studies, integrated science, science, math and technology, social studies and language arts, moral education and civics education).

*ITI related professional development.* In this study, ITI related professional development was defined as any formal ITI training experience (e.g., workshops, seminars, programs, conferences) that increased knowledge or skills in how to plan and implement ITI in the classrooms. The question relating to professional development
asked the respondent to indicate the amount of ITI related professional development hours she or he participated in.

**Academic background.** Academic background was defined as the last degree held by a teacher including: Master of Education (M.Ed.), Master of Science (M.Sc.), Bachelor in Elementary Education (PGSD), Bachelor in other than PGSD, High School in Education (SPG), General High School, and Others.

**Class size.** As part of understanding the context in which a teacher works, teacher’s class size was solicited. Class size was defined as the approximate number of students in a classroom/grade that she or he was currently teaching. In case she or he taught more than one class, the teacher was asked to identify the average number of the students by dividing the total number of students in all grade levels or classes by the number of grade levels or classes.

**Employment Status.** Employment status was defined as a teacher’s present status of employment. The categorical status ranks included tenured, non tenured and government employed. Government employment in this context means a teacher who has been hired, appointed by the appropriate government authority and entrusted to teach in a Kanisius foundation school.

**Organizational demographic backgrounds.** Organizational demographic background questions constituted the aspects of administrative support of ITI, colleagues using ITI, and school settings. The following sections are the elaboration of each aspect of organizational demographic backgrounds.
Administrative support of ITI. Perceived administrative support of ITI was defined as the perceived supportiveness of administrators (such as principal, and “Kanisius” foundation administrator) for teachers in using ITI in their instructional practices. For the perceived Administrative Support of ITI, values will be assigned by the respondent ranging from “1” (strongly disagree) to “5” (strongly agree), with an option to select “don’t know.” The “don’t know value of “0.” To determine a respondent’s perceived administrative support score within a school, or foundation, the questions within a given question were totaled. The higher the score, the more supported the teacher felt in his/her use of ITI. Table 11 shows the scale for perceived administrative support.

Table 11

Perceived Administrator Support of ITI Scales

<table>
<thead>
<tr>
<th>Perceived Administrative Support</th>
<th>Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>The principal in my school is supportive of teachers who teach with the ITI approach.</td>
<td>1 2 3 4 5 DK</td>
</tr>
<tr>
<td>The principal in my school recognizes the additional workload required to teach with the ITI approach.</td>
<td>1 2 3 4 5 DK</td>
</tr>
<tr>
<td>The principal in my school communicates with faculty about the value of teaching with the ITI approach.</td>
<td>1 2 3 4 5 DK</td>
</tr>
<tr>
<td>The principal in my school understands how to assess the quality of teaching with the ITI approach.</td>
<td>1 2 3 4 5 DK</td>
</tr>
<tr>
<td>The principal in my school has positive attitudes toward teaching with the ITI approach.</td>
<td>1 2 3 4 5 DK</td>
</tr>
<tr>
<td>The principal in my school positively recognizes the effective use of the ITI approach in reappointment, promotion and tenure decisions.</td>
<td>1 2 3 4 5 DK</td>
</tr>
</tbody>
</table>
Colleagues using ITI. Colleagues using ITI was defined as the number of teacher colleagues who are using or have used ITI to support their instructional practices. To understand how a faculty member’s colleagues were using ITI, a question was asked for the amount of colleagues a teacher perceived to be using ITI, soliciting an interval level response.

School setting. School setting was defined as the location of the school in which a teacher was currently teaching, namely rural or urban. The categorization of the school setting followed the classification of rural and urban as determined by the Central Bureau of Statistics of DI Yogyakarta Province (2009). The bureau uses two ways in classifying villages into rural and urban. The first is the statistics of a village’s economic potential census of 2006 which classifies villages as “Rural” or “Urban.” The second is the population census of 2000 which classifies villages as “Big City,” “Middle City,” “Small City” and “Rural.” For this study, the researcher will use both sources and categorize the “Big City,” “Middle City,” “Small City” as Urban. Because this study used districts (instead of villages) as the measurement for the school setting, the researcher derived the classification from the villages’ classifications. If 50% or more of the villages within a district were urban, then the district was categorized as urban. Therefore, the teachers were asked for the geographic district (similar to a township in the United States) in which the school was located, but not the name of the town or village. Each district has a number of schools, reducing the chance that any individual response would be linked to a specific school. During the data input processing, the researcher determined the Urban-Rural area of the school according to the characteristics outlined previously.
Dependent Variable: Teachers’ Implementation of ITI

In this study, the dependent variable was the degree of ITI implementation by the primary grade teachers in their classrooms. The development of the instrument used in this study followed the guidelines of the characteristics of thematic instruction as mandated by Indonesian national standards (MONE, 2009). Among the constructs measured were student-centered learning, direct experiences (hands-on learning), subjects integration, whole learning, flexibility (responsive), variety of assessments, and engaged learning. Teachers’ implementation of ITI was measured by their responses to a 5-point Likert scale based items present on ICIS. Table 12 outlines the alignment of the ICIS items and their ITI constructs.

Table 12

Integrated Curriculum Implementation Scale

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Statements and Scale 1 (never) – 5 (always)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student-centered Learning</strong> (SC)</td>
<td>1. I use lecture and direct instruction in order to cover more content in my daily teaching.</td>
</tr>
<tr>
<td>Students as subject of learning who take the main role in the learning processes and teachers work as facilitators of the processes.</td>
<td>2. I give students choices for how they want to learn.</td>
</tr>
<tr>
<td></td>
<td>3. I act as a facilitator of learning.</td>
</tr>
<tr>
<td></td>
<td>4. I use instructional strategies that allow my students to assume a leadership role in my classroom.</td>
</tr>
<tr>
<td><strong>Direct Experiences (DE) - Hands-on Learning</strong></td>
<td>5. I use “learning by doing or learning by experience” classroom activities such as students conducting research or students making presentations.</td>
</tr>
<tr>
<td>Students encounter something tangible/concrete</td>
<td>6. I ask my students to bring in personal artifacts to help them make connections between their understanding and the content.</td>
</tr>
<tr>
<td></td>
<td>7. I integrate primary sources into my instruction.(e.g. pictures, photos, plants, animals, and other tangible media/technology)</td>
</tr>
<tr>
<td></td>
<td>8. I create a resource rich classroom where students explore themes through multiple avenues using materials with which they can experiment.</td>
</tr>
<tr>
<td><strong>Subject Integration (SI)</strong></td>
<td>9. I teach math, language arts, science, and social studies as separate subjects.</td>
</tr>
<tr>
<td>The separation among subjects is not apparent.</td>
<td>10. When I use the integrated curriculum, my students understand the connections between subject areas.</td>
</tr>
<tr>
<td>Constructs</td>
<td>Statements and Scale 1 (never) – 5 (always)</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Focus of learning is on theme.</td>
<td>11. I integrate at least 2 or more subject areas on a regular basis.</td>
</tr>
<tr>
<td>12. I develop thematic units in order to teach multiple subjects.</td>
<td></td>
</tr>
<tr>
<td><strong>Whole Learning (WL)</strong></td>
<td>13. I design units around a central theme to facilitate students’ learning across subjects.</td>
</tr>
<tr>
<td>Concepts from various subjects are in a single process so students will be able to understand the concepts as a whole</td>
<td>14. I utilize graphic organizers to develop main concepts from various subjects.</td>
</tr>
<tr>
<td>15. My instruction encourages students to see similarities of concepts across subjects.</td>
<td>16. I teach concepts by linking them to specific subjects.</td>
</tr>
<tr>
<td><strong>Flexibility (F) (Responsive)</strong></td>
<td>17. I connect themes and learning materials to the local surroundings such as neighborhoods, towns and natural environment.</td>
</tr>
<tr>
<td>Connecting materials among subjects, students’ life and environment</td>
<td>18. I avoid teaching controversial social issues that are currently being debated.</td>
</tr>
<tr>
<td>19. I connect materials with students’ life experiences.</td>
<td>20. When developing integrated curriculum, I use themes relevant to my students’ life experiences and culture.</td>
</tr>
<tr>
<td><strong>Variety of Assessment (VA)</strong></td>
<td>21. I use materials or instruments for assessment that meet the individual needs of my students.</td>
</tr>
<tr>
<td>Assessment is in accordance with students’ interests and needs.</td>
<td>22. I use paper and pencil tests as my primary method for assessing my students’ learning outcomes.</td>
</tr>
<tr>
<td><strong>Engaged Learning (EL)</strong></td>
<td>25. I use games, role play, simulation and other engaged learning strategies in my teaching.</td>
</tr>
<tr>
<td>Learning is conducted in various ways such as role-play, games, discussions, and the like.</td>
<td>26. I use songs, dance, and other playful activities in my teaching.</td>
</tr>
<tr>
<td>27. I use instructional strategies that require my students to actively move around while learning.</td>
<td>28. I employ cooperative learning such as Jigsaw, Learning Together (LT), Student Team Achievement Divisions (STAD), Teams, Games, Tournaments (TGT), Group Investigation (GI), or Teams Assisted Individualization (TAI).</td>
</tr>
</tbody>
</table>

*Note: *The original language used in Indonesian educational standards is “flexibility” which can be translated as “responsive” in English.

Table 13 provides the description and measurement of each element of the instrument.
Table 13

Description and Measurement of Variables

<table>
<thead>
<tr>
<th>Variable Type</th>
<th>Definition</th>
<th>Measure</th>
<th>Quantification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variables 1: SoC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage of Concern</td>
<td>Peak intensity of concerns, the thoughts, feelings, perceptions and attitudes expressed toward an innovation. Unrelated: I am not concerned about it. Self: How will this affect me? Task: How can I manage this? Impact: How does this effect my interactions with students and colleagues?</td>
<td>SoCQ (Hall, et. al., 1979, 2001): a 35-question, eight point (0 – 7) Likert scale, from “0” = irrelevant to “7” = very true of me now</td>
<td>Unrelated (5 questions sum scale, 0 – 35 points) Self (5-questions on informational and 5-questions on personal, each sum of individual scales, 0 – 35 points. In combination will be as self becomes 0 – 70 points) Task (5-questions, sum scale, 0 – 35 points) Impact (three 5 question subscales - consequence, collaboration and refocusing, sum of individual scales, 0 – 35 points, combine as impact becomes 0 – 105 points)</td>
</tr>
<tr>
<td><strong>Independent Variable 2: Respondents’ Background</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of teaching at elementary education level</td>
<td>Number of years the teacher has taught at elementary</td>
<td>One open ended question</td>
<td>Continuous (actual years taught)</td>
</tr>
<tr>
<td>Prior ITI use</td>
<td>Number of years the teacher has used ITI for instructional purpose.</td>
<td>One open ended question</td>
<td>Continuous (actual years used)</td>
</tr>
<tr>
<td>ITI Related Professional Development</td>
<td>Any formal ITI training experience (e.g., workshop, seminar, program, conference) that increases knowledge or skills in how to plan and implement ITI in the classrooms.</td>
<td>One open ended question asking for number of hours of training.</td>
<td>Continuous response; the greater the hours, the more professional development experiment.</td>
</tr>
</tbody>
</table>
| **Academic Background** | The last degree held by a teacher. | One close ended question about the last degree of the teacher from M.Ed., M.Sc., BA in Elementary Education (PGSD), BA in other than PGSD, High School in Education (SPG), General High School, and Others. | Categorical Variable with the data coding: 7 = M.Ed. 6 = M.Sc. 5 = BA in El. Ed. 4 = BA in Others 3 = Ed. HS / SPG 2 = General HS 1 = Others  
This variable could be a dummy code for the data analysis if needed. |
| **Class Size** | The approximate number of students in a classroom/grade that she or he is currently teaching | One open ended question asking for number of students in a classroom | Continuous variable |
| **Employment Status** | A teacher’s present status of employment. | Tenured, non tenured and government employment. | Categorical variable with the coding as follow: 1 = non-tenured 2 = tenured 3 = government  
This variable could be a dummy code for the data analysis if needed. |
| **Organizational Characteristics** |  |  |  |
| **Administrative Support of ITI** | The perceived supportiveness of administrators (i.e. such as principal) for teachers in using ITI in their instructional practices | Perceived administrative support scale, a 12 questions, 5-point Likert scale with responses ranging from “1” (strongly disagree) to “5” (strongly agree) asking for school administrative support (principal) and foundation administrative support. An option of “Don’t Know” is also included. | Continuous variable in which scores will range from 12 – 60) The higher the score, the more supported the teacher feels in his/her use of ITI. |
| **Colleagues Using ITI** | The number of a teacher’s colleagues who are using or have | One open ended question about the number of colleagues | Continuous variable |
used ITI to support their instructional practices in the school using ITI

<table>
<thead>
<tr>
<th>School Setting</th>
<th>The location of the school in which a teacher is currently teaching</th>
<th>One close ended question about the district where the school is located</th>
<th>Nominal Variable with the coding 1 = Rural 2 = Urban This variable could be dummied for the data analysis if needed.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td><strong>ITI Implementation</strong></td>
<td>The degree of implementation</td>
<td>28 closed ended questions about the teacher practice of ITI in the classroom. Scale “1” as “never” to “5” as always. An option of “don’t know” is also included. There are seven sub scale scores which are summated for a total score.</td>
</tr>
</tbody>
</table>

**Assessing Reliability and Validity**

Reliability means the results would look the same if the survey is repeated with the same people the next day and validity means the instrument measures what it should measure (Creswell, 2005). The questionnaire consisted of three parts namely: SoCQ, ITI implementation and demographics. SoCQ is the accepted instrument for its validity and reliability. However, the questions about the ITI implementation and administrative support were assessed for their reliability. For doing this, as many as 51 primary school teachers as part of the sample were asked to do the test retest. Twenty-one people as members of the pilot study testing (see p. 121) were also asked to participate in the test retest. Then, to calculate a measure of internal reliability, the researcher used the Cronbach’s Alpha as a reliability coefficient based on the average covariance among
items in a scale (Nunnally & Bernstein, 1994). The assumption was that items on a scale were positively correlated with each other because they’re all tapping into the same construct; meaning they’re all measuring a common entity. Some items were intended to be reverse scored so that they were all positively correlated. The α was interpreted as a correlation coefficient and it ranged in value coefficient from 0 to 1. The coefficient can be used to describe the reliability of factors gained from dichotomous scale (i.e., questions with two possible answers) or multiple choice answers (i.e., 1-5 Likert scale). The higher the coefficient, the more reliable the scale is. According to Nunnally (1978), a cut point of 0.7 is an acceptable reliable coefficient but lower cut point, such as .6, is sometimes used in the research (Santos, 1999). Negative α values can sometimes occur when items aren’t positively correlated among themselves and the reliability model is violated (Nunnally & Bernstein, 1994). A high Cronbach’s alpha (.7 and higher) would be consistent with the hypothesis that all of my scale items are measuring the same construct. With a low alpha (below .7), the researcher needed to check the column of the output labeled “Cronbach’s alpha if item deleted.” It meant that the alpha would go up if the researcher deleted the particular items. The items that should be deleted were the items with low “item-total correlations” because by deleting them, the scale’s alpha increased. The report of reliability for this study appears on chapter four.

In addition, a factor analysis on the ITI implementation and administrative support were employed as an exploratory analysis to begin to build the psychometric validity of this instrument for further use. Validity of the scales for the ITI implementation questionnaire was also inferred from several sources. Content and face
validity were presumed for the measures because the questions were reviewed by some faculty members who had expertise in this field. It was a measure of how representative a research project was ‘at face value,’ and whether it appeared to be a good project. The faculty members were asked to rate the items on the instrument representing specific constructs with the degree to which they thought that item represented or fitted with the definition of the construct. The rating scale was 1-5 in which 1 meant “does not represent the definition at all” and 5 meant “represents the definition completely.” For the reverse score items, they were asked to rate how well these represent the opposite of the construct definition. The reverse score items were marked by an asterisk (*). The ITI implementation scale consisted of 28 items from number 36 to number 63 in the questionnaire. Five of them (questions 36, 44, 51, 53, and 57) were negative items that needed to be scored reversely in the coding process by the researcher.

The researcher also provided a place for comments under each item for any feedback or suggestions about an item that was thought not to represent the construct definition. From this process, the researcher picked items with the highest scores to be kept and the items with minimum average scores of 3.5. Changes to the items were made for the items with average scores below 3.5 or if the feedback from the faculty members made sense.

**Response Rate and Results**

As many as 17 faculty members were informed by an email asking them to give their feedback on the questionnaire part 2 (ITI implementation Scale). Four out of seventeen (23%) faculty members responded to the request. In addition, some graduate
students in Curriculum and Instruction of Loyola University Chicago and elementary school teachers from local schools were asked to review the instrument and offer feedback. Nine people responded; therefore the total responses for the content validity came from 13 people. The result of those face or content validity processes was the following: generally, the average score for 28 items in the questionnaire were relatively good (4.36 out of 5). There were 17 items with the average scores between 4.5 – 5.0, four items with an average score between 4.0 – 4.49, four items with an average score between 3.5 – 4.0 and three items with an average score below 3.5. The three items below 3.5 needing to be considered for revision were #36, #44 and #57. All three items were reversing score items. Table 14 shows the summary scores of internal validity on the Curriculum Integration Scale for 28 items from 13 evaluators (A-M).

The changes on the questions were made based on the score of the item and the comments from the reviewers. The items with low scores and negative comments or high scores but negative comments were changed. However, no change was made for the item that had a low score but positive comments because it is possible that the reviewer was confused in scoring the item. For example, for a negative item, the reviewer thought that the item question was good. She or he also noticed that the item had an asterisk symbol meant that the item was a reversed score item. Therefore, she or he decided to score “1” instead of “5”.


Table 14

Result of Respondents’ Rating of Items on ICIS

<table>
<thead>
<tr>
<th>Item No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>AVG</th>
</tr>
</thead>
<tbody>
<tr>
<td>113</td>
<td>36</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>.</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2.33</td>
</tr>
<tr>
<td>114</td>
<td>37</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>.</td>
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<td>1</td>
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<tr>
<td>115</td>
<td>38</td>
<td>5</td>
<td>5</td>
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<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4.5</td>
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<td>4</td>
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<td>4.62</td>
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<td>4.62</td>
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</table>

It seemed that for the reviewers, the asterisk symbol and the word “reverse score” were confusing. The initial purpose of putting them was as a caution for both the
reviewers in making their comment and the researcher in the coding process. The reviewers may have thought that the “reverse score” for negative items applied to this validity process; that they needed to reverse their score by putting “1” for a “good” negative item and “5” for a “bad” negative item. For example, reviewer E on table 14 put a score of “1” for questions 36, 44, 51 and 57. All of these items were negative (reverse score) items. Meanwhile, she or he put higher scores, a “4” or “5”, for the remaining questions. It seemed that she or he intended to give those items high scores, but because of the words “reverse”, she or he scored “1” instead of “4” or “5”.

Question 36 was stated: I use lecture and direct instruction in my daily teaching. This is a reverse score question with the average validation score of 2.33. Some comments for this item were as follow: it depends on the purpose and how much; the question should be “How many minutes a day is the teacher engaged in DI and for what purpose?”; Is it possible that a student-centered classroom may still have SOME DI even on a daily basis for maybe just a short time each day? I think you might want to quantify this in some way; teachers might be student-centered and use some lecture and direct instruction, I would choose number 2, because lecturing and direct instruction are still needed for my students; this item is rather confusing - teacher as facilitator might also require the teacher to lecture although he/she will not dominate the class. The reviewers pointed out that direct instruction was still needed even though the teacher employed a student-centered approach. However, the frequency of using the lecturing made a difference; the more frequently teachers used lectures in their daily teaching; the less likely they implemented a student-centered approach. Therefore, the researcher changed
this item by adding the words “in order to cover more content” to refer to the frequency with which the teachers used direct instruction in their daily teaching.

Question #44 was written as follows: I teach math, language arts, science, and social studies as separate subjects. This is a reverse score question with the average validation score of 3.34. Two comments for this item were as follows: integrating the subjects together is necessary; no such thing as separate subjects in integrated curriculum; the integration should not be forced. These comments actually stressed the importance of integrating subjects in thematic instruction. With the low score but favorable comment, this item was unclear. It was possible that the evaluators were confused with the words of this reverse score item, since they scored 1 instead of 5 for the “good negative item question.” For example, the evaluators E and G were not consistent in rating the scale (see Table 10 above). Therefore there was no change made for this item.

Question #57 was written: I use paper and pencil tests to assess my students’ learning outcomes. This reverse score question had the average validation score of 3.00. Some comments for this item included: the frequency because pencil and paper tests are useful for a variety of assessments; the question could be "I PRIMARILY use paper and pencil tests to assess my students' learning outcomes; is it possible that a paper and pencil test (or an essay test) could be in accordance with student needs; not always but sometime; not an ideal form of assessment but sometimes necessary to assess the concepts or skills that have been taught; I find reverse score is confusing; the use of paper and pencil tests might also fulfill students’ need. Similar with #36 question, this
question about paper and pencil assessment needed to be focused on the frequency of using the assessment in teaching. If teachers relied upon paper and pencil assessment as their primary way to evaluate the students, then it is considered as an unfavorable practice of thematic instruction. The evaluators considered paper and pencil tests as a valid form of assessment among others. Therefore, a change was made for this item by adding the word “as my primary method.”

The changes were also made for questions #45 and #47 even though their scores were 3.5 or above. Question #45 was scored 3.45 and stated: When I use the integrated curriculum, my students **do not recognize** the subject areas being taught. The comment from the reviewers included: *Could students still recognize that they are receiving instruction in a subject even though it is part of an integrated unit?; just because the curriculum is integrated does not mean students won’t recognize specific subjects; no, they realize more than one subject is being taught; objectives should be told to students so they understand what they are learning or what the end of a unit/lesson’s goal is; I think the students need to know what they are learning; is it reverse score?* This item seemed to be a tricky question, because it was not a reverse score question even though it used the word “do not.” The main idea when constructing this question was that when teachers used integrated instruction, subjects were blended into a theme(s). Therefore, students would not recognize the subject as separate. Comments from the reviewers made the researcher realize that this item needed to be reworded. Therefore, the change made for this item was eliminating the words “do not recognize,” replacing them with the words “understand the connection.”
Question #47 was phrased as follows: I develop a single thematic unit in order to teach multiple subjects. There was only one comment from a reviewer for the #47 item; *not necessary strategies and concepts are met in the curriculum.* The change was made for this item erasing the words “a single” in order to make the sentence clearer. Table 15 shows the changes made.

Table 15

*The Changes Made*

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Statements and Scale 1 (never) – 5 (always) BEFORE</th>
<th>Statements and Scale 1 (never) – 5 (always) AFTER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student-centered Learning</strong></td>
<td>I use lecture and direct instruction in my daily teaching.*</td>
<td>I use lecture and direct instruction <strong>in order to cover more content</strong> in my daily teaching.</td>
</tr>
<tr>
<td>Students as subject of learning who take the main role in the learning processes and teachers work as facilitators of the processes.</td>
<td>I give students choices for what and how they want to learn.</td>
<td>I give students choices for how they want to learn.</td>
</tr>
<tr>
<td></td>
<td>I act as a facilitator of learning.</td>
<td>I act as a facilitator of learning.</td>
</tr>
<tr>
<td></td>
<td>I use instructional strategies that allow my students to assume a leadership role in my classroom.</td>
<td>I use instructional strategies that allow my students to assume a leadership role in my classroom.</td>
</tr>
<tr>
<td><strong>Direct Experiences (Hands-on Learning)</strong></td>
<td>I use “learning by doing or learning by experience” classroom activities such as students conducting research or students making presentations.</td>
<td>I use “learning by doing or learning by experience” classroom activities such as students conducting research or students making presentations.</td>
</tr>
<tr>
<td>Students encounter something tangible/concrete</td>
<td>I ask my students to bring in personal artifacts to help them making connections between their understanding and the content.</td>
<td>I ask my students to bring in personal artifacts to help them making connections between their understanding and the content.</td>
</tr>
<tr>
<td></td>
<td>I integrate primary sources into my instruction (e.g., pictures, photos, plants, animals, and other tangible media/technology)</td>
<td>I integrate primary sources into my instruction (e.g., pictures, photos, plants, animals, and other tangible media/technology)</td>
</tr>
<tr>
<td></td>
<td>I create a resource rich classroom where students explore themes through multiple avenues using materials with which they can experiment.</td>
<td>I create a resource rich classroom where students explore themes through multiple avenues using materials with which they can experiment.</td>
</tr>
</tbody>
</table>
### Subject Integration

The separation among subject is not apparent. Focus of learning is on theme

- I teach math, language arts, science, and social studies as separate subjects.*
- When I use the integrated curriculum, my students do not recognize the subject areas being taught.
- I integrate at least 2 or more subject areas on a regular basis.
- I develop a single thematic unit in order to teach multiple subjects.

When I use the integrated curriculum, my students **understand the connections** between subject areas.

### Whole Learning

Concepts from various subjects is in a single process so students will be able to understand the concepts as a whole

- I design units around a central theme to facilitate students’ learning across subjects.
- I utilize graphic organizers to develop main concepts from various subjects.
- My instruction encourages students to see similarities of concepts across subjects.
- I teach concepts by linking them to specific subjects.*

I design units around a central theme to facilitate students’ learning across subjects.

I utilize graphic organizers to develop main concepts from various subjects.

My instruction encourages students to see similarities of concepts across subjects.

I teach concepts by linking them to specific subjects.

### Flexibility (Responsive)*

Connecting materials among subjects, students’ life and environment

- I connect themes and learning materials to the local surroundings such as neighborhoods, towns and natural environment.
- I avoid teaching controversial social issues that are currently being debated.*
- I connect materials with students’ life experiences.

I connect themes and learning materials to the local surroundings such as neighborhoods, towns and natural environment.

I avoid teaching controversial social issues that are currently being debated.

I connect materials with students’ life experiences.

When developing integrated curriculum, I use themes relevant to my students’ life experiences and culture.
<table>
<thead>
<tr>
<th>Variety of Assessment</th>
<th>I use materials or instruments for assessment that meet the individual needs of my students.</th>
<th>I use materials or instruments for assessment that meet the individual needs of my students.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I use paper and pencil tests to assess my students’ learning outcomes.*</td>
<td>I use paper and pencil tests as my primary method for assessing my student’s learning outcomes.</td>
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<td>I use performance assessments to assess my students’ learning outcomes</td>
<td>I use performance assessments to assess my students’ learning outcomes</td>
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<td>I use portfolio to assess my students’ learning outcomes</td>
<td>I use portfolio to assess my students’ learning outcome</td>
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<tr>
<td>Engaged Learning</td>
<td>I use games, role play, simulation and other engaged learning strategies in my teaching.</td>
<td>I use games, role play, simulation and other engaged learning strategies in my teaching.</td>
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<td></td>
<td>I use songs, dance, and other playful activities in my teaching</td>
<td>I use songs, dance, and other playful activities in my teaching</td>
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<td>I use instructional strategies that require my students to actively move around while learning.</td>
<td>I use instructional strategies that require my students to actively move around while learning.</td>
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<td>I employ cooperative learning such as Jigsaw, Learning Together (LT), Student Team Achievement Divisions (STAD), Teams Games Tournaments (TGT), Group Investigation (GI), or Teams Assisted Individualization (TAI).</td>
<td>I employ cooperative learning such as Jigsaw, Learning Together (LT), Student Team Achievement Divisions (STAD), Teams Games Tournaments (TGT), Group Investigation (GI), or Teams Assisted Individualization (TAI).</td>
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<td>Note: * Reverse score</td>
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**Pilot Testing**

Pilot testing was needed to improve the validity of the instrument especially in its usability and clarity. As Creswell (2005) has argued, pilot testing of an instrument is important in establishing content validity and in improving the questions, format, and scales. In order to obtain feedback about the structure and individual questions within the instrument, this researcher conducted pilot testing prior to the initial survey, on determining the length of time to complete the questionnaire, and getting feedback on the
readability of the research instrument as well as identifying ambiguities and difficult questions. A convenience sample of 21 elementary teachers in Indonesia that were not part of the sampling frame were identified and asked to complete the instrument and comment about the questions, directions, and length of the survey two weeks before the initial survey.

The questionnaire executed in this study was translated from English into the Indonesian language. The translation was supposed to be validated by the Language Center of Sanata Dharma University. However, in the actuality, it was validated by some faculty members from Sanata Dharma’s language education department. The change was made due to the difficulty to meet with the director of the center. In addition, many of the faculties in the language center were from the English education study program. Having colleagues from Indonesian language study program also brought additional benefit for the translation, especially dealing with spelling, punctuation and grammar of Indonesian language according to “Ejaan Bahasa Indonesia yang Disempurnakan” (EYD) or guidelines for Indonesian language spelling. Therefore, prior to this pilot study, the researcher asked some Indonesian colleagues from both the Indonesian language education and English education study programs to confirm the translation of the items developed in English into the Indonesian language.

**Response Rate and Results**

Prior to the pilot study, the researcher approached some colleagues from the Indonesian Language Education and English Language Education study programs of Sanata Dharma University, Indonesia. Nine out of ten (90%) of those who were
approached agreed to complete and give feedback on the translated questionnaire. The researcher gave a hard copy of the instrument to these colleagues. Eight of them gave responses directly in hard copy while one of them responded both in hard copy and via email. In appreciation for their contributions, “Chicago” logo pens were sent to each colleague.

The feedback from the English education study program colleagues mainly concerned word choice that was tied to cultural context rather than a literal translation such as using the word “dear sir or madam,” using the greeting "dengan hormat" ("with respect") as the first line of letters instead of “how are you” and always putting the words “thank you” to close the letter. Meanwhile, the Indonesian language colleagues reviewed the use of letters, words and punctuation such as putting the words “learning by doing” and “paper and pencil” in italics, using I, II, III instead of 1, 2 and 3 for grade level.

Moreover, the result of the translation confirmation was the following: (1) word use and spelling such as “ilema” (using one “m”) instead of “dilemma” (2) using dear sir or madam on the heading of the cover letter instead of you, (3) using the prefix, Mr/Ms, for the respondents instead of you on the remaining questionnaire, (3) not using a question word within the sentence such as: “I would like to know the decision maker in the new system” instead of “I would like to know who will make decision in the new system…”; “I would like to know the way my teaching is supposed to change” instead of “I would like to know how my teaching is supposed to change”; “the principal in my school understands the way to assess the quality of teaching with the ITI approach” instead of “the principal in my school understands how to assess the quality of teaching with the ITI
approach.” Some cultural aspects needed to be considered such as “if you would like to participate” instead of “if you decide to participate”; “I would like to ask your willingness to fill and return the questionnaire…” instead of “I would like to have all surveys completed and returned.”

As soon as the researcher got the translation confirmation and revised the instrument, the pilot study was conducted. Twenty-one elementary school teachers who were not part of the sample were asked to complete the confirmed instrument of the study. They were from two different elementary schools in Yogyakarta. The procedure for the pilot study involved contacting the principals of the schools to explain the study and asking for permission and a time to deliver and pick up the instruments from the schools by courier. The researcher conducted a meeting with the courier who also served as a research assistant. The courier was an alumnus of Sanata Dharma University who was familiar with the geographic areas and the settings of the research. During the meeting, the researcher explained the job description of the research assistant such as making sure the number of instruments equaled the number of participants, taking the instruments to the school at the agreed time, giving a letter to the principal to explain the study, and picking up the instruments from the schools at the agreed time. The researcher then sent the instruments that consisted of the confirmed translated questionnaire to be used in the study along with the introduction letter, a comment sheet for feedback, the directions to complete the pilot and a “Chicago” pen for the participants in appreciation for their participation. The pilot participants were asked to write their feedback in a general comment on the questionnaire, the readability and clarity, and the time to
complete the questionnaire (30 minutes). The response rate was 100% in which five of
them responded via email and 16 used the hard copy.

The result of the pilot in general was that the questionnaire was good and could be
used for the research. The pilot participants were familiar with the ITI; and found the
instrument thorough and comprehensive. However, the introduction letter of the
questionnaire needed to be condensed and simplified. Most of the piloting participants
(18 out of 21) stated that the readability and comprehension of the introduction letter was
low due to long sentences such as part I of the introduction letter. Seven participants
thought that some question sentences were too long and confusing, too “heavy” for
elementary school teachers. They recommended that the sentences be translated into
daily language (more context than content translation). One of the participants expressed
that 78 questions were too many for the level of elementary school teachers. Nine of
them asked about the Likert scale in part II and III of the questionnaire and suggested
adding the option of “Do not know (DK)” with the scale of zero. The DK option was
proposed to provide an answer for those who did not understand the question, did not
know about the ITI, or about administrative support due to their educational background
or length of work (new teacher) and for those who did not want to answer the question.
Iarossi (2006, p. 62) stated that allowing respondents to opt out because they are not
familiar with the question or if it does not apply to their situation, will help to improve
the response rate and the quality of the data. Regarding the time completion, fifteen
(70%) participants said that 30 minutes was appropriate to complete the questionnaire,
two of them (10%) did not give any response and four of them (20%) said that the completion time was too short.

Based on the pilot study results, some changes were made. The introduction letter was revised to be more readable, two of the research questions (63 and 71) were edited to be shorter and more understandable by using daily language, and the option of “DK” was added to part I and II of the questionnaire. The time completion was not revised.

**Data Collection**

The data collection was carried out in July and August of 2011. The procedure of data collection included filing and completing the necessary forms to Loyola University Chicago’s Institutional Review Board (IRB). The IRB required that I obtain permission from the Southwest Educational Development Laboratory (SEDL) in Austin, Texas, which holds the copyright for the SoCQ instrument. Permission was also necessary from the Kanisius Foundation to conduct the study in the selected schools. The researcher obtained the permission from SEDL on May 3, 2011 and from the Kanisius foundation on May 21, 2011. Loyola’s IRB reviewed and approved the project on Thursday, June 9, 2011. As soon as the permissions were obtained, the researcher contacted each school principal by a telephone call and personal visit to give the information about the survey. The next step was conducting a meeting with five students to serve as couriers and research assistants who would deliver the instruments to the schools. These assistants were five undergraduate students of Sanata Dharma University who originally came from the five regencies of the research settings and were acquainted with the location neighborhood. Similar to the pilot study, during the meeting the researcher explained the
nature of the study, the assistants’ duty and the incentives. They took the instruments in accordance with the number of schools and teachers in each region. The researcher sent the couriers the printed format (hard copies) of the questionnaire with a cover letter for each teacher. The cover letter explained the description, the purpose and the significance of the study, the inclusion of the respondents (i.e., they are being asked to participate in this research because they are 1st – 3rd grade teachers who are mandated by the national standards to implement ITI in their classrooms), the assurance of confidentiality for respondents completing the questionnaire, the approximate duration to complete the survey, the expected date to return the questionnaire, and the contact information of the dissertation chair and the researcher.

Each respondent was sent a sealed packet of containing: (1) the cover letter to introduce the study; (2) the questionnaire that consisted of three parts namely Stages of Concern Questionnaire (SoCQ), Integrated Curriculum Implementation Scale (ICIS) questionnaire, and personal data set for collecting demographic information of the respondents; (3) a “Chicago” logo pen for token of participation. In addition, the researcher constructed an introductory letter to the principal of each school accompanying the instrument. The couriers distributed the research instrument to the schools. When the couriers were in the school, they were instructed to meet the principal or contact person of the school, give the introductory letter and the research instruments, and set up the appointment for picking up the questionnaires.

Two days after the letters and instruments were distributed, the researcher made a telephone call to each school to ensure that the questionnaires had arrived, to remind the
principal to ask teachers to complete the survey instrument, and to inform the schools of the expected time for returning the questionnaires. In case the questionnaires were not returned within two weeks of their arrival, follow-up telephone calls to the principals or site visits to the schools would be made. Fortunately, all the questionnaires were returned within a week and the follow-up phone call was not necessary. The response rate was 99% in which from 151 potential respondents, 150 were returned. One respondent was ill so she could not participate in the study, some schools were phasing out and some teachers taught more than one class. The researcher received phone calls and emails from some research participants who expressed that the ITI study was good and they were happy to be able to be involved in the study. They hoped that in the future, as a follow-up of this study, Sanata Dharma University would develop more partnerships and professional development programs for the teachers to advance their knowledge and understanding of ITI. Similar comments also made by principals to the couriers.

While the response rate was excellent, it remained a question. Response rate can be calculated by dividing the number of people who submitted a complete survey by the number of people contacted. A survey is considered to be complete if 80% or more questions were answered (American Association for Public Opinion, 2000). A meta-analysis study conducted by Johnson and Owens (2003) on 23 well known journals revealed that with a little exception, some of these prominent journals that routinely publish survey research do not have clear policies regarding the full explanation of response rate information.
There is no standard agreement about factors affecting the survey response rates. Studies have used different points of view in studying response rate factors (Greer et al., 2000). Sheehan (2001) stated some factors that affect both paper and email survey response rates are the length of the survey, respondent contacts, survey design, research affiliation, compensation and issue salience. Meanwhile, Greer, Chuchinprakarn, and Seshadri (2000) mentioned the following factors: survey sponsorship, cover letter clarity, color of the questionnaire’s paper, anonymity, pre-notification, follow-up, monetary and non-monetary incentives, type of postage, and personalization. In this study, the researcher will review only the factors that possibly contributed to the likelihood of participating in this mail survey.

Studies on the length of survey showed mixed results. Jobber (1986) found that there was no significant difference in response rate between short and long questionnaires, whereas Mihn (2000) found a difference between the two forms. Other studies showed that survey length has a negative influence on response rates in which the longer the survey, the more likely it is that the response rate will be lower (Steele, Schwendig & Kilpatrick, 1992). Some studies have also indicated that samples in business-oriented studies were more sensitive than consumers to survey length (Jobber & Saunders, 1993) because the respondents are likely to complete the questionnaires during the work hours. A recent study suggested that still more research is needed to generally conclude the effect of questionnaire length to the willingness to participate (Greer et al., 2000). Business respondents may be more willing to fill out a short questionnaire because it consumes less time and energy. From the pilot study of this research, most of
the respondents did not mention that time was an issue. However, 20% of the participants said that the time was too short to complete the questionnaire or in other words, the 78 items in the questionnaire were too many. In this case the survey length might not have any direct influence to the willingness to participate in this study. However, the researcher predicted that the higher participation was due to the available time the respondents had to complete the study. This survey was carried out during the summer break or early semester when the teachers had more time to answer the questionnaires. In this matter, time seemed to influence the participation level by the length of questionnaire. Iarossi (2006) stated that “the actual length of the questionnaire in itself is not truly a deterrent for survey participation; rather it is an excuse offered by a respondent who would not participate even if the questionnaire was one page long” (p. 151). The willingness to participate might be different if the study was carried out during the middle or the end of the semester.

Moreover, in timing the use of deadlines seemed to be another factor that encouraged the respondents to take the survey. The instrument was delivered on Monday, July 11, 2011 and the researcher put the deadline of Friday, July 22, 2011. Iarossi (2006) believed that when questionnaires arrive during the early week, the respondents will have more willingness to fill out the questionnaire since there is still plenty of time left before the end of the week when other works must have higher priority.

Respondent contacts included those made by the researcher before the research. There is a mixed argument about the pre-notification contact prior to the study of a mail
survey. Haggett and Mitchell (1994) stated that pre-notification contact improves the response rate while according to Jobber and Sanderson (1983), there is no effect of pre-notification contact and response rate. Moreover, they found that pre-notification on a mail survey has decreased the response rate. For this study, pre-notification contacts were made with the principal as a contact person, not directly to the respondents due to issues of confidentiality. There is a possibility that pre-notification contact to the principals affected the high response rate in this study. The principals might have felt obligated and in turn urged the teachers in her or his school to participate. Iarossi (2006) stated that it is important to identify the correct person of first contact for the success of participation. The person who has the authority to direct other respondents to participate might lead to greater response rate (Groves, Cialdini, & Couper 1992).

Design issues include the cover letter and delivery method (web versus mail surveys). Studies by Albaum and Strandskov (1989) showed no significant effect of the cover letter describing the project. However, Iarossi (2006) said that it is important to use an advance letter to foster participation and that the letter improved responses. From the confirmation translation, one colleague stated that the cover letter was too long. However, the cover letter in this study was detailed to introduce the respondent to the project and to build the legitimacy of the research. The letter made a reference to the researcher including the contact name and phone number as well as that of the chairperson as the qualified persons who will grant the study, all of which might have influenced the teachers to participate.
Included in this cover letter was research affiliation, which has been shown to have a positive effect on survey response rates (Sheehan, 2001). There was a significant difference on response rates between university sponsorship versus commercial sponsorship (Faria & Dickinson, 1996). Knowing the researcher’s affiliation or university sponsorship might encourage the respondents to participate. It is due to the personal experiences of the respondents with the researcher’s institution – Sanata Dharma University (e.g., alumni, collaborative research, and other kinds of partnerships).

Research by Underwood, Kim, and Matier (2000) on Cornell University’s students showed that postal surveys typically get a higher response rate than web (email) surveys. In addition, Veiga (1984) studied the use of stamped return envelopes had a different response rate than those using business reply envelopes. This study used couriers to distribute and pick up the survey due to the geographical location and to lessen the time involved. The response rate in this study might have been different (lower) if the respondents were asked to mail back the survey themselves even if the envelope and stamp were provided.

Compensation or incentives is believed to improve the response rate. Cialdini (1985) identifies the rule of “reciprocation” states that persons will have a feeling of being obliged to participate in return for the gifts, invitations, and the like that they accept from another person. In this research the incentive was the “Chicago” logo pen. The participants might feel obligated to participate to show their respect for receiving a souvenir from a foreign country. Some respondents even contacted the researcher after their participation to say thank you for the gift.
Salience is another factor that has a strong positive effect on response rate for postal, email and web-based surveys (Sheenan, 2001). Salience is the feeling of importance on a specific issue (Martin, 1994). Meaning is very subjective in that for the same topic, the feeling of importance can differ among people. Roberson and Sundstrom (1990) reported that the salience issue is a key for mail survey participation. The primary grade teachers in this ITI study might have the topic of salience, since they are required to implement ITI. The result would likely be different if the respondents were upper grade teachers who are not obliged by the curriculum to implement the ITI.

Data on response rates from an international perspective are mixed. Research by Harzing (2000) in 22 countries revealed that response rates in the U.S. (14.3%) are lower than in Europe (22.9%) and Japan (28.6%). However, recent reports according to the U.S. Census 2010, national participation rate on mail surveys was 74% and showed a high participation of the households that filled and mailed back the surveys. Meanwhile, in Southeast Asian countries, response rates are generally low. For example a study by Mirza, Bartels, and Hiley (1997) in Taiwan got a 10% response rate. Ng and Chui (1997) reported an 11% response rate in Hong Kong; Singapakdaki, Vitell, and Leelakulthanik (1994) showed a 16.3% response rate in Thailand; and Wang, Wee, and Koh (1998) mentioned a 10–15% for Singapore (and China). A survey conducted in January 12-22, 2009 by The International Republican Institute/IRI (2009) on public opinion about national trends, received a response rate of 91.5%. A study conducted by Son, Robb and Charismiadji (n.d.) about computer literacy among Indonesian teachers, reached a 70% response rate.
To conclude this section, it can be said that the high response rates in this study might be the result of the combination of all of the above factors. Particularly, the researcher believes that the most likely factor affecting the high response rate of this study was a combination between the researcher’s affiliation and the use of couriers. The role of collectivism culture is tied to Indonesian, especially in Yogyakarta where the Javanese culture places the role of authority of “seniors” (e.g., teachers, parents, or a person with higher status) identical with power and behaviors. Kornadt (2002) said that “Japan and Indonesia clearly belong to the more collective group of cultures.” This collectivistic culture is characterized by polite behavior, mutual respect among people and obedience to norms” (p. 199). Independence, self realization and assertiveness are “unacceptable.” Moreover, Asian culture is identical with seniority in which “the society is structured in hierarchical way according to seniority” (p. 200). Clearly, teachers and parents have high authority. In this context of study, the respondents or principals may have an “emotional” attachment to Sanata Dharma University. It was possible that the principals, the contact person or the respondents might have felt impolite if they did not participate. In addition, the principal or contact person of the school might have had another pressure knowing that the couriers would pick up the completed questionnaires from their school. They might encourage their teachers to participate in the research in order to be noticed as cooperative in supporting the research.
Data Analysis Procedures

Based on the purpose of the study, and the research questions, the following research hypotheses (if any) were addressed:

1. What are the stages of concern of primary school teachers regarding the implementation of Integrated Thematic Instruction (ITI)? This question does not have any hypothesis because the answer to this question is descriptive.

2. To what degree do primary school teachers implement ITI in their classrooms? This question does not have any hypothesis because the answer to this question is descriptive.

3. Are there any significant differences between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC?

   *Null hypotheses*: there are no significant differences between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC.

4. Are there any significant relationships between primary school teachers’ demographic backgrounds including their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) as well as their organizational data (administrative support, colleagues using ITI, and school setting) and the degree of ITI implementation in their classrooms?
Null hypotheses: The first null hypothesis for this question was that there was no significant relationship between primary school teachers’ demographic background in their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) and the degree of ITI implementation in their classrooms. The second null hypothesis for this question was that there was no significant relationship between primary school teachers’ demographic background in their organizational data (administrative support, colleagues using ITI, and school setting) and the degree of ITI implementation in their classrooms.

The data management was carried out prior to the data analysis for testing the hypotheses. It consisted of four steps suggested by Iraossi (2006), namely coding, editing, data entry and cleaning. From 150 returned questionnaires, all of them were usable because they met the criteria as a completed questionnaire.

The data obtained from the returned questionnaires was transcribed to coding sheets. Coding is the process of categorizing respondents’ answers into meaningful patterns (Moser & Kalton in Iraossi, 2006). In this process, the DK (don’t know) answers were coded 0. The negative items on part II of the questionnaire about the ITI Implementation scale were going to be coded in reverse. In reality, all negative items (questions 36, 44, 51, 53 and 57) were removed because they were confusing. As a result, in the final data input, there were no negative questions involved. After the data was coded, it was reviewed and edited by two colleagues who were experts in quantitative analysis. The editing stage was important to find and correct errors. The
next stage was data entry. Microsoft Excel and the computer statistical package SPSS Version 17 was utilized to generate a computer data input and analysis of the data.

The next process was data cleaning. Cleaning was an activity of “final editing and imputation procedures used to enhance data quality and prepare data for analysis” (Iraossi, 2006, p.195). The researcher carried out the data cleaning to verify the structural stability of the data by conducting the following check on the data file(s) containing all three sections of the questionnaire: each record had a unique ID which corresponding to the sample (i.e., the schools), each variable had a unique label, and all data in the computer matched with the questionnaire. Invalid data, such as zero responses and blank answers, were erased. Part of the data cleaning was eliminating the zero and non-responses (empty cells) from the data analysis. For example, in the questionnaire there were seven categories of educational background and the coding was 7 – 1 for Master of Education (M.Ed.), Master of Science (M.Sc.), Bachelor in Elementary Education (PGSD), Bachelor in other than PGSD, High School in Education (SPG), General High School, and Other respectively. However, three categories, namely Master in Education, Master in Science and general high school had blank answers (i.e., none of the respondents had a master’s degree). In addition, respondents wrote the degree of a two year diploma in elementary education (PGSD) on the “other” option. Therefore, the actual data was transferred into four categories: “1” for SPG, “2” for a bachelor’s degree in other than PGSD, “3” for two year diploma in elementary education and “4” for bachelor in elementary education. SPG was used for a vocational high school in education, which no longer exists. Data cleaning also involved the identification of the
outliers in which the data was erroneous or out of range. For example, on the data about ITI experience, a respondent wrote 20 years and another respondent wrote 12 years. These two data were considered as extreme data (outliers) and needed to be eliminated.

The final and by far the most difficult step in the cleaning process was the investigation of internal inconsistencies among individual questions, especially on part II of the questionnaire with the ITI implementation scale. Running the Exploratory Factor Analysis (EFA) showed the inconsistency among questions and the constructs were not really addressed clearly by the items. The negative items in this scale were also confusing. Therefore, the negative items on this scale were omitted for data analysis.

This was consistent with the feedback from participants during the validation process as well as from the translation confirmation and pilot study respondents.

Prior to testing the proposed hypothesis, the researcher selected an appropriate level of significance for interpretation of the statistical data. The level of significance is defined as the risk of rejecting a null hypotheses (specifically for research questions three and four) when it should not be rejected (McMillan & Schumaker, 1993). Usually, in accordance with the level of significance selected for the majority of studies in social science, the 0.05 level of significance will be adopted for testing the hypotheses. This study planned to adjust the level of significance into .01 because this study ran multiple comparisons (i.e., five multivariate analyses). The five analyses were the relationships between (1) school settings and ITI implementation; (2) employment status, and ITI implementation; (3) educational degree and ITI implementation; (4) demographic backgrounds and ITI implementation; and (5) ITI implementation among the different
groups comprised of the SoC. However, the researcher decided to keep the level of significance 0.05. The debate over the need to adjust the significance level for multiple comparisons remains unresolved. The proponents of p-value adjustment argue that the p-value should be adjusted due to the chance of making a Type I error (also called as false-positive) by incorrectly rejecting the true null hypothesis. They state that “the control of false-positive is imperative” (Feise, 2002, p. 2). On the other hand, those who object to adjusting the p-value argue that reducing the chance of making a Type I error will increase the chance of making a Type II error. Type II error is also called a false positive by incorrectly accepting the false null hypothesis (Rothman, 1990). In addition, the term of “family” to refer the infinite number of potential inferences is not clear and there is “no statistical theory [that] provides answers for these practical issues” (Feise, 2001). Furthermore, the criteria for p value and its conclusion was set as followed: when p value > .10, the observed difference was “not significant”; when p value ≤ .10, the observed difference was “marginally significant”; when p value ≤ .05, the observed difference was “significant”; and when p value ≤ .01, the observed difference was “highly significant”. In this context, the word “significant” meant “the observed difference is not likely due to chance” (Gerstman, 2006, p. 1).

The data analysis was conducted in response to the type of data and the research questions.

**Research Question 1:** “What are the stages of concern of primary school teachers regarding the implementation of Integrated Thematic Instruction (ITI)?” To answer this question, the descriptive analysis was used by following the guidelines of the
SoCQ manual. Concern theory hypothesizes that “teachers’ concerns will move from unrelated, to self, to task and to impact concerns” (Petherbridge, 2007, p. 145). For example, the increased concerns at the impact stage would decrease the concerns at the personal stage. The SoCQ profiles were graphed to illustrate these shifts. According to Hall et al. (1979), the SoCQ analysis and interpretation is used by following the manual guidelines to construct the profiles of teachers’ concerns:

1. Summing up the responses to the five item statements on the scale that make up each stage of concern. The total score of this summation is the raw scores of each stages of concern. The mean of each scale is computed for statistical analysis.

2. Taking the raw scores from each stage and converting the scores to percentiles according to percentile tables provided by the manual. This step provided the percentile figures.

3. Plotting the stages of concern profiles by identifying the highest percentile or peak score of each individual percentile figures.

4. Determining the composite Stages of Concern Profile for the entire respondents by tallying the number of teachers in each Stage of Concern.

This group average will show the main high and low concerns of the group.

**Research Question 2:** “To what degree do primary school teachers implement ITI in their classrooms?” To answer this question another descriptive analysis was conducted based on the information from the respondents’ responses. Similar responses were combined and general category descriptions were developed to portray to what
extent the teachers implemented the ITI and to construct the Likert items. Therefore, for
the purpose of this research question, the researcher used the raw score of each measure.
Next, the respondents’ ITI raw scores were split respectively into three different groups,
low-middle-high implementer. With the possible score ranging between 23 and 115, the
lower group of respondents was a score of 53 or less, the mid-range was between the
score of 54 and 83 and the higher group was between the score of 84 and 115. To know
which construct was most (or least) implemented by the respondents, the mean and
standard deviation of each construct was computed. A construct with the highest mean
indicated that the construct was implemented by most of the teachers, and vice versa.

**Research Question 3:** “Are there any significant differences between the amount
of ITI implementation among the different groups with different attitudes and behaviors
related to ITI as measured by the SoC?” The null hypothesis stated that there were no
significant differences between the amount of ITI implementation among the different
groups with different attitudes and behaviors related to ITI as measured by the SoC. This
question was analyzed using an ANOVA.

**Research Question 4:** “Are there any significant relationships between primary
school teachers’ demographic backgrounds including their individual data (years of
teaching, prior ITI use, ITI professional development, academic background, class size,
and employment status) as well as their organizational data (administrative support,
colleagues using ITI, and school setting) and the degree of ITI implementation in their
classrooms?” The null hypothesis for this question means that there were no significant
relationships between primary school teachers’ demographic backgrounds, including
their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) as well as their organizational data (administrative support, colleagues using ITI, and school setting) and the degree of ITI implementation in their classrooms. The nature data in this study is a nested data, therefore this hypothesis was tested using two separate multiple regression analyses. The first multiple regression tested the significant relationship between primary school teachers’ individual demographic backgrounds including years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status and the degree of ITI implementation in their classrooms. Meanwhile, the second multiple regression analysis tested the significant relationships between primary school teachers’ organizational demographic backgrounds including administrative support, colleagues using ITI, and school setting and the degree of ITI implementation in their classrooms. Preceding the two analyses, the researcher performed some additional separate statistical tests since the data differed with regard to scale. A t-test was used to examine the relationship between school setting (a categorical scale) and the implementation of ITI; an ANOVA was used to examine relationships between academic background and employment status (both ordinal scales) and the implementation of ITI; and a Chi Square was used to examine the possible mediation between school location and academic background. If the results from the t-test, and ANOVA test showed a significant relationship between each independent variable (i.e., school location, employment status and educational background) and dependent variable (i.e., ITI implementation); these dependent variables would be need to be dummied before
entering them into a regression analysis. However, if none of these tests were significant, dummy coding was not necessary. Moreover, if the result of the Chi Square indicated that the school location mediated the educational background, the school location variable would be taken out before conducting the first regression model.

A multiple regression analysis provides a way to present more than one variable within one equation, giving the effect of each independent variable (individual and organizational backgrounds) on the dependent variable (ITI implementation) while controlling for other variables (Petherbridge, 2007). Regression analysis is a statistical procedure that estimates the value of a dependent variable from a series of independent variables. The resulting R value indicates the value of the correlation coefficient between the multiple independent variables and the single dependent variable, while R squared provides the explained variance and the measure of effect size. The standardized regression coefficients versions of the b values were used to illustrate the contribution to the overall R value. The standardized coefficients are all measured in standard deviation units and can be comparable directly. For the purpose of this study, data entry and management were accomplished using Microsoft Excel, a spreadsheet software package. All the data analysis was performed by using the computer statistical package SPSS (Statistical Package for the Social Sciences) Version 17.
Assumptions and Limitations

Assumptions

This study was based on the following assumptions:

1. The General Linear Model (GLM) generates most of the statistical analyses including the t-test, Analysis of Variance (ANOVA), Analysis of Covariance (ANCOVA), regression analysis, and many other multivariate methods. GLM works under the assumptions of residual normality, homogeneity of error variance, linearity of model, no multicollinearity, independence of observations (no serial correlation), no autocorrelation of errors and no influential outliers (Yaffee, 2004).

2. Respondents’ concerns and responses were representative of overall primary teachers in the schools involved.

3. Teachers’ concerns about implementing ITI were appropriate to measure using the SoC instrument.

Limitations

This study was limited by its short-term design, cross sectional design, and the fact that only one measure was used to collect data. Therefore the results were only accurate to the degree that teachers were able to self report their concerns, attitudes, self-perceptions, personal and organizational demographic data. Though it had advantages as a proper measure to examine the relationship between variables at a particular point in time, gathering data from many variables and a large population had some disadvantages. Regarding the time bind, this study is static and increases the chance of error (Sigelman
& Rider, 2009). It also could not measure cause and effect or even change. In a survey, the more subjects and locations included, the more the cost would be.

Furthermore, the employment of multiple regression analysis might not result in a very accurate prediction because the data were naturally nested (individual and organizational level). Therefore, the employment of more precise data analysis using Hierarchical Linear Modeling might be warranted. In addition, the role of researcher takes an important part in this aspect. Cresswell (1994) stated that the researcher’s special abilities and sensitivities bring to a study a worldview influenced by training and experiences which favor specific methods of research. In this case, General Linear Modelling of Multiple Regression and ANOVA analysis fit with the researcher’s ability and experiences having previously used this method of analysis. Time was another factor for this research because of urgency to advance the ITI reform. The study captured a snapshot profile of primary teachers in the process of implementing the new standards. Choosing a clear research design sensitive to time is essential (Ferrini-Mudy & Johnson, 1994), so that appropriate and relevant training can be designed.

The instrument used in this study could also be a limitation. While part I of the questionnaire had established validity and reliability, the other parts especially part II of the questionnaire with the ITI implementation scale needed to be investigated more for its validity and reliability.

The setting of the study was limited in generalizing the findings in which the selected schools are Catholic schools under the “Kanisius” foundation in the Yogyakarta
Archdiocese and teachers at such schools might have different concerns than teachers in different locations or types of schools.

There were potential discrepancies between what teachers report on the survey and what they actually do in the classroom. This survey should be equipped with observation and interview (Kimpston, 1983) as the original CBAM, which consists of three dimensions: SoC, LoU and IC. The teachers’ concern profile is usually followed by LoU interview to determine the relationship between SoC and LoU and the description of IC.

**Ethical Considerations**

There are some ethical issues to be taken seriously for this research. First of all, the researcher should follow the ethical guidelines suggested by Christians (2005) and Loyola University Chicago’s Institutional Review Board to protect the rights of the participants. It included the voluntary participation and informed consent, confidentiality, reciprocity, and researcher bias. The researcher had to respect the rights of the participants throughout the data collection procedures including the explanation of the purposes of the research, the necessity and procedure of their participation, the risk involved in their participation, and the use and security of their data. The researcher also informed them that they should participate on a voluntary basis and could withdraw from the research for any reason and at any time.

Moreover, the researcher had to assure the privacy and confidentiality of the participants by protecting their anonymity using pseudonyms for their names, names of their schools, and locations of the schools. The researcher expected to benefit from the
study. The researcher wanted the participants to also benefit from the study. Therefore, the researcher was modestly compensating them for their participation in the survey. Next, the researcher bias was a potential problem no matter what research method was employed. The problem of researcher bias becomes more significant when a study involves an analysis of descriptive nature like the current study. My role might also affect the validity of the research because the researcher is biased when it comes to instruction. The researcher believed that it was essential for educators to bring their classrooms into the 21st century through the use of innovative instruction such as ITI. My perspective or bias for my research meant that I needed to be careful about making assumptions when it came to teachers' confidence and competence with the innovation especially in the Indonesian context, because many teachers are not using the innovative instruction in their teaching. Also, the researcher needed to be aware that not every school or teacher had the funds or resources to spend on innovative teaching; even though being innovative can be inexpensive. Being aware of these situations limited the potential problems arising from my biases and other ethical considerations.

This study might also present some ethical concerns regarding the influence on the teachers as participants in this study. The approval from the “Kanisius” foundation to conduct this study and the established partnership with my university (Sanata Dharma University), the foundation and the schools, might influence the principals and the teachers to feel obligated to participate in this study. The partnership with the university included sending undergraduate students to do their practice teaching in schools, helping with curriculum improvement or enrichment in specific curriculum areas such as
elementary education curriculum, giving training/workshops to the teachers about instructions, curriculum, leadership and administrative management techniques, and improving practice through cooperative educational research among faculty members and teachers, as well as collecting data and building a data base about the schools and the teachers of the foundation.

This is true especially due to their concern that the participation could influence the evaluation and supervision from the Kanisius foundation toward the schools’ performance and teachers’ DP3 (Daftar Penilaian Pelaksanaan Pekerjaan or performance appraisal of employment). DP3 is the Evaluation List of Work Implementation as a result of the assessment of the implementation of civil service jobs. In the Assessment List of Work Implementation, elements assessed are: Loyalty, Job Performance, Responsibilities, Obedience, Honesty, Cooperation, Initiative, and Leadership. The scale used to evaluate teachers are: 91-100 (Very good), 76-90 (Good), 61-75 (Average), 51-60 (Medium) and below 50 (Less). The list of Work Implementation Assessment is confidential created by the official appraisal by using materials provided by the leadership of colleges, schools or courses concerned. DP3 performance standard is one of the requirements for promotion.

Moreover, the researcher position as a training facilitator for one school might also influence the teachers in that school to participate in this study. However the researcher involvement was with upper grade teachers.

In order to limit those concerns, teachers and principals were informed in writing about their voluntary participation in this study. There was no direct consequence or
connection between their participation and their performance as teachers in regard to the DP3 or other forms of evaluation. The participants were informed that they would complete the questionnaire anonymously.
CHAPTER IV

RESULTS

This chapter presents the results of the study. It contains five sections including study purposes and questions, respondents’ demographic characteristics, the results of the validity and reliability analysis, the results of four research questions and an exploratory factor analysis report. The results and data will be presented using tables or figures followed by narrative explanations that consist of quantitative and qualitative aspects from the survey study.

Study Purpose and Questions

The study was conducted addressing the literature gap found in many studies about educational reform initiatives and teachers’ concern. The gap showed that there was no research in Indonesia that revealed the level of implementation of Integrated Thematic Instruction (ITI) by primary school teachers, especially in relating with their concerns and demographic characteristics. Research in other settings, however, showed that teachers’ concern was crucial on the implementation of any innovation. Some characteristics of the innovation users proved to be influential factors of the reform effort realization. Thus, this study investigated the concern of primary school teachers in the implementation of Integrated Thematic Instruction and whether or not teachers’ backgrounds have any relationship to their concern. Using the purposive sample of 150 primary teachers from 151 potential teachers (99% response rate) from first, second and
third grade levels in 46 Kanisius schools, the study aimed at answering the following research questions:

1. What are the stages of concern of primary school teachers regarding the implementation of Integrated Thematic Instruction (ITI)?

2. To what degree do primary school teachers implement ITI in their classrooms?

3. Are there any significant differences between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC?

4. Are there any significant relationships between primary school teachers’ demographic backgrounds including their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) as well as their organizational data (administrative support, colleagues using ITI, and school setting) and the degree of ITI implementation in their classrooms?

**Demographic Results**

The results from data frequencies showed a profile of teachers who participated in this study. The data was presented into two different tables in regard to the types of the data. Table 16 showed participants’ profile gathered from categorical data (academic background, employment status and school setting). Meanwhile, Table 17 showed that participants’ profile gathered from continuous data (years of teaching, prior ITI use, ITI professional development, class size, administrative support, and colleagues using ITI).
As shown in Table 16, most of the respondents held a bachelor’s degree in science or general education (28.3%), non-tenured teachers (69.9%) and worked at school located in rural area (72.7%). Respondents’ educational degree data were categorized into four different groups from high school as the lowest level of education, a bachelor’s degree in science or general education, a two year diploma in elementary education (PGSD) to a bachelor’s degree in elementary education. The researcher put the option of master’s degree and above but none of the respondents had earned this degree. The profile of Kanisius primary school teachers had a typical profile compared to the general profile of elementary school teachers in DIY province. According to the Central Bureau of Statistics of DI Yogyakarta Province (2009), most elementary school teachers in DIY province held a Bachelor’s degree in education (43.28%) in all majors. Regarding employment status, the sample characteristic in this present study was similar with the characteristic of elementary teachers in private schools in DIY province. From a total of 4,640 teachers, 53% were non-tenured, 28% were tenured and the remaining 19% were public or government teachers.

As shown in Table 17, on average, Kanisius primary teachers had 12 years of teaching experience in elementary education, used ITI in their teaching for three years, had 17 hours of professional development related to ITI and taught an average of 21 students in their classrooms. At the organizational level, respondents perceived having a good amount of support from the principal in using ITI; they also had more than one colleague who implemented thematic instruction. The standard deviation was relatively
“high” on the variable of years of teaching, ITI professional development and class size indicated that the data was more spread apart from the means (more variability).

Table 16

*Descriptive Statistics of Participants for Categorical Data*

<table>
<thead>
<tr>
<th>Categories</th>
<th>n</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Educational Degree (N = 145)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School in Ed. (SPG)</td>
<td>36</td>
<td>24.8</td>
</tr>
<tr>
<td>Bachelor in general</td>
<td>41</td>
<td>28.3</td>
</tr>
<tr>
<td>Diploma Elementary Ed.</td>
<td>30</td>
<td>20.7</td>
</tr>
<tr>
<td>Bachelor Elementary Ed.</td>
<td>38</td>
<td>26.2</td>
</tr>
<tr>
<td><strong>Employment Status (N = 143)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non Tenured</td>
<td>100</td>
<td>69.9</td>
</tr>
<tr>
<td>Tenured</td>
<td>18</td>
<td>12.6</td>
</tr>
<tr>
<td>Government</td>
<td>25</td>
<td>17.5</td>
</tr>
<tr>
<td><strong>School Setting (N = 150)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>41</td>
<td>27.3</td>
</tr>
<tr>
<td>Rural</td>
<td>109</td>
<td>72.7</td>
</tr>
</tbody>
</table>

As shown in the observed range, some teachers were novice while some others had 40 years teaching experience in elementary education. A bimodal existed in which 14 respondents had two years teaching experience and another 14 respondents had four years teaching experience. The mean was in the middle of possible range, it meant that most of the teachers were on the middle years of teaching experience. This profile was slightly different with private elementary school teachers in DIY province, since most of
them (3,245 out of 4,640 teachers) were regarded in the early years of teaching (less than 10 years).

The respondents have been using ITI in their teaching for around three years. Teachers were mandated to implement thematic instruction since the new curriculum was launched in 2006. However, the guideline of implementing this new instruction was launched three years later (in 2009). Two teachers reported that they had seven years experience in using ITI. It might be teachers who previously taught the first and second grade. As it was mentioned on Chapter II, the Curriculum 2006 was an upgraded version of Curriculum 2004. In curriculum 2004, the mandate was purposed for the first and second grade teachers while in Curriculum 2006 the third grade teachers were also obligated to implement ITI.

The data about teachers’ experience in professional development relating to ITI revealed an average of 17 hours. Interestingly, the number of teachers who answered this question was 77 out of 150. Nearly half of the respondents left the question unanswered or blank. While one teacher stated that she or he never had any professional development regarding the ITI, one teacher admitted to having 38 hours of training.

On average, the respondents had 21 students in their classrooms. Most teachers in this study had ten students; however two teachers had only four students in their classes. The general average in DIY province, elementary school teachers at private schools had 14 students (see Table 9 in Chapter III).

Moreover, most respondents perceived having high support from their principals ($M = 24.93, SD = 4.82$). The possible minimum score for this administrative support
scale was 6 and the possible maximum score was 30. From the mode (30), it showed that many respondents regarded their principals as a very supportive. The teachers felt the full support from their principals. None of the respondents identified their principals as extremely unsupportive of ITI implementation.

Table 17

Descriptive Statistics of Participants for Continuous Data

<table>
<thead>
<tr>
<th>Categories</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Mode</th>
<th>Observed Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of teaching (N = 146)</td>
<td>11.51</td>
<td>11.76</td>
<td>6.0</td>
<td>2.0a</td>
<td>0 – 40</td>
</tr>
<tr>
<td>Prior ITI use (N = 138)</td>
<td>2.62</td>
<td>1.63</td>
<td>2.3</td>
<td>1.0</td>
<td>0 – 7</td>
</tr>
<tr>
<td>ITI professional development (N = 77)</td>
<td>16.87</td>
<td>12.91</td>
<td>24.00</td>
<td>2.0</td>
<td>0 – 38</td>
</tr>
<tr>
<td>Class size (N = 150)</td>
<td>21.40</td>
<td>10.49</td>
<td>21.00</td>
<td>10</td>
<td>4 – 42</td>
</tr>
<tr>
<td>Administrative support (N = 145)</td>
<td>24.93</td>
<td>4.82</td>
<td>26.00</td>
<td>30</td>
<td>8 – 30</td>
</tr>
<tr>
<td>Colleagues using ITI (N = 149)</td>
<td>3.32</td>
<td>1.80</td>
<td>3.00</td>
<td>3</td>
<td>1 – 9</td>
</tr>
</tbody>
</table>

aMultiple modes exist. The smallest value is shown.

Validity and Reliability Analysis

Before addressing the research questions of the study, the researcher conducted analysis on the reliability of the research instrument. As noted in Chapter III, SoCQ was an accepted instrument; therefore the researcher did not plan to test the reliability of the seven categories of concerns as measured by SoCQ. However, based on the results of some studies, the researcher decided to check the reliability and validity of the SoCQ as well as for the scales created by the researcher (the Integrated Curriculum Implementation Scale – ICIS and the Administrative Support Scale-ASS). A study
conducted by Cheung et al. (2001) noted that many researchers quoted the alpha from the authors of the SoCQ without testing their own data reliability. In fact, those who tried to check the reliability of their study found low reliability on some scales of the seven SoCQ scales. A study by Bailey and Palsha (1992) found lower reliability in their sample (N = 142), ranging from .49 to .79. Meanwhile, Shotsberger and Crawford (1996) found low reliability on their two studies in the same year, ranging from .45 to .77 (N = 376) and from .42 to .74 (N = 273). Another study by Cheung et al. (2001) using SoCQ in a Chinese version found low and moderate reliability in which item-total correlation for 35 questions ranged from .00 to .66. Those three studies made some adjustment and modifications on their research tool. In conclusion, they claimed that there was a potential issue with reliability of Hall’s SoCQ, therefore, they suggested that researchers who use Hall’s 35 items SoCQ need to examine the reliability of their own data.

The reliability scores from the questionnaire in the present study were calculated empirically by using different methods of computation. The results of each method will provide broader evidence of reliability. Most researchers in high-quality journal articles, however, frequently reported the use of internal consistency reliability and test retest (Johnson & Christensen, 2008). To determine the internal consistency for the sample of the present study, the researcher calculated the Cronbach’s Alpha. In addition, test retest was performed to test the consistency of the measurement.

As shown in Table 18, the result of the coefficient alpha for all SoCQ scales was considered high (.86). Meanwhile, the reliability coefficients for each of seven stages of concern ranged from .45 (Stage 1-Informational) to .76 (Stage 5-Impact Collaboration).
Moreover, the test retest was performed two weeks after the initial completion of the instrument. Samples of 71 teachers were asked to complete the questionnaire for the second time. All the respondents returned the questionnaires. The coefficient correlation between the initial measure and the second measure of the seven scales of SOCQ ranged from .34 to .60. Meanwhile for all the scales, the coefficient correlation was considered poor (Field, 2009) .57. All of the correlations were significant at the 0.01 level (2-tailed). Table 19 shows the result of test retest using Pearson’s correlation.

Table 19

<table>
<thead>
<tr>
<th>Stage</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>All Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>.51</td>
<td>.45</td>
<td>.64</td>
<td>.51</td>
<td>.70</td>
<td>.76</td>
<td>.65</td>
<td>.86</td>
</tr>
</tbody>
</table>

Furthermore, the researcher calculated the internal consistency for the second part of the questionnaire, the Integrated Curriculum Implementation Scale (ICIS). The initial result of the Cronbach Alpha for the ICIS with 28 questions was relative high (Field, 2009) at .81. After five negative items were deleted, the alpha became .85 for 23 items.
As shown in Table 20, the result of the coefficient alpha for each of seven constructs of ICIS ranged from .06 (Student Centered) to .69 (Whole Learning).

Table 20

Coefficient of Internal Reliability for Integrated Curriculum Implementation Scale (N=171)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Centered</td>
<td>.06</td>
</tr>
<tr>
<td>Direct Experience</td>
<td>.52</td>
</tr>
<tr>
<td>Subject Integration</td>
<td>.68</td>
</tr>
<tr>
<td>Whole Learning</td>
<td>.69</td>
</tr>
<tr>
<td>Flexibility</td>
<td>.55</td>
</tr>
<tr>
<td>Variety Assessment</td>
<td>.49</td>
</tr>
<tr>
<td>Engaged Learning</td>
<td>.59</td>
</tr>
<tr>
<td>All Constructs</td>
<td>.85</td>
</tr>
</tbody>
</table>

As shown in Table 21, from the test retest results, the coefficient correlation between the initial measure and the second measure of the seven constructs of ICIS ranged from .02 to .45, while for all constructs, the coefficient correlation was .38. Three of seven constructs were significant at the 0.01 level (2-tailed). Table 21 shows the result of test retest using Pearson’s correlation.
Table 21

*Test Retest Coefficient Correlation on the Integrated Curriculum Implementation Scale (N=71)*

<table>
<thead>
<tr>
<th>Construct</th>
<th>r</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Centered</td>
<td>.35</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>Direct Experience</td>
<td>.40</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>Subject Integration</td>
<td>.23</td>
<td>.06</td>
</tr>
<tr>
<td>Whole Learning</td>
<td>.25</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>Flexibility</td>
<td>.02</td>
<td>n.s</td>
</tr>
<tr>
<td>Variety Assessment</td>
<td>.14</td>
<td>n.s</td>
</tr>
<tr>
<td>Engaged Learning</td>
<td>.45</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>All Constructs</td>
<td>.38</td>
<td>&lt; .01</td>
</tr>
</tbody>
</table>

The second scale created by the researcher was the Administrative Support Scale (ASS). The scale only measured a single construct, thus the reliability and validity analysis was not as urgent as the ICIS. However, to provide more complete characteristics of the questionnaire that was used in this study, the ASS was assessed for its validity and reliability as well. The result of the coefficient alpha for the Administrative Support Scale was considered as *acceptable* (Field, 2009) .76 while the correlation coefficients from a test retest was .63 significant at the 0.01 level (2-tailed).

The researcher obtained validity evidence from different sources including evidence based on content, evidence based on internal structure and evidence based on relations with other variables (Johnson & Christensen, 2006). The present study
investigated the evidence based on content by asking experts in the education area (see Chapter III). Meanwhile, the evidence based on internal structure was carried out by using the factor analysis technique (reported separately at the end of this chapter) for the ICIS and correlation matrices for the SoCQ, ICIS and ASS. A correlation matrix shows the correlation between all pairs of the data set (usually in a table format). The matrix can be used to analyze the correlation among items or among constructs (i.e., sub-scales, traits, dimensions) to determine whether a scale measures the same or different constructs or traits (Johnson & Christensen, 2006). The correlation matrix can show the correlation between items and constructs (whether items measure the constructs), items and total scores (whether items contribute to measure the total scores) or constructs and constructs (whether constructs are convergent or different with other constructs). If the items correlate highly with the total scores, it means that the items measure the same things as the total score; thus the scale had internal consistency and it measured the construct as it is supposed to. If the correlation between two constructs is low, it means that those constructs are independent of each other. The construct is not similar to other constructs that it theoretically should not be similar to.

The analysis of correlation matrices for Stages of Concern Questionnaire indicated that 88% of the items correlated more highly with the stage to which they had been assigned than with any other stage’s scale score. The average correlation coefficient for 35 items with their assigned stages was .63 and ranged from .007 to .83. There were four items that missed from the designed scale. Item #6 was assigned higher to Stage 0 \((r = .38)\) than to the intended Stage 1 \((r = .25)\); item #22 was assigned higher to Stage 4 \((r = .38)\) than to the intended Stage 3 \((r = .25)\) and lower to the intended Stage 2 \((r = .12)\).
than to the intended Stage 6 ($r = .69$); item #23 was assigned higher to Stage 4 ($r = .63$) than to the intended Stage 0 ($r = .007, \text{n.s.}$); and item #25 was assigned higher to Stage 2 ($r = .50$) than to the intended Stage 3 ($r = .38$). This result was in accordance with Hall’s analysis in which 72% of the items correlated highly with the assigned stages
than with the other stages of the scale score (George, Hall & Stiegelbauer, 2006).

Moreover, another correlation matrix revealed that 94% of the items correlated
more highly with the stage to which they had been assigned than with the total score of
the instrument. The correlation between the 35 items of the SoCQ and the total score had
an average coefficient of .44 and ranged from -.05 to .66. Only question #23 and #25 had
higher correlations with the total ($r = .50$ and $r = .55$, respectively) than with the assigned
stages ($r = .007, \text{n.s.}$ and $r = .38$, respectively). This result was in accordance with Hall’s
analysis in which 83% of the items correlated highly with the assigned stages than with
the total score of the questionnaire (George et al., 2006).

The analysis of correlation matrices for the Integrated Curriculum Implementation
Scale indicated that 100% of the item questions correlated more highly with the construct
to which they had been assigned than with any other construct’s scale score. The average
correlation coefficient for 23 items with their assigned constructs was .70 and ranged
from .47 to .82. Moreover, 100% of the items correlated more highly with the construct
to which they had been assigned than with the total score of the instrument. The
correlation between the 23 items of the scale and the total score had an average
coefficient of .49 and ranged from .26 to .62.
The analysis of correlation matrices for the Administrative Support Scale indicated that six items measured a single construct. The average correlation coefficient of item-to-total analysis of the scale was .68 and ranged from .47 to .83. All of the correlation coefficients were significant at the 0.01 level (2-tailed). The researcher had evidence that the scale was internally consistent and that it measured the construct of administrative support.

The conclusion from the reliability and validity analysis for the research instrument in the present study indicated that the instrument was good enough for the purpose of the research. However, more psychometric analysis could be done to refine these results.

**Teacher Stages of Concern**

Research Question 1 asked the following: “What are the stages of concern of primary school teachers regarding the implementation of Integrated Thematic Instruction (ITI)?” Data about teacher concern gathered from the SoC Questionnaire were analyzed according to the manual of scoring for the SoCQ to provide the Stages of Concern Profile for the entire respondents. This profile indicated the highest or peak scores of individuals’ stages that were used to assist in data interpretation. The possible minimum score was 0 and the possible maximum score was 245. The numbers of teachers in each stage were counted to plot the composite Stages of Concern profile for the entire population in this study. To view the pattern of concern for overall respondents, the individual data was scored aggregately on their raw scores for each of the seven stages following the guidelines from SEDL followed by locating the scores into percentile tables.
and plotting the results on the tables. Graphing the overall stages of concern score for all respondents indicated that respondents’ highest concern were unrelated and self concern, with a slight tailing-up of impact-refocusing concern. Specifically, the SoCQ analysis revealed the following: overall, most primary teachers at the Kanisius foundation in DI Yogyakarta were on the Stage 1, self-informational Stage of Concern, as many as 39% of the population, followed by 34% in Stage 0, awareness or unconcerned Stages of Concern. It meant that more than half of the population was at the early Stages of Concern as shown in Table 22 below.

Table 22  
*Teachers’ Concern Stages (N=150)*

<table>
<thead>
<tr>
<th>Stages of Concern</th>
<th>N</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness Stages 0</td>
<td>50</td>
<td>34.0</td>
<td>34.0</td>
</tr>
<tr>
<td>Self Informational Stages 1</td>
<td>59</td>
<td>39.3</td>
<td>73.3</td>
</tr>
<tr>
<td>Self Personal Stages 2</td>
<td>12</td>
<td>8.0</td>
<td>81.3</td>
</tr>
<tr>
<td>Task Management Stages 3</td>
<td>10</td>
<td>6.0</td>
<td>87.3</td>
</tr>
<tr>
<td>Impact Consequences Stages 4</td>
<td>1</td>
<td>0.7</td>
<td>88.0</td>
</tr>
<tr>
<td>Impact Collaboration Stages 5</td>
<td>5</td>
<td>3.3</td>
<td>91.3</td>
</tr>
<tr>
<td>Impact Refocusing Stages 6</td>
<td>13</td>
<td>8.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Furthermore, as shown in Figure 3, the general percentile stages score for all respondents indicated that most respondents were highest on awareness or unconcerned Stage 0 (50 participants) and self informational Stage 1 (59 participants), lowest on impact consequences Stage 4 (1 participant) and a tendency of tailing up on impact collaboration Stage 5 (5 participants) and impact refocusing Stage 6 (13 participants). This profile represented a characteristic of a “non user” profile (Hall et al., 1979). This shows the individuals who have not begun using the innovation. According to Hord
(1987), the non user profile stands out “most clearly and consistently” (p. 37) in which the highest concerns are normally on the early stages (Stages 0, 1, and 2) and lowest on the later stages (Stages 4, 5, and 6). A high frequency on Stage 0 (Awareness) indicated the individuals who were not fully aware of the innovation and were somewhat more concerned about other things (i.e., other programs, innovations, and activities). However, because the frequency of concerns was also high on Stage 1 (Informational), it revealed that the respondents were interested in learning more about the innovation.

According to the SoCQ manual, the relationship between Stage 1 and Stage 2 is very important. If the stages are very different, the profile can be said as having a one-two split, the “one” referring to stage 1 and the “two” to Stage 2. When Stage 1 was higher than Stage 2 (personal), it revealed the individuals who had more interest in knowing more about the innovation than the personal effect of the innovation such as personal position or job security. They admitted their lack of understanding and knowledge about the innovation and the way to implement it. They had positive and proactive perspective with little fear of the personal effect of the innovation. When Stage 1 is higher than Stage 2, this is called a “positive one-two split” in which the individuals are open and interested in learning more about the innovation (George et al., 2006).

Moreover, the low frequency on Stage 3 revealed that respondents also had little or no concern about management; the ability to manage their work-load especially regarding the scheduling, and organizing the innovation. Not surprisingly, this non user profile had low frequency on Stage 4 that indicated teachers who did not intensively have concern about the impact of the innovation on students’ outcomes, academic
performance. Neither did they have a great deal of concern about collaboration, working with other colleagues (low frequency on Stage 5).

Normally a non user profile, Stage 6, would be low and indicate that the individuals did not have “other ideas that would compete with the innovation” (Hord, 1987, p. 37). However, in this study, there was a tendency for Stage 6 scores to tail up on the typical non user profile. It could be interpreted that the individuals felt that other approach had more merit than the proposed innovation. Thus, any tailing up on the Stage 6 of a non user can be regarded as a warning that some individuals might be resistant to the innovation; “a more severe tailing up should be heeded as an alarm” (George et al., 2006, p. 42). The overall profile reflected individuals who somewhat wanted additional information about the innovation but also had some individuals who were fairly resistant to its potential use.

![Figure 3. Teacher Stages of Concern Profile](image-url)
Furthermore, the researcher was interested in contrasting teachers’ concerns with their experience in using the innovation. The ITI experiences were grouped into seven groups: 0 – 0.99 year, 1 – 1.99 years, 2 – 2.99 years, 3 – 3.99 years, 4 – 4.99 years, 5 – 5.99 years and 6 years above. As shown in Figure 4, the SoCQ profiles related to teachers’ experience in using ITI in their instruction revealed a similar pattern to the general Stages of Concern profile. Most teachers who were in Stages of Concern level 0 (awareness) and level 1 (self informational), had experience with ITI in their instruction for less than three years. However, those who had ITI experience for around 4 – 5 years, were also still in Level 0 and Level 1 of Stages of Concern. This is an unexpected result. Perhaps, these teachers implemented ITI in their classroom because of social desirability.

![TC Stage across ITI Experience](image)

*Figure 4. Teacher Stages of Concern across ITI Experience*
Teachers Implementation of ITI

Research Question 2 asked the following: “To what degree do primary school teachers implement ITI in their classrooms?” Data about teachers’ implementation of ITI were gathered using the ITI implementation scale created by the researcher. After cleaning up the data and reducing the outliers (e.g., zero response and empty cells) as well as excluding the “Do not Know (DK)” responses and deleting the negative items, the data were split into three different groups of implementation (low, medium and high). The ITI implementation scores average was 92.12, $SD = 12.93$, Median = 91.00, Mode = 87 and 115 (bimodal); minimum score was 45 and maximum score was 115 from potential of minimum score 23 and maximum score 115 with $N = 150$. The mean represents the two third of the respondents, fell on the high range implementer. Table 23 shows the distribution of the ITI implementation scores. Surprisingly, two modes existed, on the score 87 and 115 (the maximum score). It meant that many teachers perceived themselves as higher implementers than they might actually have been.

Moreover, a descriptive analysis was performed to know which construct was considered as the most implemented by the respondents. The construct with the highest mean was the one that was most implemented by the respondents and the construct with a lower mean(s) would be relatively less implemented. With this information, the researcher will be able to target the efforts in the areas where they will be most effective. The possible range of ITI implementation measures was 23 – 115 where higher scores indicated higher degree of implementation. The obtained range was 45 -115. The frequency distribution of the level of ITI implementation for each construct was shown in
Table 23. From the information provided, it could be seen that two highest correlations were on Flexibility construct ($M = 13.61, SD = 1.6$) and Variety Assessment ($M = 12.19, SD = 2.2$). These two constructs seemed to be implemented frequently by the respondents. Meanwhile, the less implemented constructs seemed to be Subject Integration ($M = 11.65, SD = 2.8$) and Whole Learning ($M = 11.65, SD = 2.7$).

**Table 23**

*Frequency Distribution of Each ITI Implementation Construct*

<table>
<thead>
<tr>
<th>ITI Construct</th>
<th>Mean</th>
<th>SD</th>
<th>Med</th>
<th>Mo</th>
<th>Range Observed</th>
<th>Range Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Centered (n = 147)</td>
<td>11.94</td>
<td>2.1</td>
<td>12</td>
<td>11</td>
<td>7 - 15</td>
<td>3 – 15</td>
</tr>
<tr>
<td>Direct Experience (n = 148)</td>
<td>11.96*</td>
<td>2.7</td>
<td>16</td>
<td>16</td>
<td>8 - 20</td>
<td>4 – 20</td>
</tr>
<tr>
<td>Subject Integration (n = 147)</td>
<td>11.65</td>
<td>2.8</td>
<td>12</td>
<td>15</td>
<td>5 - 15</td>
<td>3 – 15</td>
</tr>
<tr>
<td>Whole Learning (n = 146)</td>
<td>11.65</td>
<td>2.7</td>
<td>11</td>
<td>15</td>
<td>3 - 15</td>
<td>3 – 15</td>
</tr>
<tr>
<td>Flexibility (n = 149)</td>
<td>13.61</td>
<td>1.6</td>
<td>14</td>
<td>15</td>
<td>9 - 15</td>
<td>3 – 15</td>
</tr>
<tr>
<td>Variety Assessment (n = 148)</td>
<td>12.19</td>
<td>2.2</td>
<td>12</td>
<td>15</td>
<td>7 - 15</td>
<td>3 – 15</td>
</tr>
<tr>
<td>Engaged Learning (n = 146)</td>
<td>11.91*</td>
<td>2.8</td>
<td>16</td>
<td>16</td>
<td>8 - 20</td>
<td>4 – 20</td>
</tr>
</tbody>
</table>

*Notes: *Converted score from maximum possible range.

**ITI Implementation and Teachers Stages of Concern**

*Research Question 3* asked the following: “Are there any significant differences between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC?” The null hypothesis for this question was “There are no significant differences between the amount of ITI
implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC.”

A one-way analysis of variance was conducted to evaluate the differences between the degree of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC. The independent variable, the teachers’ Stages of concern, included seven levels: Stage 0, Stage 1, Stage 2, Stage 3, Stage 4, Stage 5, and Stage 6. The dependent variable was the degree of ITI implementation. The descriptive data showed that teachers who were in Stage 6, Impact Refocusing, had higher score ($M = 97.23$ and $SD = 13.55$) than teachers who were in other stages in which means (with standard deviations in parentheses) for Stages 0 through Stages 5 were 89.82 (14.67), 92.54 (12.29), 92.75 (10.55), 91.70 (10.07), 88.00 (0) and 97.00 (11.07), respectively. The Lavene’s test for the equality of variances among the levels of the independent variable (teachers’ Stages of Concern) found that the variance differences were not significant ($F = .90, p = .50$). The output of the ANOVA showed no significant differences between groups with different attitudes and behaviors related to ITI as measured by the SoC in regard to the degree of ITI implementation, $F(6, 143) = .74, p = .61, \eta^2 = .03$.

Furthermore, the seven groups of Stages of Concern were simplified into four different Stages of Concern as groups - unrelated, self, task and impact - as proposed by Hall and Hord (1987). Another one-way analysis of variance was conducted to evaluate the differences between the degree of ITI implementation among four different groups with different attitudes and behaviors related to ITI as measured by the SoC. The
independent variable, the teachers’ Stages of concern, included four stages: awareness, self, task and impact. The dependent variable was the degree of ITI implementation. The descriptive data showed that teachers who were in Impact Stage had higher score \((M = 96.68 \text{ and } SD = 12.41)\) than teachers who were in other stages in which means (with standard deviations in parentheses) for Awareness Stage, Self Stage and Task Stage were 89.82 (14.67), 92.58 (11.95) and 91.70 (10.18), respectively. The Lavene’s test for the equality of variances among the levels of the independent variable (teachers’ Stages of Concern) found that the variance differences were not significant \((F = .88, p = .45)\). The next output of the ANOVA showed no significant differences between four groups with different attitudes and behaviors related to ITI as measured by the SoC in regard to the degree of ITI implementation \(, F(3, 146) = 1.36, p = .26, \eta^2 = .027\).

The null hypotheses stated that there were no significant differences between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC. The result from the ANOVA test showed that the \(p\)-value was .26 which is bigger than .05. Therefore the null hypothesis was fail to be rejected meaning that there were no significant differences between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC. There were also no significant differences between teachers’ from four different levels of concern.
Demographic Characteristics and ITI Implementation

Two sets of multiple regression analysis were run in order to test the hypothesis for Research Question 4. The fourth question was stated “Are there any significant relationships between primary school teachers’ demographic backgrounds including their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) as well as their organizational data (administrative support, colleagues using ITI, and school setting) and the degree of ITI implementation in their classrooms.” The first null hypothesis for this question was that there were no significant relationships between primary school teachers’ demographic background in their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) and the degree of ITI implementation in their classrooms. The second null hypothesis for this question was that there were no significant relationships between primary school teachers’ demographic background in their organizational data (administrative support, colleagues using ITI, and school setting) and the degree of ITI implementation in their classrooms.

Prior to multiple regression analysis, four tests were carried out in order to find out the relationship between the three categorical variables (education degree, employment status and school location) and the degree of ITI implementation. The findings of these tests were necessary to decide whether or not to include those variables of into regression analysis. If there was a significant relationship between each of those variables and the degree of ITI implementation, the variable needed to be dummyed before entering into regression analysis.
A one-way analysis of variance (ANOVA) was conducted to evaluate the differences between the degrees of ITI implementation among the different groups with different educational background. The independent variable, the educational degree, included four levels: high school, bachelor’s degree in science or general education, a diploma in elementary education and bachelor’s degree in elementary education. The dependent variable was the degree of ITI implementation. On average, teachers with a high school degree had higher scores on the ITI implementation scale ($M = 97.28, SD = 13.24$) than those with diploma in elementary education ($M = 91.23, SD = 13.75$), bachelor’s degrees in science or general education ($M = 88.51, SD = 14.18$) and bachelor’s degree in elementary education ($M = 91.76, SD = 9.83$). This effect of education on the degree of ITI implementation was significant, $F(3, 141) = 3.074, p = .03, \eta^2 p = .06$. Since the p-value = .03 was less than .05, education should be included in the regression analysis.

Another one-way analysis of variance (ANOVA) was conducted to evaluate the differences between the degrees of ITI implementation among the different groups with different employment status. The independent variable, the employment status, included three levels: non tenured, tenured and government employee. The dependent variable was the degree of ITI implementation. On average, 100 non-tenured teachers had higher scores on the ITI implementation scale ($M = 92.52, SD = 13.21$) than 18 tenured teachers ($M = 89.61, SD = 11.56$) and 25 government teachers ($M = 92.12, SD = 14.27$). However, this effect of employment status on the levels of ITI implementation was not significant, $F(2, 140) = .37, p = .69, \eta^2 p = .005$. There was no significant relationship
between ITI implementation and employment status. Therefore, employment should not be included in the multiple regression data analysis.

An independent t-test was conducted to evaluate the differences between the degrees of ITI implementation among the different groups with different school location. The independent variable, the school location, included two levels: urban and rural. The dependent variable was the degree of ITI implementation. Comparison of the degree of ITI implementation for 41 teachers worked in urban areas \((M = 97.05, SD = 12.35)\) and 104 teachers in rural areas \((M = 90.27, SD = 12.71)\) revealed a significant differences between the groups \(t(148) = 2.94, p = .004\) and represented a low effect-size \((\text{Field, 2009})\) \(r = .23\).

Furthermore, a Pearson Chi-square test of independence was performed to examine the relation between teachers’ education degree and school location because there was a possibility that the variable of education degree mediated the variable of school location. Using the significance level of .05, the association between teachers’ education degree and school location was significant, \(X^2(3, N = 145) = 8.15, p = .04\). The effect size Cramer’s V statistics was .24, represented a medium association \((\text{Field, 2009})\) between location and educational background. Generally, teachers in rural schools had higher education than those in urban schools. From the Chi-Square result, there was a clear evidence of the mediation effect of education degree on school location.

Therefore, the location variable was taken out from the analysis and the variable of education was dummied for the regression analysis. Based on the above test results, the variable of employment status and location were not included into regression analysis.
Before running the regression analysis, the researcher constructed a dummy coding for education degree. The process was rather complicated because the education consisted of four groups namely High School, Bachelor’s of Science and General Education, Diploma in Elementary Education and Bachelor’s in Elementary Education. The dummy coding followed the eight basic steps as outlined by Field (2009, p. 254):

1. Counting the number of groups for recoding and subtract 1.
2. Creating as many new variables as the value calculated on step 1, these were the dummy variables.
3. Choosing one group as a baseline, it could be a control group or the group that represented the majority.
4. Assigning the baseline group values of 0 for all the dummy variables.
5. For the first dummy variable, assigning the value of 1 to the first group that would be compared against the baseline group and assigning all other groups 0 for this variable.
6. For the second dummy variable, assigning the value of 1 to the second group that would be compared against the baseline group and assigning all other groups 0 for this variable.
7. Repeat this until the dummy variable runs out.
8. Place all the dummy variables into a regression analysis by using the Recode function.

Table 24 shows the result of the dummy coding scheme.
Table 24

*Dummy Coding for Variable Education Degree*

<table>
<thead>
<tr>
<th>Education Degree</th>
<th>Dummy Variable 1</th>
<th>Dummy Variable 2</th>
<th>Dummy Variable 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BSc &amp; Gen Ed.</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Diploma El.Ed.</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Bachelor in El. Ed.</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

To test the hypothesis that the degree of ITI implementation in the classrooms is a function of primary school teachers’ demographic backgrounds including their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status), a multiple regression analysis was performed. Tests for multicollinearity indicated that a very low level of multicollinearity was present ($VIF = 1.12$ for teaching experience, $1.29$ for ITI experience, $1.07$ for ITI professional development, $1.15$ for number of student taught, , and $1.35$ for education degree). All five predictor variables were entered as one set of predictors because the researcher did not make a priori hypotheses about what predictors will be better predictors. The predictors were the five individual demographic variables consisted of teaching experience, ITI experience, ITI professional development, number of students and educational background). From the results, it could be inferred that among five individual demographic predictors, number of students taught was the best predictor followed by education degree with the Beta value -.296 and .232 respectively. While
three other predictors were not statistically significant influences on ITI implementation. Therefore, the first null hypothesis for this research question was rejected. It means that there were significant relationships between primary school teachers’ demographic background in their individual data (academic background and class size) and the degree of ITI implementation in their classrooms. Results of the first multiple regression analysis on ITI implementation and teachers’ individual characteristics is shown on Table 25.

Table 25

*Individual Demographic Predictors of ITI Implementation*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>98.680</td>
<td>4.698</td>
<td></td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>.005</td>
<td>.116</td>
<td>.005</td>
</tr>
<tr>
<td>ITI Experience</td>
<td>-0.254</td>
<td>.969</td>
<td>-0.033</td>
</tr>
<tr>
<td>ITI Professional Development</td>
<td>.118</td>
<td>.110</td>
<td>.124</td>
</tr>
<tr>
<td>Number of Students Taught</td>
<td>-0.356</td>
<td>.144</td>
<td>-0.296*</td>
</tr>
<tr>
<td>Dummy education</td>
<td>6.491</td>
<td>3.646</td>
<td>0.232**</td>
</tr>
</tbody>
</table>

Note: R = .46, R² = .21, *p < .005, **marginally significant p < .10

To test the hypothesis that the degree of ITI implementation in the classrooms is a function of primary school teachers’ demographic backgrounds including their organizational data (administrative support, and colleagues using ITI), another multiple regression analysis was performed. Tests for multicollinearity indicated that a very low level of multicollinearity was present (VIF = 1.045 for both predictors). The two predictor variables were entered as one set predictors because the researcher made no a priori hypotheses about what predictors will be better predictors. The predictors were the
two organizational demographic variables consisted of administrative support and number of colleagues implementing integrated curriculum. From the results, it could be inferred that between two organizational demographic predictors, administrative support was the best predictor with the Beta value .419; while the other predictor was not a statistically significant influence on ITI implementation. Therefore, the second null hypothesis for this research question was rejected. It means that there were significant relationships between primary school teachers’ demographic background and their organizational data (administrative support) and the degree of ITI implementation in their classrooms. Results of the second multiple regression analysis on ITI implementation and teachers’ organizational characteristics was shown on Table 26.

Table 26

*Organizational Demographic Predictors of ITI Implementation*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>67.578</td>
<td>5.689</td>
<td></td>
</tr>
<tr>
<td>Administrative Support</td>
<td>1.083</td>
<td>.199</td>
<td>.419*</td>
</tr>
<tr>
<td>Number of Colleagues using ITI</td>
<td>-.630</td>
<td>.537</td>
<td>-.090</td>
</tr>
</tbody>
</table>

*Note: R = .45, R² = .20, *p < .001.*

The best fitting model for predicting the degree of ITI implementation in the classroom is a linear combination of number of students taught, education degree (with the Beta value -.296 and .232, respectively) and administrative support as the only variable that was significant (*B = .419*).

Moreover, the bivariate correlations between the demographic variables and the degree of ITI implementation were positive for five variables (administrative support,
teaching experience, ITI experience, ITI professional development, and education degree) and negative for the other two variables (i.e., number of students taught and number of colleague using ITI). Four of the seven indices that showed statistically significant results \((p < .05)\) were administrative support, number of colleague using ITI, number of student taught and education degree. One of the seven indices that showed marginally significant \((p < .10)\) was ITI professional development. Meanwhile, two of the seven indices that showed not statistically significant were teaching experience and ITI professional development.

Based on the above results and theoretical background, a further analysis was conducted using a hierarchical multiple regression. Three predictor variables that were significant on previous results were entered as predictors. The researcher made a hypothesis that administrative support will be a better predictor. In addition, research showed that professional development of the innovation influenced the level of implementation (Adams, 2002; Fullan, 1990). The researcher decided to enter administrative support first, followed by number of students taught, education degree and professional development as a composite. The decision to enter the last three variables as a composite was that there was no literature supporting the order of these three variables, which one was more important or should be entered first into the model than the others. Results of the hierarchical regression analysis are reported on Table 27.
Table 27

Hierarchical Multiple Regression Analysis Predicting ITI Implementation from Individual Demographic Characteristics and Organizational Demographic Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>69.785</td>
<td>7.229</td>
<td></td>
</tr>
<tr>
<td>Administrative Support</td>
<td>0.943</td>
<td>0.287</td>
<td>0.364**</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>72.499</td>
<td>7.465</td>
<td></td>
</tr>
<tr>
<td>Administrative Support</td>
<td>0.957</td>
<td>0.261</td>
<td>0.369***</td>
</tr>
<tr>
<td>Number of Students Taught</td>
<td>-0.299</td>
<td>0.129</td>
<td>-0.245*</td>
</tr>
<tr>
<td>Dummy education</td>
<td>6.886</td>
<td>3.105</td>
<td>0.234*</td>
</tr>
<tr>
<td>ITI Professional Development</td>
<td>0.123</td>
<td>0.098</td>
<td>0.128</td>
</tr>
</tbody>
</table>

Note: $R = .364$, $R^2 = .132$ for Step 1, $\Delta R^2 = .180$ for Step 2 (p < .01).
* $p < .05$, ** $p < .01$, and *** $p < .001$

Running the hierarchical multiple regression analysis resulted in the better model. From the results, it appeared that organizational demographic background – administrative support – appeared to be a good predictor of the ITI implementation. From the standardized coefficient of Beta, it could be interpreted that the most important predictor in the model was administrative support (.37) followed by the number of students (-.25) and educational background (.23). An increase in respondents’ perception of having administrative support and educational background increased the degree of ITI implementation, while an increasing number of students lowered the degree of ITI implementation.
Exploratory Factor Analysis (EFA)

As indicated in Chapter III, the researcher created two scales namely the Integrated Curriculum Implementation Scale (ICIS) and the Administrative Support Scale (ASS). The construct of the Integrated Curriculum Implementation Scale was based on the guidelines of the characteristics of thematic instruction as mandated by Indonesian national curriculum standards (MONE, 2009) while the Administrative Support Scale was constructed based on a review of literature. The reliability analysis for testing the two scales was a Cronbach’s Alpha test. An initial reliability analysis on the Integrated Curriculum Implementation Scale resulted in a Cronbach’s alpha .81 for 28 items. The second round of the reliability analysis for 23 items (i.e., removing five negative items) improved the Cronbach’s alpha to .85. Excluding negative items was proven to improve the reliability of the scale. For the Administrative Support Scale, a reliability analysis resulted in a Cronbach’s alpha .76.

Furthermore, an Exploratory Factor Analysis (EFA) was carried out to give a basic psychometric analysis of the scales. The Integrated Curriculum Implementation Scale (see Table 10) was created to determine the implementation of integrated (thematic) curriculum. It consisted of seven constructs namely Student Centered (SC), Direct Experience (DE), Subject Integration (SI), Whole Learning (WL), Flexibility (F), Variety Assessment (VA) and Engaged Learning (EL). Each construct was represented by four items and as a result the total number of items was 28. In the questionnaire, these items were numbered 36 to 63. Construct SC was represented by questions 36 through 39, DE was represented by questions #40 until #43, SI was represented by #44 through
#47, WL was represented by questions #48 until #51, F was represented by #52 through #55, VA was represented by questions #56 until #59 and EL was represented by questions #60 through #63. The negative questions were #36, #44, #51, #53, and #57.

The process of building the validity of the instrument was started by sending the instrument to faculty members, graduate students and practicing teachers (see Chapter III). The feedback from the first process was used to make a revision of the instrument prior to translation. The next step was translating the instrument from English into the Indonesian language. The translation was reviewed by colleagues in Indonesia from Indonesia Language Department and from the English Education Department at the University of Sanata Dharma. The second revision was used for the pilot study. Twenty-one teachers were involved in the pilot test. Based on the feedback gained from piloting, the instrument was ready to be distributed to the real sample.

The following steps were taken in running the Exploratory Factor Analysis (EFA) for the first time for the 171 returned questionnaires with 28 items, using orthogonal rotation (varimax), suppress absolute values less than 0.10 (default) and extraction based on Eigenvalues over 1. The Kaiser-Meyer-Olkin (KMO) measure identified the sampling adequacy for the analysis, KMO = .75 (‘mediocre’ according to Field, 2009). Bartlett’s test of sphericity $X^2 (378) = 1379.753$, $p < .001$, indicated that correlations between items were significant for EFA (Field, 2009). This initial analysis was run to obtain eigenvalues for each component or construct in the data. Ten components had eigenvalues over Kaiser’s criterion of 1 and in combination explained 68.228% of the variance.
The KMO statistic measured the sampling adequacy in which Field (2009) recommended a minimum value of .5 and that the values between .5 and .7 were mediocre, values between .7 and .8 were good, values between .8 and .9 were great and values above .9 were superb. The output on the rotated component matrix showed “a matrix of factor loadings for each variable into each factor or construct” (Field, 2009, p. 664). Factor loadings on this first run did not match with the seven factors as the researcher proposed when constructing the instrument. The items spread out and some of them blended into different factors. In the second run, the researcher decided to run the Exploratory Factor Analysis (EFA) for the second time for the 171 returned questionnaires with 28 items, using orthogonal rotation (varimax), suppress absolute values less than 0.40 proposed by Field (2006) and 7 as the number of factor extraction instead of using the Eigen values as the previous one did. This initial analysis was run to obtain eigenvalues for each component or construct in the data. Ten components had eigenvalues over Kaiser’s criterion of 1 while the 7 predetermined factors in combination explained 56.581% of the variance. The factor loadings were still mixed.

The possible cause of these conditions was the existence of negative items (reverse scores) that were confusing. They did not consistently measure the reverse scores, for example one respondent scored “1” on one negative question instead of “5”. The researcher made a comparison of respondents’ answers for the negative item scores on every construct with the average score of positive items on that construct. If the difference was 2 or above, it meant that the respondent responded to the negative items inconsistently. The result was that in construct Student Centered (SC), there were 36%
respondents who had different scores more than 2, 27% in construct Subject Integration (SI), 53% in construct Whole Learning (WL), 43% in construct Flexibility, and 63% in Variety of Assessment (VA). The conclusion was that the negative items needed to be taken out. Table 28 and Table 29 showed the summary of EFA for various trials.

Based on the above information, some patterns were found:

1. Removing negative items improved the total variance explained (compare trial 2 and 3).

2. Item #45, #46, #47 and #48, #49, #50 were always bounded, it raised a question whether Subject Integration and Whole Learning were actually the same construct.

3. Student Centered and Direct Experience were spread out into any construct; it raised a question whether Student Centered and Direct Experience were general terms that could be included in every construct.

Table 28

Summary of EFA Trials

<table>
<thead>
<tr>
<th>Trials</th>
<th>No of item</th>
<th>No of factors</th>
<th>Coeff</th>
<th>KMO</th>
<th>Tot Variance Explained</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>28</td>
<td>10</td>
<td>0.10</td>
<td>.75</td>
<td>68.228%</td>
<td>Using EV &gt; 1</td>
</tr>
<tr>
<td>2</td>
<td>28</td>
<td>7</td>
<td>0.40</td>
<td>.75</td>
<td>56.581%</td>
<td>Predetermined factors</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>8</td>
<td>0.40</td>
<td>.75</td>
<td>66.84%</td>
<td>EV&gt;1, rotation failed to converge in 50 iterations</td>
</tr>
<tr>
<td>4</td>
<td>23</td>
<td>7</td>
<td>0.40</td>
<td>.75</td>
<td>62.310%</td>
<td>Predetermined factors</td>
</tr>
<tr>
<td>5</td>
<td>23</td>
<td>6</td>
<td>0.40</td>
<td>.75</td>
<td>57.461%</td>
<td>Predetermined factors</td>
</tr>
<tr>
<td>6</td>
<td>23</td>
<td>6</td>
<td>0.50</td>
<td>.75</td>
<td>57.461%</td>
<td>Predetermined factors</td>
</tr>
<tr>
<td>7</td>
<td>23</td>
<td>4</td>
<td>0.50</td>
<td>.75</td>
<td>46.502%</td>
<td>Predetermined factors</td>
</tr>
</tbody>
</table>
Table 29

Summary of Rotated Component Matrix of Integrated Curriculum Implementation Scale

<table>
<thead>
<tr>
<th>Trial</th>
<th>Factor Extracted</th>
<th>No of Item in the Questionnaire</th>
<th>Construct(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>45, 46, 47, 48, 49, 50, 51</td>
<td>SI, WL</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>40, 58, 59</td>
<td>DE, FA</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>36, 41, 54, 55, 56</td>
<td>SC, DE, FA, VA</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>39, 52, 62</td>
<td>SC, F, EL</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>42, 43</td>
<td>DE</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>60, 61</td>
<td>EL</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>63</td>
<td>EL</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>37, 44, 53</td>
<td>SC, SI, F</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>38</td>
<td>SC</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>57</td>
<td>VA</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>40, 45, 46, 47, 48, 49, 50</td>
<td>SC, SI, WL</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>41, 58, 59</td>
<td>DE, FA</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>42, 43, 60, 61</td>
<td>DE, EL</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>54, 55, 56</td>
<td>F, VA</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>39, 52</td>
<td>SC, F</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>37, 62, 63</td>
<td>SC, EL</td>
</tr>
<tr>
<td></td>
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<td>38</td>
<td>SC</td>
</tr>
<tr>
<td>*4</td>
<td>1</td>
<td>45, 46, 47, 48, 49, 50</td>
<td>SI, WL</td>
</tr>
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<td>2</td>
<td>41, 54, 55, 56</td>
<td>DE, F, VA</td>
</tr>
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<td>3</td>
<td>58, 59</td>
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</tr>
<tr>
<td></td>
<td>4</td>
<td>42, 43, 60, 61</td>
<td>DE, EL</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>39, 40, 52, 62, 63</td>
<td>SC, DE, F, EL</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>37, 38 neg</td>
<td>SC</td>
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<td>45, 46, 47, 48, 49, 50</td>
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<td>3</td>
<td>58, 59</td>
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<td>Omit: 42, 52</td>
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<td>6</td>
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<td>58, 59, 60, 61</td>
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<td>4</td>
<td>37, 43, 62, 63</td>
<td>SC, DE, EL</td>
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<tr>
<td></td>
<td>Omit: 38, 39, 42, 45, 52</td>
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*Note: Trial #3 does not appear because it failed to converge in the iteration.*
4. Item #42 and #43 were good descriptors for Direct Experience, item #54, #55 were good descriptors for Flexibility, item #58, #59 were good descriptors for Variety of Assessment and item #60, #61 were good descriptors for Engaged Learning.

5. Item #54, #55, and #56 were always in the same construct, this raised questions about whether or not Flexibility and Variety of Assessment were the same construct or whether or not item #56 fit more with Flexibility than Variety of Assessment.

6. Item #42, #43 and #60, #61 were always in the same construct, the question was whether or not the Direct Experience and Engaged Learning were the same construct.

The EFA results can be used as preliminary findings about the integrated curriculum implementation scale. Further analysis and research is needed in order to get more precise information.

Another Exploratory Factor Analysis (EFA) was conducted for measuring the second scale namely Administrative Support Scale. This scale consisted of six question items in the questionnaire, from item #64 through #69. This EFA used orthogonal rotation (varimax) suppresses absolute values less than 0.40 and extraction based on Eigenvalues over 1. The Kaiser-Meyer-Olkin (KMO) measure identified the sampling adequacy for the analysis, KMO = .81 (‘great” according to Field, 2009). Bartlett’s test of sphericity $X^2 (15) = 377.830, p < .001$, indicated that correlations between items were significant for EFA (Field, 2009). This initial analysis was run to obtain eigenvalues for
each component or construct in the data. One component had eigenvalues over Kaiser’s criterion of 1 and in combination explained 70.53% of the variance. It seemed that factor loadings after rotation for the scale were pretty good as it was shown in Table 30. Except for item #69, all other items were pulled in one construct. Moreover, it can be interpreted that item #64, #65, #66 and #68 represented one construct about administrative support on ITI implementation. Meanwhile item #67 and #69 represented another construct about administrative support on evaluation of teachers using ITI.

Table 30

*Rotated Component Matrix for Administrative Support Scale*

<table>
<thead>
<tr>
<th>Rotated Component Matrix*</th>
<th>Component 1</th>
<th>Component 2</th>
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<tbody>
<tr>
<td>it64. The principal in my school is supportive of teachers who teach with the ITI approach</td>
<td>.765</td>
<td></td>
</tr>
<tr>
<td>it65. The principal in my school recognizes the additional workload required to teach with the ITI approach.</td>
<td>.699</td>
<td></td>
</tr>
<tr>
<td>it66. The principal in my school communicates with faculty about the value of teaching with the ITI approach.</td>
<td>.829</td>
<td></td>
</tr>
<tr>
<td>it67. The principal in my school understands how to assess the quality of teaching with the ITI approach</td>
<td>.666</td>
<td>.546</td>
</tr>
<tr>
<td>it68. The principal in my school has positive attitudes toward teaching with the ITI approach.</td>
<td>.799</td>
<td></td>
</tr>
<tr>
<td>it69. The principal in my school positively recognizes the effective use of the ITI approach in reappointment, promotion and tenure decisions</td>
<td>.929</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Extraction Method: Principal Component Analysis, Rotation Method: Varimax with Kaiser Normalization, *Rotation converged in 3 iterations.*
CHAPTER V

FINDINGS

This final chapter provides findings of the study. It consists of a summary of the present study, followed by a discussion of the major research findings as well as implications and suggestions for further practices regarding the implementation of Integrated Thematic Instruction (ITI) as an educational reform initiative. The chapter closes with conclusions and recommendations for future study.

Summary of the Research

This study examined the implementation of an educational reform initiative called Integrated Thematic Instruction (ITI) in Indonesia from teachers’ perspectives. In order to improve its educational quality, Indonesia has been undergoing an educational reform by launching “Curriculum 2006” along with the National Education Standards. Part of this legislation serves as a new guideline for policy makers and schools in changing the teaching and learning process. Specifically, in elementary education levels, subject matter in grades 1, 2 and 3 should be taught using thematic units known as Integrated Thematic Instruction (ITI). It has been several years since the curriculum was introduced in Indonesia, but no major changes in the daily classroom have been detected (MONE, 2008a). One of the reasons for this is that teachers were too busy working on administrative tasks and were too tired to implement instructional innovation (MONE, 2008b). Fullan (2011) asserts that changes often raise a potential concern of school
faculty and take their attention away from the primary task of teaching. Another reason is that there is a lack of attention given to teachers as “front line” agents of change (Cohen, 2004). MONE (2007a) identified that teachers and school staffs do not have a role in policy making and that they tend to just “copy and paste” the samples from the central government. The school personnel also had limited support to carry out the reform. The activities of nationalization of the curriculum and the implementation for schools conducted by the central government often do not involve teachers. Participation in training on the specific reform is often based on selection because of the limited number of professional trainers and the amount of budgeted (MONE, 2007b).

Teachers’ perspectives on educational reform is imperative because in the end, how teachers feel and perceive a given change will determine whether or not any change occurs in the classroom (Hall & Hord, 1984). It is not uncommon for persons involved in an innovation to have mixed feelings, perceptions, and emotions about the new system or approach (Holloway, 2003). Teachers are required to have more technical knowledge and skills to teach subject content as well as to equip students with the necessary tools to be lifelong learners (Hargreaves, 2003). In addition, change requires teachers to provide a considerable amount of time, knowledge and skills (Hargreaves & Moore, 2000). It takes confidence, courage and knowledge on the part of teachers to make a reform effort take place in reality. Therefore, addressing teachers’ concerns about the particular innovation is necessary in order to help them gain more competency and confidence required for any reform effort.
This study was carried out to provide empirical data that could assist policy makers in understanding the degree of change in teachers’ practices. In turn, it could serve as a basis to provide the necessary support and resources that teachers’ need in order to be more effective in implementing the reform. Specifically, this study portrayed teachers’ concerns regarding the implementation of ITI, the degree of ITI implementation in the classroom, the relationship between their concerns and the ITI implementation and the effect of teachers’ individual and organizational backgrounds for their ITI implementation.

Previous studies show that there are some factors that affect the implementation of a reform in classrooms such as time, teachers’ expertise, teacher involvement, administrative support and years of teaching (Utomo, 2005). For example, the longer teachers have been involved in the time to transfer information and to practice the new approach, the more likely they will consider implementing the change (Hord et al., 1987).

The theoretical framework used in this study was the Concern Based Adoption Model (CBAM) developed by researchers from the University of Texas at Austin (Hord et al., 1987). The CBAM model provides tools for measuring the process of implementation such as standards-based education reforms. Part of the CBAM is the Stages of Concern (SoC) theory that has been widely used by researchers in the United States and outside the U.S. SoC proposes seven gradual stages of concern that teachers usually experience during the implementation of an innovation namely: unconcerned (awareness), informational, personal, management, consequences, collaboration and refocusing. Individuals faced with implementing change progress in their concerns from
lower stages into the higher stages of concerns. Research also shows that demographic aspects affect the concern (that in turn can affect the implementation) such as related professional development, prior instructional use, years of teaching and class size among others (Petherbridge, 2007).

Using a purposive sample of Kanisius primary teachers in the DIY province, this study aimed to explore primary grade teachers’ stages of concern and their implementation of ITI. The research design was a non-experimental, cross-sectional descriptive design using a survey methodology for data collection. The population of the research was primary grade teachers in Catholic schools of the Kanisius Foundation in the Yogyakarta Diocese who currently teach first, second or third grade students and were mandated to employ ITI in their teaching. The questionnaire was distributed to 151 teachers from 46 schools. With the average response rate return of 99%, 150 teachers from 46 schools decided to participate in this study.

The survey instrument used to collect the data consisted of three parts. The first part was the Stages of Concern Questionnaire (SoCQ) developed by Hall & Hord (2001). The second part consisted of the Integrated Curriculum Implementation Scale (ICIS) developed by the researcher. The third and last part was a questionnaire asking about personal and organizational data of respondents. The information for respondents used in this study were their individual data including years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status; also their organizational data like administrative support, colleagues using ITI, and school setting. A section of this third part was the Administrative Support Scale (ASS) that was
created by the researcher. The independent variables of the study were the stages of concern and demographic background, while the dependent variable was teachers’ implementation of ITI. Descriptive analysis was used to analyze the teacher concern profile and the degree of ITI implementation while an ANOVA was conducted to understand the difference in ITI implementation among the teacher concern groups. To understand the relationship between individual and organizational demographic backgrounds, multiple regression analysis was used. Four tests were carried out prior to the multiple regression analysis. An ANOVA was performed for knowing the difference of ITI implementation with different levels of education as well as the difference of ITI implementation with different employment status. A t-test was used to show the relationship between ITI implementation and geographic location. In addition, a Chi Square test was performed for finding the relationship between location and education and whether the location mediated the education.

The instrument was measured for its reliability and validity. The three parts of the instrument (Stages of Concern Questionnaire, Integrated Curriculum Implementation Scale and Administrative Support Scale) were assessed for their reliability using the Cronbach’s Alpha and test-retest. The result for the reliability using Cronbach’s Alpha was .85 for all scales of SoCQ and ranged from .45 to .76 for the seven Stages of Concern; .85 for 23 items of the ICIS and ranged from .06 to .69; and .76 for the Administrative Support Scale measuring a single construct of administrative support. The second test of the reliability was conducted by a test-retest of 71 elementary teachers. From the test-retest, the correlation coefficient was .57 for all scales of SoCQ and ranged
from .34 to .60 for all seven stages; .38 for all constructs of ICIS and ranged from .02 to .45; and .63 for ASS.

The validity of the instrument was inferred from several sources. Content and face validity were gathered by asking some experts and practitioners to review the ICIS. They were faculty members, graduate students and teachers. The result of the validity test was the revision of item #36, #44 and #57 on the ICIS. In addition, some comments indicated that the negative items were confusing. Therefore, the researcher conducted a descriptive comparison between negative item scores and positive item scores on each construct of the ICIS defining whether or not the negative items were clear for respondents. The result for the comparison was that the negative item scores were not reversed as they were supposed to be. It gave other evidence that the negative items did not function properly and were confusing. Therefore, five negative items on the ICIS (#36, #44, #51, #53 and #57) were removed. Another test for internal validity was carried out using Pearson’s product moment to know the relationships between all pairs of the data set including the item-to-total correlation, item-to-construct correlation and construct-to-construct correlation. The results for SoCQ revealed that 88% of the items correlated more highly with the stage to which they had been assigned than with any other stage’s scale score and 94% of the items correlated more highly with the stage to which they had been assigned than with the total score of the instrument. Meanwhile, all 23 item questions in ICIS correlated more highly with the construct to which they had been assigned than with any other construct’s scale score; all of the items were also significantly correlated more highly with the construct to which they had been assigned
than with the total score of the instrument. The result for the ASS showed the same result, each item of the ASS had significant positive correlation with the total score with the average correlation .68. In addition, an Exploratory Factor Analysis (EFA) was conducted to build the psychometric validity of the instrument for further use. The result from the first run of EFA using orthogonal rotation (varimax), *suppress absolute values less than* 0.10 (default) and extraction based on Eigenvalues over 1, showed KMO = .75 (‘mediocre’ according to Field, 2009). Bartlett’s test of sphericity $X^2 (378) = 1379.753, p < .001$, indicated that correlations between items were significant for EFA (Field, 2009). Ten components had eigenvalues over Kaiser’s criterion of 1 and in combination explained 68.228% of the variance. The ten factor loadings were not matched with the predetermined seven factors when the researcher developed the ICIS scale. Moreover, the items were mixed in every construct and did not contribute to the construct as it was planned. It meant that the constructs were blended even though some patterns appeared as some other trials of the EFA were conducted. For example item #42 and #43 from the Direct Experience construct were always together with item #60 and #61 from the Engaged Learning construct; items #45, #46, and #47 from Subject Integration were always on the same factor loading with items #48, #49 and #50 from the Whole Learning construct. Another Exploratory Factor Analysis (EFA) was conducted for measuring the Administrative Support Scale. The Kaiser-Meyer-Olkin (KMO) measure identified the sampling adequacy for the analysis, KMO = .81 (‘great’ according to Field, 2009). Bartlett’s test of sphericity $X^2 (15) = 377.830, p < .001$, indicated that correlations between items were significant for EFA (Field, 2009). One component (construct) had
eigenvalues over Kaiser’s criterion of 1 and in combination explained 70.53% of the variance. The first factor loading was about administrative support on ITI implementation and the second factor loading was about administrative support on evaluation of teachers using ITI.

Overall, the study resulted that teachers’ highest concerns were unrelated and informational concerns. There was less concern for personal, management and consequences levels, with a slight tailing up on collaboration and refocusing levels. Teachers were in need of information about the innovation with the lowest concern on the impact of the innovation on their students. The tailing up on the later stages indicated some resistance to implement ITI. Contrasting the teacher concerns and their experience using ITI, most teachers who were in Stages of Concern level 0 (awareness) and level 1 (self informational), had experience with ITI in their instruction for less than three years.

Generally, teachers considered themselves as higher ITI implementers than they might actually have been. Respondents thought that Flexibility and Variety Assessment were the two constructs that were implemented by most teachers with Mean 13.61 and 12.19, respectively. Subject Integration and Whole Learning (both Means were 11.65) seemed to be the less implemented constructs in their classrooms respondents.

Moreover, there was no significant difference between the amount of ITI implementation among the seven different groups with different attitudes and behaviors related to ITI as measured by the SoC. There was also no significant difference between four groups with different attitudes and behaviors related to ITI as measured by the SoC in regard to the degree of ITI implementation. The result of the hierarchical multiple
regression analysis showed that administrative support, the number of students and teachers’ education had significant influence on the degree of ITI implementation.

A recommendation of this study is to provide the necessary supports to meet the needs of the teachers for knowing more about the ITI and to being able to implement ITI in their classrooms. Professional development that focuses on ITI and specific skills required for it is recommended as well. Teachers also need to have administrative support to provide a supportive and conducive environment for implementing ITI. In technical matters, teachers need to have a suitable number of students in the classroom; also further education to facilitate the chance to implement ITI in their classroom.

Discussion of Results

The following section summarizes and discusses the results of each research question. These findings are discussed in accordance with the research literature regarding the stages of concern, integrated thematic instruction, educational reform and the Indonesian educational context.

Research question one was stated “What are the Stages of Concern of primary school teachers regarding the implementation of Integrated Thematic Instruction (ITI)?”

Overall, the profile of teachers’ greatest concern was on the awareness and informational stages with a slight tailing up on the later stages (collaboration and refocusing). This profile is a typical non-user profile that puts the most intense concerns at Stage 1 and (theoretically) will ultimately register the highest levels of concern at later stages (George, et.al, 2006). However, in this case there is a variation in the amount of intensity of concern shown on the slight tailing up on stages 5 and 6. As shown in Figure 3 in
Chapter IV, awareness was the high concern on Stage 0 and indicated the degree the respondents were placing on the innovation. Stage 0 does not indicate whether the respondent is a user or non-user (George et al., 2006) but it shows the degree of interest of the respondents toward the innovation compared with other tasks, activities and efforts of the respondents. The lower intensity at Stage 0 indicates that a respondent prioritizes the innovation in his or her teaching and it becomes the focus of her or his activities. In contrast, if this stage has a high score, it means that the respondent has a number of other things to focus on and they become central to his or her activities (the new innovation is not the only thing the respondent is concerned about). Scores in Stage 0 do not provide any indication whether or not the respondent is using the innovation. In this study, teacher choices indicate that the ITI was not the only thing in their thinking and activities. There was no information whether or not the teachers in this stage were implementing ITI in their daily teaching. It is because they already knew about the demand of the new curriculum regarding ITI.

The greatest concern on Stage 1, the information stage, indicated that teachers are interested in learning more about the innovation (Hall & Hord, 1987). They would like to know basic information (more general than specific) about the innovation (George et al., 2006). They need more information about what ITI is, what it will do, and what the resources are for implementing it. However, the score does not indicate how much knowledge the teachers need in order to know more about ITI. The original model of SoC indicates that individuals in both Stage 0 and Stage 1 need more information about the innovation. The difference between two stages is that individuals in Stage 0 do not
want to learn (or are less interested in knowing more) about the innovation while those who are in Stage 1 are interested in learning more about the innovation. The present study supports the model however it has a different explanation due to the nature of the innovation. The innovation was a mandate and the teachers were expected to use it regardless of whether they wanted. From the questionnaire, most respondents (40%) who were in Stage 0 selected the items that represented that they were occupied with other things and spent little time thinking about ITI. It seems a contradiction in which the mandate does not motivate teachers to prioritize ITI in their teaching.

Moreover, Stage 2 is called self-personal concern (Fuller, 1969). It shows the magnitude of questions and uncertainties that a person has regarding the effect of the innovation on her or him; the burden, status, reward, consequences that the innovation might bring on her or him. The low concern on the personal self-concern in Stage 2 indicated that the teachers were not worried about how the innovation (ITI) would impact them as individuals.

The relationship between Stage 1 and Stage 2 is important. When there is a distinct difference between the two stages, the profile will be seen as having a one-two split in which “one” is referring to Stage 1 and “two” is referring to Stage 2. According to George et al. (2006), when the Stage 1 scores are significantly higher than Stage 2 scores, this condition is called a “positive one-two spilt” and when the Stage 2 scores are higher than Stage 1 scores, it is called a “negative one-two split.” The results appeared to indicate that the difference between these two stages was significant; 59 teachers were on Stage 1 while only 12 were on Stage 2. It can be interpreted that the profile has a
positive one-two split, meaning that the teachers have a positive and proactive perspective on the ITI innovation, with little fear of the personal effects. Personal effects in this case can be work position, job security or salary. In other words, teachers were open to and had more desire to learn about the innovation rather than worrying about their position, job security, salary or other personal issues. In the case of a negative one-two split, the individuals have more concern about personal issues than the need to learn more about the innovation.

Stage 3 is the management concern; time and logistics needed to implement the innovation (George et al., 2006). The low number of Kanisius teachers in this stage indicated that they do not have significant management concerns (indicated by medium intensity in Stage 3. They are not concerned about the innovation’s consequences in taking their time or how they manage all the requirements for implementing ITI.

Stage 4 is the consequences, how the innovation might affect students, including how the students can be involved. Only one teacher showed a high concern in this stage. This indicated that most teachers did not have any concern about students’ attitude toward ITI, students’ involvement in ITI or using students’ feedback to change the program.

The tailing up on the later Stage 5 and Stage 6 on the non-user profile provided additional information about the attitude of the respondents toward the innovation. Any tailing up on the later stages of non-user profiles might indicate that some teachers perceived other approaches have more merit than the proposed innovation. According to George et al. (2006), this situation might indicate resistance to the innovation (ITI).
Therefore, there is a need for policy makers to address the amount of support given to implement ITI. The higher the peak of concern in these stages, the more serious the situation is. It has been five years since the Indonesian government launched Curriculum 2006 in Indonesian education. During that period of time, Indonesia’s government has conducted a series of efforts to nationalize the new curriculum. The findings of this research showed that most Kanisius teachers were on the informational stage (Stage 1) and even a significant number of them were still on “unresolved” Stage 0 – awareness. It seemed that the teachers had many other things to be concerned about above and beyond ITI. A report from MONE (2007b) regarding the implementation of Curriculum 2006 in 33 provinces revealed that generally teachers and school staffs interpreted the new curriculum more on administrative matters such as completing documents, laboratories, and textbooks. Therefore, the impact of the new curriculum on the instructional practice in the classroom was often neglected and became a secondary priority among school staffs. The findings of the report also revealed that in general, elementary school teachers had difficulties in developing syllabi into lesson plans particularly in constructing objectives, instructional procedures and evaluation to reach indicators, and rubrics for assessments. They also had problems in extracting standards of competency and basic competencies into indicators, developing the criteria for mastery learning, as well as the techniques of assessment. The reasons for those problems were that teachers had a lack of references and models (examples) and that administrative duty required a great deal of time. For primary teachers, the report stated that teachers faced difficulties in developing
themes, instructional plans and instructional activities that integrated subject matters (MONE, 2008b).

Even though they were mandated to implement it in their classrooms, their thinking and activities were not focused on this new demand. Another group of teachers might use ITI in their teaching but they needed more information regarding ITI implementation. It is possible that teachers did not have enough support from policy makers to facilitate them knowing more about ITI in administrative and/or practical levels. Obviously, all these teachers were novices in this topic. They did not know whom to ask when they faced difficulties and challenges in using ITI. Some teachers expected the central government to provide a complete example of an ITI instructional unit (MONE, 2008b). Previous research indicated that this should be expected “Concerns at this point have to do with feelings of potential inadequacy, self-doubts about the knowledge required, or uncertainty about the situation they are about to face. Typical statements reflecting these types of concerns are: ‘I wonder if I know enough to teach them.’ ‘Will I be able to control them?’” (Hall & Hord, 1987, p. 57). Resistance in the non user profile indicated that teachers had ideas about how other things ought to be different and might want to change or replace the innovation (George et al., 2006). Perhaps a lack of information among teachers in turn made them more negative towards the innovation.

Research question two was stated, “To what degree do primary school teachers implement ITI in their classrooms?”
The second research question dealt with the extent that ITI implementation would be found among Kanisius teachers. The degree of implementation was examined by using the teachers’ total score from 23 items in the Integrated Curriculum Instruction Scale (ICIS) of the questionnaire. From the total score of implementation, the mean is 92.12 and the standard deviation 12.93. Most of the participant teachers implemented ITI at some level (showed by the obtained minimum score of ITI implementation was 45 from the possible minimum score 23), even though the extent of the implementation varied from teacher to teacher (showed by the high standard deviation). Teachers had different understandings of how to integrate the new instruction into their instruction and how to tie the program’s goals to learning standards. Specifically, teachers seemed to have different levels of comprehension regarding ITI implementation in the aspects of being student centered, with direct experience, subject integration, whole learning, flexibility, variety assessment and engaged learning. Based on the classification in Chapter 4, 75% teachers were considered as high implementers, 24% as middle implementers and only 1% regarded as a low implementer. This result is surprising because it is quite common to find at least 20% of non-user even in the second or third years of implementation (Hord et al., 1987). To know the teachers’ perception of the most implemented construct, the frequency data point in chapter four showed that among teachers, Flexibility and Variety Assessment seemed to be constructs that were implemented in most of the teachers’ classrooms while Subject Integration and Whole Learning were less implemented in their classrooms.
It is possible that the high-implementers took a shorter time to grasp the basic concepts and thus became more able or more motivated to implement the program. For example, the high-implementing teachers might sufficiently comprehend the purpose of the program and how it aligned with standards. However, in this case, the researcher believes that self-report from the respondents did not portray the real situation and more likely reflected social desirability. Hord et al. (1987) support the idea that participants determine “what ideal or most acceptable practice should be even if it is not marked on the instrument” (p. 27). Teachers might have felt they were being evaluated on their teaching practice; therefore, it is difficult for them to indicate themselves as less than ideal or unacceptable. Teachers might claim themselves as good implementers (especially those who reached a full score of 115). However, this research could not track the quality of the practice was. For example, in the researcher’s experience as a national trainer, some teachers said that they gave a worksheet to student groups and they called this activity cooperative learning. The nature of the instrument was unable to encourage teachers to respond freely about their teaching practice without feeling pressure of having to compare their practice to an ideal standard (Hord et al., 1987). It seemed that the paper and pencil survey did not adequately assess the degree and quality of ITI use. Perhaps the respondents perceived that the focus of the study was on their practice instead of the program (ITI).

A report from MONE (2007b) about the implementation of thematic units in primary grades revealed that the implementation of the content standard in the classroom was not as it was supposed to be as mandated by the Content Standard. Teachers had
difficulties in constructing syllabi, especially in developing the Standard of Competency and Basic Competency as required by the Content Standard. In addition, teachers had difficulties in allocating time in weekly lesson plans because there was no guideline about how many weeks should be allocated for each theme. Teachers were reported not to have common understandings of the essence of ITI and how to practice it. The report recommended that primary teachers be offered a comprehensive in-house training.

Following the report, the difficulties in implementing thematic instruction may stem from the fact that teachers who teach in primary grade levels are teachers who did not have an educational background as elementary school teachers. They were trained for specific subject matter such as those who underwent training to teach technology or general teachers who did not specialize in elementary education. The demographic data in this research showed that 77 respondents had educational degrees rather than an elementary education program, and most of them had less than two years experience in using ITI. In addition, most of the teachers did not have professional development specified in ITI, or if they did, it was less than 27 hours. It seemed that perhaps “they have difficulties in implementing standards in a field of knowledge which is not their expertise” (Kleiger & Yakobovitch, 2011).

In relating to what construct is most frequently implemented, teachers tended to stress the use of Flexibility (or responsiveness) in which they connected materials among subjects, student’s life and environment such as neighborhoods, towns and natural environment. Teachers’ answers also indicated that they used various kinds of assessment to meet students’ interest and needs, such as performance assessment and portfolios.
However, teachers found that Subject Integration and Whole Learning were constructs that were less implemented. They found that focusing learning on themes (such as integrating at least two or more subject areas on a regular basis and developing thematic units in order to teach multiple subjects) and teaching concepts from various subjects in a single process (such as designing a unit around a central theme and utilizing graphic organizers to develop main concepts from various subjects) were less practiced in their classrooms.

To be connected with the result from the first research question, it appeared to be another contradiction in which most of the participant teachers indicated a lack of time, knowledge and less opportunity to be involved in professional development that focused on integrated instruction. However, they regarded themselves as being able to implement the innovation. Another explanation for this is that teachers might undergo some professional development focusing on other active learning than thematic instruction per se, such as contextual teaching and learning, enjoyable learning (Pembelajaran Aktif, Kreatif, Efektif dan Menyenangkan – PAKEM) and/or Mathematic Realistic (MR). These kind of professional development programs stress the importance of building knowledge in meaningful ways by engaging students in real life situations. Therefore, the wording in the present study questionnaire such as “local surroundings,” “students’ life experience,” or “neighborhoods” was not new for the respondents. They claimed to implement ITI because most of the ICIS constructs had similar (overlapping) constructs with those approaches. For example, the characteristics of PAKEM are student-centered, environments as learning tools (physical, social and cultural environment), supportive
classroom, cooperative group and group learning, inquiry, variety of assessment, engaged learning, holistic and teacher as facilitator of learning (MONE, 2006). However, when it came to the word ‘thematic’, ‘theme’ (as in the Subject Integration and Whole Learning constructs of the ICIS), most of the teachers might not have confidence to say that they implement ITI. This might be true especially for teachers who were categorized as middle implementers. In this case, primary school teachers were presumed to have enough content knowledge in all areas that would enable them to implement the standard or curriculum.

Research question three was stated, “Are there any significant differences between the degree of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC?"

The null hypothesis for this question was that there were no significant differences between the amount of ITI implementation among the different groups with different attitudes and behaviors related to ITI as measured by the SoC.

Because the $p$-value is more than .05, the null hypothesis was fail to be rejected, that there were no differences among the different groups with different attitudes and behaviors related to ITI implementation as measured by the SoC. The means and standard deviations are presented in chapter four. The total extent of implementation is a mean of 92.12 ($SD = 12.93$).

Following the ANOVA test for seven groups of Stages of Concern was another ANOVA test to deal in whether there were any differences in ITI implementation scale among four simplified groups of Stages of Concern (unrelated, self, task and impact).
The result of the ANOVA showed no significant differences between the four groups with different attitudes and behaviors related to ITI as measured by the SoC in regard to the degree of ITI implementation, $F(3, 146) = 1.36, p = .26, \eta^2 = .027$.

In conclusion, differences were not found in the extent of implementation of the different teachers’ Stages of Concern. ITI does not change groups in terms of being implemented to a greater extent. The teachers at different Stages of Concern did not prove to have different extents of implementation of the ITI constructs.

The findings proved a contradiction of the idea that teachers’ concerns would be reflected in their instructional practices in thematic units. The researcher expected that teachers with higher levels of concern would show higher levels of implementation because they already were considered as experts. The researcher’s expectation was that the results of the study would inform teacher educators and professional development providers of the need to help primary grade teachers identify their concerns in order to improve on their practices and preparation in thematic units; but the data from this particular study did not support that advice. This condition was aligned with the finding from research question one in which most of the teachers were considered as non-users and those who were on the later stage were presumed to have a resistance to the innovation (instead of mastering the innovation).

As mentioned in the previous section, the instrument used in this research has limitations in regards to the real situation of the teachers. Another possible explanation is that the Stages of Concern construct might be “[culturally] bound and innovation specific” (Cheung et al., 2001, p. 236). Thus the SoC as a framework in this research
may not have been the best fit for the Indonesian setting and/or culture. SoCQ was developed in the United States, a setting in which individuals’ contribution and independence is imperative and often valued; while Indonesia is characterized by a collectivist culture. Furthermore, Cheung et al. (2001) stated that it is worthwhile for researchers in other countries to give greater attention to the psychometric and conceptual issues to detect any cultural differences. Moreover, while SoCQ in the American version consists of 35 items, a study conducted in Dutch-Belgian needed to adjust the questionnaire to 52 items (Vandenberghe, 1983). Similarly, a study in Cyprus by Christou et al. (2004) ended up with 36 items. In addition, Cheung et al. (2001) had to revise the original SoCQ for their participants in Hongkong to 22 items. These studies make a convincing case that the SoCQ used in this research might bring some limitations due to cultural differences. Perhaps, teachers’ efficacy and honesty in this research helps to explain the research finding. Teachers might actually be attempting to implement ITI, but still believe they need to learn more about ITI; or they did not implement it correctly, but believed they implemented it. This situation might help to explain the connection between the degree of ITI implementation and the length of experience in using ITI. Even teachers with 4–5 years experience in using ITI, were still at Stage 0 or Stage 1. Perhaps they did not feel confidence due to the feeling of being obligated, mandated and evaluated by this study. Perhaps, the SoCQ was correctly measuring their situation, but not ICIS.

Research question four was stated, “Are there any significant relationships between primary school teachers’ demographic backgrounds, including their individual
The first null hypothesis for this question was that there was no significant relationship between primary school teachers’ demographic background in their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) and the degree of ITI implementation in their classrooms. The second null hypothesis for this question was that there was no significant relationship between primary school teachers’ demographic background and their organizational data (administrative support, colleagues using ITI, and school setting) and the degree of ITI implementation in their classrooms.

The research question was answered using a multiple regression analysis in which the independent variables were primary school teachers’ demographic backgrounds including their individual data (years of teaching, prior ITI use, ITI professional development, academic background, class size, and employment status) as well as their organizational data (administrative support, colleagues using ITI, and school setting). The dependent variable was the degree of ITI implementation. Prior to the analysis, other tests were carried out due to the nature of the non-continuous data of the educational background, employment status and school location. The results of these comparisons will be used to determine whether the variable would be included in a regression model.
A one-way analysis of variance was conducted to evaluate the relationship between teachers’ educational background and the degree of ITI implementation. The independent variable, the educational background, included four levels: high school, bachelor in science or general education, diploma in elementary education and bachelor in elementary education. The dependent variable was the degree of ITI implementation. The ANOVA result was significant, $F(3, 141) = 3.074, p = .03$. The strength of the relationship between the educational background and the degree of ITI implementation, as assessed by $\eta^2p$ was weak (Field, 2009), with the education background accounting for only 6% of the variance of the dependent variable.

Another one-way analysis of variance was conducted to evaluate the relationship between teachers’ employment status and the degree of ITI implementation. The independent variable, the employment status, included three levels: non tenure, tenure and government employee. The dependent variable was the degree of ITI implementation. The ANOVA result was not significant, $F(2, 140) = .37, p = .69$. The strength of the relationship between the educational background and the degree of ITI implementation, as assessed by $\eta^2p$ was very weak, with the employment status accounting for only 0.5% of the variance of the dependent variable. Because there is no significant relationship between employment status and ITI implementation, variable employment status was not included in the regression analysis.

An independent-samples test was conducted to evaluate the null hypothesis that there was no difference in ITI implementation between teachers whose schools are located in rural areas and of those located in urban areas. The test was significant, $t(148)$
= 2.94, \( p = .004 \). On average, the degree of implementation of participant teachers who worked in urban areas was greater (\( M = 97.05, SD = 12.35 \)) than teachers who worked in rural areas (\( M = 90.27, SD = 12.71 \)). The 95% confidence interval of the difference of the means was quite wide, ranging from 0.99 to 10.04. The calculated effect was .23 and indicated that 23% of the variance of ITI implementation was accounted for by whether teachers were assigned to an urban location or a rural location.

Since there is a possibility that location mediated education on the degree of ITI implementation, another test was needed to evaluate this hypothesis. A one sample chi-square test was conducted to assess whether there was a significant association between school location and educational background. The results of the test were significant, \( X^2(3) = 8.15, p < .05 \) with the effect size Cramer’s V statistics is .24 and represents a medium association (Field, 2009) between location and educational background. Because there was a proven correlation between location and education, location was put into the regression model analysis; education would be used instead.

Two multiple regression analyses were conducted to predict the degree of ITI implementation by Kanisius primary teachers. One analysis included the five individual demographic data as predictors (teaching experience, ITI experience, ITI professional development, number of students and educational background). Meanwhile, the second analysis included the two organizational demographic data as predictors (administrative support and number of colleagues implementing integrated curriculum). The regression equation with the individual demographic background was significant, \( R^2 = .21, \) adjusted \( R^2 = .15, F(5, 63) = 3.38, p = .009 \). Meanwhile, the regression equation with the
organizational demographic background was also significant, $R^2 = .20$, adjusted $R^2 = .19$, $F(2, 141) = 17.59, p < .001$. Based on these results and the results from hierarchical multiple regression analysis, organizational demographic background appeared to be better predictors of ITI implementation. From the standardized coefficient of Beta of the hierarchical multiple regression model, it could be interpreted that the most important predictor in the model was administrative support (.37) followed by the number of students (-.25) and educational background (.23). An increase in respondents’ perception of having administrative support and educational background increased the degree of ITI implementation, while an increasing number of students lowered the degree of ITI implementation. The findings of this study showed that administrative support is essential for teachers to implement educational innovations. It influenced positively to the degree of ITI implementation by teachers. This finding was in alignment with what research shows that in order to have a successful implementation of educational reform; the local factor still plays a greater role than the central government that provides financial support for the local efforts (Wright, 2005). There is a direct correlation between the responsibility structure and the institutional models. A number of studies provide evidence that the lack of administrative support is a primary barrier to individuals’ use of innovation (Butler & Sellbom, 2002; Frey & Donehue, 2003; Kahne, Sporte, Torre & Easton, 2008). In the Indonesian setting, research conducted by Utomo (2005) showed that school principals played an important role as initiators of school based in-service teacher training.
Moreover, Dusick (1998) states, “although the teacher may have control over some environmental factors (classroom setup, for example), a supportive administrative staff and support staff, are critical to encouraging the adoption of innovation” (p. 131). Teachers need a positive environment to develop themselves as educators. Some experts (Barth, 2001; Moss & Fuller, 2000) agree that teachers perform better in implementing educational reform initiatives when they receive significant support from administrators. Teachers will have more commitment to their work if administrators involve them in the decision-making and invite them into discussion (Utomo, 2005). Barth (2001) stated that “These administrators trusted their teachers, as demonstrated by teacher participation in curriculum development” (pp. 443-449). Hope said that “principals mired in the top-down administrative approach experienced higher teacher attrition rates than those who engaged teachers in the decision-making process” (pp. 54-56). Similarly, Moss and Fuller (2000) argued that, “Administrators who supported teachers by giving them their trust, developed teachers who became innovative in the classroom” (pp. 273-274).

Furthermore, this study revealed that large class size had a significant negative effect to the implementation of ITI in the classroom. The more students that teachers have, the less likely they will be to implement ITI in their teaching practice. This makes sense because by having more students, teachers will have limited time to perform new approaches. Teachers need more time and effort to practice instruction that they are not familiar with.

An article in Education Week (2011) reported that most research tends to support the belief of having small classes. A survey conducted by Education Week showed that
more than 70% of current teachers said that their primary barriers to job satisfaction and their ability to teach was having very large classes in addition to a lack of time for personal development, and NCLB (Edweek, 2008). In 1989, the state of Indiana initiated Project Prime Time and they found that teachers of smaller classes reported themselves as more productive and efficient and that students in smaller classes scored higher on standardized tests (Bain, 1986). In Finland, class size is capped at 16 so students are capable to do lab work with each lesson. Finland is a country in which for the fourth consecutive year its students posted stellar scores in PISA, the scores referred to occurred in science classes in grades seven through nine. This is the subject in which Finnish students have done especially well on PISA (Abrams, 2011).

However, there is also some opposition to class size reduction for the purpose of cost saving. In the United States, reducing class size was famous in 2000 but because of the economic downturn in 2008, some states decided to eliminate their class size policies (Dorko & Sparks, 2010; Sparks, 2010). Some researchers argued that class size did not matter especially during the initial reform effort because teachers new to the reform effort tend to use the same strategies (especially direct teaching) with both larger and smaller groups of students (Cahen, Filby, McCutcheon & Kyle, 1983; Rice, 1999; Slavin, 1989; Stasz & Stecher, 2002). They also agree that reducing the class size does not automatically translate into better learning. While previous studies presented mixed results and class size is still a debated topic, this study contributes an empirical study that the number of students in class statistically significant influences a teacher’s degree of implementing an educational reform. Even though the effect size is minimal.
Another variable that was found to affect teachers’ degrees of ITI implementation in this study was the teachers’ educational backgrounds. In this case, the higher and the more appropriate the teachers’ education, the more likely they implemented the ITI. The teachers more likely to report the use of thematic instruction were the teachers whose educational background was in elementary education. The rationale behind this finding is that elementary education provided teachers with curriculum and instructional practice regarding thematic units. In other words, thematic units were likely a topic addressed in an elementary education program. Teachers who came from different educational backgrounds than elementary education would have to learn about ITI on their own.

Research about the effect of education on teachers’ instructional practice was mixed. Research conducted by Berends (2000) revealed that educational backgrounds affected teachers in implementing the New American Schools (NAS) design in which teachers who had bachelor degrees were more likely to report positive results in the NAS design than teachers with higher education degrees. Meanwhile according to MONE (2007a), teachers’ educational background is one cause of low level implementation of content standards in Indonesian classrooms. While the debate over the effect of educational background continues, this present study provides another finding to enrich the literature in education.

**Conclusion**

Hall and Hord (1987) stated that in order to implement a new innovation successfully teachers need to be prepared for it and have adequate support from administrators, especially from the school principal. This study was conducted to
understand teachers’ concern toward the implementation of ITI, the degree of ITI implementation, the differences in teachers’ amount of ITI implementation across different attitudes and feelings as measured by the SoC, and the influence of both personal and organizational demographic variables toward ITI implementation. Overall, Kanisius teachers were in the early Stages of Concern, specifically in Stage 0 (awareness) and in Stage 1 (self information). Most of them portrayed less concern in the Stage of consequences. This latter profile was portrayed as a non-user profile that has peak concerns in Stages 0, 1 and 2 (Hall & Hord, 1987). The tailing up on the later stages (Stage 5 and Stage 6) was unexpected and indicated some resistance from some teachers about the innovation. This finding is corroborated by the studies conducted by Rout et al. (2010), Petherbridge (2007) and Alfieri (1998) respectively. The results of this body of research revealed that the respondents’ profiles in each case were non users coupled with tailing up on the later stages. Rout et al. (2010) found that the tailing up of Stage 6 concern indicated that teachers were exploring the possibility of changes and alternatives to the existing Geography curriculum for greater impact. Meanwhile, Petherbridge (2007) stated that the tailing up of Stage 6 on her research revealed some reservation about the use of technology in instruction. In addition, Alfieri (1998) found that some faculty members’ high concern on Stage 6 likely made teachers more negative toward the technology innovation. Considering that all these teachers have already begun using the innovation of thematic teaching and learning, as it has been introduced to schools and educational practitioners since 2006 (MONE, 2007b), it seems unusual that the concerns of teachers (at Stage 0 and Stage 1) are so intense at this point in the implementation
process. Since they are assumed to already use the innovation, the conclusion that can be inferred is that these teachers still have self concerns (Stages 0 and 1) which have not been totally resolved. This situation is unfavorable since unresolved self-concerns can be an obstacle to implementation of the curriculum innovation (Hall & Rutherford, 1976).

The data showed that Kanisius teachers were on the high level of ITI implementation in their fifth year of implementation since the curriculum was launched in 2006. This finding was not in line with the finding from the first research question in which most of the teachers were still seeking more information about the innovation (ITI). It seems that so far they have been practicing the standard according to their own understanding. Perhaps they did not know whom to ask to get more knowledge about thematic units and in the end they preferred to still use the “traditional” method of instruction as before. Perhaps the measurement from the survey did not reveal the real situation.

There was no difference in the level of ITI implementation among Kanisius teachers with different attitudes and feelings as measured by SoC. This finding is very logical in relationship to previous results. Generally, it seems that teachers were on the higher level of implementation regardless of their stage of concern. This also produced high concern on Stages 5 and Stages 6 as it was shown on the tailing up of the SoC profile as demonstrating some resistance from teachers. Bednarz (2004) stated that that one factor influencing the differences in the implementation of standards in the classroom is accessibility to information on the standards; also some other factors, namely the teachers’ experience, teaching skills, sense of the self as an agent of change, personal
motivation, and incentives given by the institution to implement the standards and contents when teaching.

Regarding demographic variables, organizational background and especially administrative support was predictive of ITI implementation. Teachers who were perceived as having a high level of support from the principal were more likely to implement the ITI than teachers with a low level of administrative support. Regarding individual characteristics, a large number of students were a negative influence on ITI implementation. The more students the teacher had, the less likely the implementation of ITI. Another individual characteristic, educational background, also contributed to the degree of ITI implementation. The higher and more appropriate the degree that teachers had, the more likely they implemented the thematic unit in their classroom.

The main problem in the implementation of standards is how standards of content that were prepared at a national level, move down into the classroom curriculum and are in the hands of teachers who decide whether or not to implement them (Loveland, 2004). The classroom teacher is ultimately responsible for implementation of the standards and they deserve to be supported. According to Schmoker and Marzano (in Klieger & Yakobovitch, 2011), “teachers should get a clear manageable, grade-by-grade set of standards and learning benchmarks that make sense and allow a reasonable measure of autonomy” (p. 294). Anything less is frustrating and counterproductive.
Implications for Teachers

Thus in this study, it seems that teachers kept trying to use the innovation even though they had relatively serious and unresolved basic needs (in self-concerns). Lack of information did not prevent them from implementing thematic units. The findings from this study suggest that the teachers perceived some shortcomings in the existing ITI curriculum innovation. Such shortcomings led them to strive to do their best in using any knowledge they possessed. Such attitudes, in turn, gave rise to alternative ideas in trying to improve and supplement the existing innovation (Rout et al., 2010). This explains the high degree of ITI implementation reported by teachers.

Implications for Administrator

George et al. (2006) indicate that individuals with a high category in the awareness stage has little concern about or involvement with the innovation. They are occupied with other things. Most pre-service teachers at the beginning of their education program usually are at this stage; they are not concerned about teaching or their role in teaching (Hall & Hord, 1987). Meanwhile, for individuals with a high self-informational score, they “[want] fundamental information about what the innovation is, what it will do, and what its use will involve” (George et al., 2006, p. 32). Moreover, Hall and Hord (1987) noted that “persons with high informational concerns do not want massive detail and a bombardment of information about the innovation; rather, they need a small amount of information at any one time but repeated offerings of information” (p. 71). The key to success for those with high self-informational concerns is to initially begin providing these individuals clear and accurate information about the innovation, using a
variety of ways to share information, motivating them but not overwhelming them (Hord et al., 1987). Then, gradually, the amount of information offered can be increased (Hall & Hord, 1987).

Once the teachers’ concerns are identified, the next step is delivering the interventions that might address their concerns. For high awareness concerns, interventions can be done in some ways, including ‘involving teachers in discussions and decisions, sharing information to arouse interest and taking steps to minimize gossip and inaccurate information” (Hord et al., 1987, p. 44). Meanwhile, for those who have high self-informational concerns, interventions providing information can be done such as “face-to-face conversations, brief reports in staff meetings, the use of newsletters, and press releases” (Hall & Hord, 1987, p. 71). Surry and Land (2000) suggested that some attention gaining strategies can be used to provide support for teachers who are at the beginning of innovation users including “newsletters; e-mail lists; ‘Best Practice’ demonstrations; campus-wide, regional, and national conferences; guest speakers, and; improved vendor / faculty interaction” (p. 150). Attention gaining strategies are designed to increase the curiosity of the users and potential users. Individuals with unrelated awareness concerns may also benefit from those strategies because they may initially need some information to acquaint them with it (Petherbrigde, 2007).

Two types of training are needed for favorable results in classroom practice: within the school and between schools. Within the school, the principal should maintain internal support and monitoring such as conducting regular discussions to address the needs of teachers. Between schools, the local government should support schools by
building a systematic mechanism for monitoring, evaluating and scaffolding teachers’ performance after the training. Additionally, some relevant literature suggests various kinds of interventions such as workshops and seminars for teachers and principals, recognition in the reappointment, promotion and tenure (RPT) process, and mentoring (Gandolfo, 1998; Petherbridge, 2007; Surry & Land, 2000). Particularly for the respondents with high awareness concerns and self informational concerns, perhaps the most important interventions for them are technical support, training and time (Petherbridge, 2007). However, one thing for sure, leadership is necessary in any process of innovation implementation (Gandolfo, 1998).

**Recommendations for Future Research**

This research carried out preliminary attempts in building the integrated curriculum instruction scale. As noted in the result of the exploratory factor analysis, the factor loadings of the items were mixed. Therefore further research about this scale is needed by involving a larger sample size as well as a better theoretical foundation.

Although there is a large body of research published on both educational reform and SoC, there is limited research on educational reform in integrated thematic instruction using SoC as a framework. For example, more research especially in experimental and longitudinal dimensions would benefit from a deeper exploration into the class size effect and/or teachers’ educational degree on ITI implementation. This is necessary since a correlation was found between the number of students and the degree of ITI implementation, but other research results were mixed. Pajares (1992) recommends the increased use of experimental techniques in order to manipulate sources and effects.
Pajares recommends that in order to improve the research on attitude, researchers should assess the sources and effects of concerns, through direct, long-term observation rather than relying on self-reports.

There is also limited research on professional development as it relates to the implementation of standards in Indonesia. Specifically, there is a gap in exploring what types of professional development may be most effective when it comes to the implementation of standards-based education in Indonesia. More research is needed to find out what type of professional development increases teachers’ knowledge and skills as well as changes in their teaching practice. Desimone, Porter, Garet, Yoon, and Birman (2002) categorize professional development as reform and traditional. Traditional professional development includes within-district workshops, courses for college credit and out of district workshops. Reform professional development involves activities such as teacher study groups, teacher networking, mentoring, internships and resource centers. More investigation is needed to find out the type of activities that would be most effective in supporting teachers’ implementation of ITI.

It is imperative to focus more attention and resources on primary education, since it is the foundation of education. It should use higher order instructional methods and different forms of assessment that can be adequate for mastering not only basic skills, but also application and problem solving.
APPENDIX A

RECRUITMENT LETTER WITH INFORMED CONSENT
Dear Primary Grade Teacher,

I am writing to invite you to participate in a research study: Teachers’ Concerns Regarding the Implementation of Integrated Thematic Instruction (ITI): A Study of Primary Grade Teachers in Catholic Schools in Yogyakarta, Indonesia. You are being asked to participate in this research because you are 1st, 2nd or 3rd grade teacher responsible for ITI according to the national standards. The purpose of this study is to investigate the concerns of primary school teachers regarding ITI implementation, the degree of ITI implementation by primary school teachers in their classrooms, and the degree of administrative support for ITI implementation. This study will help me complete the requirements of my doctoral dissertation research in the Curriculum and Instruction program in the School of Education at Loyola University Chicago.

Your participation in the study is voluntary. There are minimal risks from being in this study, no more than experienced in everyday life. While you may not benefit personally, I hope that others may benefit in the future from what we learn as result of this study. This study hopes to contribute to our understanding of curriculum implementation in general and ITI in particular.

All survey responses are anonymous. They will be treated confidentially and stored on a secure server. I will assure the privacy and confidentiality of your participation by using pseudonyms for the names and locations of all schools. Furthermore, the study will not refer to individuals. If you choose to be a participant in this study, please complete the enclosed paper survey. The survey should take approximately 30 minutes to complete.

**By completing and returning the survey, you agree to participate in this study.** I would like to have all surveys completed and returned no later than Saturday, July 23. As a thank you for participating in this study, I have included a pen from Chicago.

If you have any questions, concerns or comments about the survey, please do not hesitate to contact me or my dissertation chair, Dr. Ann Marie Ryan (arian3@luc.edu). If you have questions about your rights as a participant in this study, please contact the Loyola University Office of Research Services at 773-508-2689.

Thank you for your time and assistance,

Sincerely,

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Curriculum and Instruction Program
School of Education
Loyola University Chicago
Patangpuluhan WB 3/298 Yogyakarta, 55251
crismiati@luc.edu Phone: 0274 379917 (home) or 081227286363 (mobile)
APPENDIX B

REVISED QUESTIONNAIRE (ENGLISH VERSION)
Part I: Concerns about the Integrated Thematic Instruction (ITI)
(Part I, questions 1 – 35, reprinted with permission of the Southwest Educational Development Laboratory)

The purpose of this questionnaire is to determine what people who are using or thinking about using various innovations are concerned about at various times during the adoption process. The items were developed from typical responses of school and college teachers, who ranged from no knowledge at all about various innovations to many years of experience in using them. Therefore, some of the items on this questionnaire may appear to be of little relevance or irrelevant to you at this time. For the completely irrelevant items, please circle “0” on the scale. Other items will represent those concerns you do have, in varying degrees of intensity, and should be marked higher on the scale.

For example:
This statement is very true of me at this time. 0 1 2 3 4 5 6 7
This statement is somewhat true of me now. 0 1 2 3 4 5 6 7
This statement is not at all true of me at this time. 0 1 2 3 4 5 6 7
This statement is irrelevant to me. 0 1 2 3 4 5 6 7

Please respond to the items in terms of your present concerns, or how you feel about your involvement with Integrated Thematic Instruction (ITI). ITI is a way of teaching in which several areas of curriculum (i.e. science/social studies, language arts, physical education, etc.) are connected within a theme. Phrases such as “the innovation,” “this approach,” and “the new system” all refer to Integrated Thematic Instruction. Please read each question carefully and answer it to the best of your ability. Remember to respond to each item in terms of your present concerns about your involvement or potential involvement with Integrated Thematic Instruction. There are no correct or incorrect responses; I am merely interested in your personal point of view. Your answers are completely confidential.

<table>
<thead>
<tr>
<th>Irrelevant</th>
<th>Not true of me now</th>
<th>Somewhat true of me now</th>
<th>Very true of me now</th>
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<tr>
<td>0</td>
<td>1 2 3 4 5 6 7</td>
<td>0 1 2 3 4 5 6 7</td>
<td>0 1 2 3 4 5 6 7</td>
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<tr>
<td>1. I am concerned about students’ attitudes towards Integrated Thematic Instruction (ITI).</td>
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<tr>
<td>2. I know of some other approaches that might work better.</td>
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<td>3. I do not even know what Integrated Thematic Instruction (ITI) is.</td>
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<td>4. I am concerned about not having enough time to organize myself each day.</td>
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<td>5. I would like to help other faculty in their use of Integrated Thematic Instruction (ITI).</td>
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<td>6. I have very limited knowledge about Integrated Thematic Instruction (ITI).</td>
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<td>7. I would like to know the effect of the reorganization on my professional status.</td>
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<td>8. I am concerned about conflict between my interests and my responsibilities.</td>
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<td>9. I am concerned about revising my use of Integrated Thematic Instruction (ITI).</td>
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<td>10. I would like to develop working relationships with both our faculty and outside faculty using Integrated Thematic Instruction (ITI).</td>
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<td>11. I am concerned about how Integrated Thematic Instruction (ITI) affects students.</td>
<td><img src="image" alt="Rating" /> 0 1 2 3 4 5 6 7</td>
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<td>12. I am not concerned about Integrated Thematic Instruction (ITI).</td>
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<td>13. I would like to know who will make decisions in the new system.</td>
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<td>14. I would like to discuss the possibility of using Integrated Thematic Instruction (ITI).</td>
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<td>15. I would like to know what resources are available if we decide to adopt Integrated Thematic Instruction (ITI).</td>
<td><img src="image" alt="Rating" /> 0 1 2 3 4 5 6 7</td>
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<td>16. I am concerned about my inability to manage all Integrated Thematic Instruction (ITI) requires.</td>
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<td>17. I would like to know how my teaching or administration is supposed to change.</td>
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<td>18. I would like to familiarize other departments or persons with the progress of this new approach.</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<td>19. I am concerned about evaluating my impact on students.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20. I would like to revise Integrated Thematic Instruction (ITI)’s structural approach.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21. I am completely occupied with other things.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>22. I would like to modify our use of Integrated Thematic Instruction (ITI) based on the experiences of our students.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23. Although I do not know much about Integrated Thematic Instruction (ITI), I am concerned about things in the area.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>24. I would like to excite my students about their part in this approach.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>25. I am concerned about time spent working with nonacademic problems related to Integrated Thematic Instruction (ITI).</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>26. I would like to know what the use of Integrated Thematic Instruction (ITI) will require in the immediate future.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>27. I would like to coordinate my efforts with others to maximize Integrated Thematic Instruction’s (ITI) effects.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>28. I would like to have more information on time and energy commitments required by Integrated Thematic Instruction (ITI).</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>29. I would like to know what other faculty are doing in this area.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
30. At this time, I am not interested in learning about Integrated Thematic Instruction (ITI).

31. I would like to determine how to supplement, enhance, or replace Integrated Thematic Instruction (ITI).

32. I would like to use feedback from students to change the program.

33. I would like to know how my role will change when I am using Integrated Thematic Instruction (ITI).

34. Coordination of tasks and people is taking too much of my time.

35. I would like to know how this Integrated Thematic Instruction (ITI) is better than what we have now.

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**Part II. Integrated Curriculum Implementation Scale**
Please indicate your agreement with the following statements by circling your response, with “1” indicating “never” and “5” indicating “always”.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>36. I use lecture and direct instruction in order to cover more content in my daily teaching.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>37. I give students choices for how they want to learn.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>38. I act as a facilitator of learning.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>39. I use instructional strategies that allow my students to assume a leadership role in my classroom.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>40. I use “learning by doing or learning by experience” classroom activities such as students conducting research or students making presentations.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>41. I ask my students to bring in personal artifacts to help them make connections between their understanding and the content.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>42.</td>
<td>I integrate primary sources into my instruction (e.g. pictures, photos, plants, animals, and other tangible media/technology).</td>
</tr>
<tr>
<td>43.</td>
<td>I create a resource rich classroom where students explore themes through multiple avenues using materials with which they can experiment.</td>
</tr>
<tr>
<td>44.</td>
<td>I teach math, language arts, science, and social studies as separate subjects.</td>
</tr>
<tr>
<td>45.</td>
<td>When I use integrated curriculum, my students understand the connections between subject areas.</td>
</tr>
<tr>
<td>46.</td>
<td>I integrate at least 2 or more subject areas on a regular basis.</td>
</tr>
<tr>
<td>47.</td>
<td>I develop thematic units in order to teach multiple subjects.</td>
</tr>
<tr>
<td>48.</td>
<td>I design units around a central theme to facilitate students' learning across subjects.</td>
</tr>
<tr>
<td>49.</td>
<td>I utilize graphic organizers to develop main concepts from various subjects.</td>
</tr>
<tr>
<td>50.</td>
<td>My instruction encourages students to see similarities of concepts across subjects.</td>
</tr>
<tr>
<td>51.</td>
<td>I teach concepts by linking them to specific subjects.</td>
</tr>
<tr>
<td>52.</td>
<td>I connect themes and learning materials to the local surroundings such as neighborhoods, towns and the natural environment.</td>
</tr>
<tr>
<td>53.</td>
<td>I avoid teaching controversial social issues that are currently being debated.</td>
</tr>
<tr>
<td>54.</td>
<td>I connect materials with students' life experiences.</td>
</tr>
<tr>
<td>55.</td>
<td>When developing integrated curriculum, I use themes relevant to my students' life experiences and culture.</td>
</tr>
</tbody>
</table>
56. I use materials or instruments for assessment that meet the individual needs of my students.  

57. I use paper and pencil tests as my primary method for assessing my students’ learning outcomes.  

58. I use performance assessments to assess my students’ learning outcomes.  

59. I use portfolios to assess my students’ learning outcomes.  

60. I use games, role plays, simulations and other engaged learning strategies in my teaching.  

61. I use songs, dance, and other playful activities in my teaching.  

62. I use instructional strategies that require my students to actively move around while learning.  

63. I use cooperative learning such as Jigsaw, Learning Together and Group Investigation.  

### Part III: Demographics

#### Administrative Support for Teaching with Technology

Please indicate your agreement with the following statements by marking your response, with “1” indicating “a strong disagreement” and “5” indicating “a strong agreement. Mark "don't know" only if you feel you simply cannot provide an opinion regarding the question.

<table>
<thead>
<tr>
<th>Perceived Administrative Support</th>
<th>Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>64. The principal in my school is supportive of teachers who teach with the ITI approach.</td>
<td>![Scales](1 2 3 4 5) DK</td>
</tr>
<tr>
<td>65. The principal in my school recognizes the additional workload required to teach with the ITI approach.</td>
<td>![Scales](1 2 3 4 5) DK</td>
</tr>
<tr>
<td>66. The principal in my school communicates with faculty about the value of teaching with the ITI approach.</td>
<td>![Scales](1 2 3 4 5) DK</td>
</tr>
</tbody>
</table>
67. The principal in my school understands how to assess the quality of teaching with the ITI approach.

68. The principal in my school has positive attitudes toward teaching with the ITI approach.

69. The principal in my school positively recognizes the effective use of the ITI approach in reappointment, promotion and tenure decisions.

70. How many years of teaching experience do you have at the elementary education level? ___________ year(s).

71. How many years have you used ITI for instructional purpose? ___________ year(s).

72. Approximately how many integrated thematic instruction related professional development hours have you completed? Please write your response on the line. (Note: integrated thematic instruction related professional development hours may include any formal workshops, seminars, programs, institutes or conferences that you have attended relating to using integrated instruction that increase knowledge or skills in how to plan and implement ITI in the classrooms).

___________ hour(s).

73. Approximately how many students are in the classroom or grade that you are currently teaching?

___________ students.

74. Please indicate your last degree earned using the table below.

<table>
<thead>
<tr>
<th></th>
<th>Master of Education (M. Ed.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Master of Science (M. Sc.)</td>
</tr>
<tr>
<td></td>
<td>BA in Elementary Education (PGSD)</td>
</tr>
<tr>
<td></td>
<td>BA in Science</td>
</tr>
<tr>
<td></td>
<td>High School in Education (SPG)</td>
</tr>
<tr>
<td></td>
<td>General High School</td>
</tr>
</tbody>
</table>
75. Please indicate your present status of employment using the table below.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenured</td>
<td>Non tenured</td>
</tr>
<tr>
<td>Government employment</td>
<td></td>
</tr>
</tbody>
</table>

76. Approximately how many colleagues in your school are using Integrated Thematic Instruction?

___________ teacher(s).

77. My school is located in __________ sub district.
APPENDIX C

REVISED QUESTIONNAIRE WITH INFORMED CONSENT

(INDONESIAN VERSION)
Kepada
Yth. Bpk./Ibu Guru SD
Pengampu Kelas Bawah

Dengan hormat,
Bpk/Ibu terpilih dalam penelitian ini karena Bpk/Ibu adalah guru pengampu kelas I, II atau III yang melaksanakan *Pembelajaran Tematik (PT).*

Penelitian ini bertujuan untuk mengetahui: (1) tingkat kepedulian guru-guru SD kelas bawah sehubungan dengan pelaksanaan PT; (2) tingkat pelaksanaan PT oleh guru di kelas, dan (3) tingkat dukungan administratif pada pelaksanaan PT. Studi ini akan mendukung penyelesaian disertasi doktoral saya pada program Kurikulum dan Pembelajaran, di Loyola University Chicago, Amerika Serikat.


Keterlibatan Bpk/Ibu dalam studi ini bersifat suka rela. Bahkan jika Bpk/Ibu telah memutuskan untuk berpartisipasi, Bpk/Ibu diberi kebebasan untuk mengundurkan diri setiap saat dengan bebas.
Jika Bpk/Ibu memiliki pertanyaan, atau saran, dimohon untuk menghubungi saya atau promotor disertasi saya, Dr. Ann Marie Ryan dengan alamat email beliau: aryan3@luc.edu.
Jika Bpk/Ibu memiliki pertanyaan sehubungan dengan hak Bpk/Ibu sebagai responden, silakan menghubungi Loyola University Office of Research Service, telepon 01-773-508-2689.

Terima kasih atas waktu dan dukungan Bapak/Ibu.

Hormat saya,
Catur Rismiati
Doctoral candidate, Curriculum and Instruction Program
School of Education, Loyola University Chicago
Patangpuluhan WB 3/298 Yogyakarta, 55251
crismiati@luc.edu 0274 379917 (home) or 081227286363 (mobile)
Bagian I: Kepedulian mengenai Pembelajaran Tematik (PT)

(Bagian I, pertanyaan 1 - 35, dicetak ulang dengan ijin dari the Southwest Educational Developmental Laboratory)

Tujuan dari kuesioner ini adalah untuk menentukan apa yang sedang dipikirkan atau apa yang menjadi kepedulian pihak-pihak yang sedang menggunakan berbagai inovasi pada rentang waktu yang berbeda selama proses pelaksanaan. Pertanyaan pada bagian ini dikembangkan dari tanggapan-tanggapan serupa dari guru-guru sekolah dan dosen, yang bervariasi, mulai dari yang tidak mengetahui sama sekali tentang inovasi-inovasi sampai dengan yang memiliki pengalaman beberapa tahun menggunakan inovasi-inovasi tersebut. Oleh karena itu, beberapa dari pertanyaan dalam kuesioner ini mungkin terlihat kurang atau tidak relevan dengan keadaan Bpk/Ibu saat ini. Untuk pertanyaan yang tidak relevan sama sekali, silakan melingkari “0” pada skala yang tersedia. Pertanyaan-pertanyaan lainnya akan menunjukkan tingkat kedalaman kepedulian yang Bpk/Ibu miliki, dan harus mendapatkan skor yang lebih tinggi.

Contoh:
Pernyataan sangat sesuai dengan keadaan saya saat ini. 0 1 2 3 4 5 6 7
Pernyataan agak sesuai dengan keadaan saya saat ini. 0 1 2 3 4 5 6 7
Pernyataan tidak seluruhnya sesuai dengan keadaan saya saat ini. 0 1 2 3 4 5 6 7
Pernyataan sangat tidak sesuai dengan keadaan saya saat ini. 0 1 2 3 4 5 6 7


<table>
<thead>
<tr>
<th>Sangat tidak sesuai</th>
<th>Tidak sesuai</th>
<th>Agak sesuai</th>
<th>Sangat sesuai</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Saya peduli dengan sikap siswa saya terhadap Pembelajaran Tematik (PT).</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Saya tahu beberapa jenis pendekatan pembelajaran lain yang lebih baik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Saya bahkan tidak tahu yang dimaksud dengan</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Saya kekurangan waktu untuk mengelola kegiatan pembelajaran saya setiap hari.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Saya ingin membantu teman-teman guru dalam melaksanakan Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Saya memiliki pengetahuan yang terbatas tentang Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Saya ingin mengetahui akibat dari reorganisasi pelaksanaan Pembelajaran Tematik pada pekerjaan saya.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Saya memiliki dilema antara kepentingan dan tanggung jawab saya dalam pelaksanaan Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Saya berniat untuk merevisi/membuat penyesuaian penggunaan Pembelajaran Tematik saya.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Saya ingin mengembangkan kerjasama dengan guru di dalam maupun di luar sekolah dalam penggunaan Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Saya memiliki kepedulian pada dampak Pembelajaran Tematik terhadap siswa.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Saya tidak peduli dengan adanya Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Saya ingin tahu pihak yang akan membuat keputusan pada sistem baru ini.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Saya ingin mendiskusikan kemungkinan penggunaan Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Saya ingin tahu sumber-sumber pembelajaran yang akan tersedia jika saya memutuskan untuk menggunakan Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Saya peduli dengan ketidakmampuan saya untuk mengelola Pembelajaran Tematik seperti yang seharusnya.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>17.</td>
<td>Saya ingin tahu cara mengubah pengajaran atau pengelolaan administrasi saya berubah.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>18.</td>
<td>Saya ingin membuat guru lain atau bagian lain menjadi lebih terbiasa dengan Pembelajaran Tematik.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>19.</td>
<td>Saya memiliki kepedulian untuk mengevaluasi dampak pembelajaran saya pada siswa.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20.</td>
<td>Saya ingin merevisi/membuat penyesuaian tentang pendekatan stuktur atau cara pelaksanaan Pembelajaran Tematik.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>21.</td>
<td>Saya telah banyak terbebani dengan hal-hal lain selain Pembelajaran Tematik.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>22.</td>
<td>Saya ingin memodifikasi atau membuat penyesuaian tentang pelaksanaan Pembelajaran Tematik berdasarkan pada pengalaman siswa-siswa saya.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>23.</td>
<td>Walau pun saya tidak tahu banyak tentang Pembelajaran Tematik, saya memiliki kepedulian tentang hal-hal yang berkaitan dengan Pembelajaran Tematik.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>24.</td>
<td>Saya ingin membuat siswa saya merasa tertarik atas peran serta mereka dalam pendekatan ini.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>25.</td>
<td>Saya peduli dengan waktu yang harus saya gunakan untuk urusan non akademik sehubungan dengan Pembelajaran Tematik.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>26.</td>
<td>Saya ingin tahu manfaat penggunaan Pembelajaran Tematik pada masa mendatang.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>27.</td>
<td>Saya ingin mengkoordinasikan penggunaan Pembelajaran Tematik dengan guru atau pihak yang lain untuk memaksimalkan dampak Pembelajaran Tematik tersebut.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>28.</td>
<td>Saya ingin mendapatkan informasi yang lebih banyak tentang komitmen waktu dan tenaga yang diperlukan dalam penggunaan Pembelajaran Tematik.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>No.</td>
<td>Pernyataan</td>
<td>Skala Persetujuan</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Saya ingin mengetahui cara guru yang lain menggunakan pendekatan ini.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Pada saat ini, saya tidak tertarik untuk mempelajari tentang Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Saya ingin lebih melengkapi, meningkatkan, atau mengganti Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Saya ingin menggunakan umpan balik dan komentar dari siswa untuk mengubah program Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Saya ingin mengetahui perubahan peran saya jika saya menggunakan Pembelajaran Tematik.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Waktu saya banyak tersita untuk mengkoordinasi tugas-tugas dan orang lain.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Saya ingin mengetahui kelebihan Pembelajaran Tematik ini daripada pendekatan yang kami lakukan/miliki saat ini.</td>
<td>0 1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Bagian II. Skala Implementasi Kurikulum Terintegrasi


<table>
<thead>
<tr>
<th>No.</th>
<th>Pernyataan</th>
<th>Skala Persetujuan</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>Dalam keseharian, saya menggunakan ceramah dan instruksi langsung agar dapat mencakup lebih banyak materi.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>37</td>
<td>Saya memberi pilihan kepada siswa untuk menentukan cara mereka belajar.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>38</td>
<td>Saya bertindak sebagai fasilitator pembelajaran.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>39</td>
<td>Saya menggunakan strategi pembelajaran yang memungkinkan siswa untuk memegang peran utama dalam kelas.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>40</td>
<td>Saya menggunakan kegiatan “belajar dengan melakukan atau belajar dengan mengalami” (learning by doing)</td>
<td>0 1 2 3 4 5</td>
</tr>
</tbody>
</table>
untuk pembelajaran di kelas seperti siswa melakukan penelitian atau siswa melakukan presentasi.

<table>
<thead>
<tr>
<th>No.</th>
<th>Deskripsi</th>
<th>Skor</th>
</tr>
</thead>
<tbody>
<tr>
<td>41.</td>
<td>Saya meminta siswa untuk membawa artefak (barang) pribadi agar mereka lebih mudah memahami materi pembelajaran.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>42.</td>
<td>Saya menggunakan sumber belajar primer dalam pembelajaran (misalnya gambar, foto, tanaman, hewan dan media/teknologi yang kasat mata lainnya)</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>43.</td>
<td>Saya menciptakan kelas yang kaya akan sumber belajar sehingga siswa dapat mendalami tema pembelajaran melalui berbagai cara dan material.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>44.</td>
<td>Saya mengajar Matematika, Bahasa, IPA dan IPS sebagai mata pelajaran yang terpisah.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>45.</td>
<td>Ketika saya menggunakan Pembelajaran Tematik, siswa saya dapat mengerti adanya keterkaitan antar mata pelajaran.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>46.</td>
<td>Saya menyatukan paling sedikit dua atau lebih mata pelajaran secara rutin.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>47.</td>
<td>Saya mengembangkan Pembelajaran Tematik untuk mengajar berbagai mata pelajaran sekaligus.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>48.</td>
<td>Saya merancang pembelajaran dalam suatu tema sentral untuk membantu siswa belajar berbagai mata pelajaran sekaligus.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>49.</td>
<td>Saya menggunakan “pemetaan” (misalnya peta konsep) untuk mengembangkan konsep utama dari berbagai mata pelajaran.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>50.</td>
<td>Pembelajaran saya mendorong siswa untuk melihat adanya persamaan konsep antar mata pelajaran.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>51.</td>
<td>Saya mengajar konsep dengan mengkaitkannya pada suatu mata pelajaran tertentu.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>52.</td>
<td>Saya mengaitkan tema dan materi pelajaran dengan lingkungan sekitar seperti kerumahtanggaan, kota dan lingkungan alam.</td>
<td>0 1 2 3 4 5</td>
</tr>
</tbody>
</table>
53. Saya menghindari mengajar hal-hal yang sedang menjadi perdebatan kontroversial saat ini.  
   0 1 2 3 4 5

54. Saya mengaitkan materi dengan pengalaman hidup siswa.  
   0 1 2 3 4 5

55. Ketika mengembangkan Pembelajaran Tematik, saya menggunakan tema-tema yang sesuai dengan pengalaman hidup dan budaya para siswa.  
   0 1 2 3 4 5

56. Saya menggunakan materi atau alat penilaian yang sesuai dengan kebutuhan setiap siswa.  
   0 1 2 3 4 5

57. Saya menggunakan tes tertulis “Paper and Pencil” sebagai metode utama dalam menilai hasil belajar siswa.  
   0 1 2 3 4 5

58. Saya menggunakan penilaian unjuk kerja untuk menilai hasil belajar siswa.  
   0 1 2 3 4 5

59. Saya menggunakan portofolio kerja untuk menilai hasil belajar siswa.  
   0 1 2 3 4 5

60. Saya menggunakan permainan, bermain peran, simulasi dan strategi pembelajaran lainnya yang melibatkan siswa secara aktif.  
   0 1 2 3 4 5

61. Saya menggunakan nyanyian, tarian dan aktivitas menyenangkan lainnya dalam mengajar.  
   0 1 2 3 4 5

62. Saya menggunakan strategi pembelajaran yang memungkinkan siswa untuk aktif bergerak ketika belajar.  
   0 1 2 3 4 5

63. Saya menggunakan pembelajaran kelompok kooperatif seperti: Jigsaw, kepala bernomor, investigasi kelompok, dan sebagainya.  
   0 1 2 3 4 5

Bagian III. Dukungan Administratif pada Pelaksanaan Pembelajaran Tematik

Silakan menentukan tingkat persetujuan Bpk/Ibu dengan pernyataan atas pernyataan-pernyataan berikut ini dengan melingkari tanggapan Bpk/Ibu, dimana “1” berarti “sangat tidak setuju” and “5” berarti “sangat setuju. Selakan melingkari angka nol atau “tidak tahu” hanya jika Bpk/Ibu tidak bisa memberikan pendapat atas pernyataan yang ada.

64. Kepala Sekolah saya mendukung para guru yang mengajar dengan menggunakan pendekatan Pembelajaran Tematik.  
   0 1 2 3 4 5
65. Kepala Sekolah saya mengetahui adanya tambahan beban kerja yang ada sehubungan dengan pelaksanaan Pembelajaran Tematik. 0 1 2 3 4 5

66. Kepala Sekolah saya mengkomunikasikan kepada para guru tentang pentingnya mengajar dengan pendekatan Pembelajaran Tematik. 0 1 2 3 4 5

67. Kepala Sekolah saya mengetahui cara menilai kualitas pembelajaran dengan pendekatan Pembelajaran Tematik. 0 1 2 3 4 5

68. Kepala Sekolah saya memiliki sikap yang positif terhadap pengajaran dengan pendekatan Pembelajaran Tematik. 0 1 2 3 4 5

69. Kepala Sekolah saya secara positif mengenali penggunaan Pembelajaran Tematik untuk kepentingan jabatan, keaduan, status dan pangkat. 0 1 2 3 4 5

Bagian IV. Demografi
Pada bagian ini, Bpk/Ibu dipersilahkan untuk mengisi pertanyaan yang ada sesuai dengan situasi Bpk/Ibu saat ini.

70. Berapa tahun pengalaman mengajar Bpk/Ibu pada tingkat pendidikan dasar?

_______________ tahun.

71. Berapa tahun Bpk/Ibu telah menggunakan Pendekatan Tematik?

_______________ tahun.

72. Sekitar berapa jam keterlibatan Bpk/Ibu dalam pengembangan profesional berkaitan dengan Pembelajaran Tematik? *(catatan: jumlah jam pengembangan profesional adalah jumlah total jam dari kegiatan-kegiatan formal yang Bpk/Ibu ikuti berkaitan dengan Pembelajaran Tematik misalnya lokakarya, pelatihan, seminar, program, kursus, atau konferensi yang dapat meningkatkan pemahaman atau keahlian Bpk/Ibu dalam merencanakan dan melaksanakan Pembelajaran Tematik di kelas).*

_______________ jam.

73. Berapa jumlah siswa di kelas Bpk/Ibu sekarang?

_______________ siswa.

74. Silakan mengisi pendidikan terakhir Bpk/Ibu dengan tabel berikut ini!
75. Silakan mengisi status kepegawaian Bpk/Ibu dengan menggunakan tabel berikut ini!

| A. Master Pendidikan (misalnya M.Pd., M.A., M.Hum., M.Ed.,) |
| B. Master Ilmu Murni (misalnya M.Si., M.Sc., MBA, M.M., M.S., M.Soc., M.T., M.Kom.) |
| C. Sarjana Pendidikan Guru Sekolah Dasar (PGSD) |
| D. Sarjana Pendidikan non PGSD (misalnya P. Mat., P. Fis., P. Ekonomi, P. Sejarah) |
| E. Sekolah Pendidikan Guru (SPG) |
| F. Sekolah Menengah Umum atau Kejuruan (SMU atau SMK) |
| G. Lainnya |

76. Berapakah jumlah rekan kerja guru di sekolah Bpk/Ibu yang menggunakan Pembelajaran Tematik?

___________ orang.

77. Apakah nama kecamatan dimana lokasi sekolah Bpk/Ibu berada?

Kecamatan __________

Terima Kasih
APPENDIX D

LETTER OF COOPERATION FROM SEDL
To: Catur Fismiati (Licensee)  
Loyola University Chicago  
School of Education  
Water Tower Campus  
820 N. Michigan Avenue  
Chicago, IL 60611

From: Nancy Reynolds  
Information Associate  
SEDL  
Information Resource Center—Copyright Permissions  
4700 Mueller Blvd.  
Austin, TX 78723

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Date: May 3, 2011

Thank you for your interest in using the Stages of Concern Questionnaire (SoCQ 075) published by SEDL and written by Archie A. George, Gene E. Hall, and Suzanne M. Stiegelbauer in 2006 as Appendix A, pages 79-82 in Measuring Implementation in Schools: The Stages of Concern Questionnaire, as a PDF document on an accompanying CD-ROM, in electronic format as SEDL's Stages of Concern Questionnaire (SoCQ) Online and published on pages 48-49 in the SEDL publication Taking Charge of Change, revised ed., published in 2006, 2nd printing, 2009, that was written by Shirley M. Hord, William L. Rutherford, Leslie Huling, and Gene E. Hall.

This instrument will be referred to as the "work" in this License Agreement. SEDL is pleased to grant permission to the Licensee, who will administer the work and will include it in a dissertation titled Teachers' Concerns Regarding the Implementation of Integrated Thematic Instruction (ITI): A Study of Primary Grade Teachers in Catholic Schools in Yogyakarta, Indonesia at Loyola University Chicago. The following are the terms, conditions, and limitations governing this limited permission to reproduce the work:

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Thank you, again, for your interest in using the Stages of Concern Questionnaire (SoCQ). If you have any questions about this License Agreement, please contact me at 800-476-6861, ext. 6548 or 512-391-6548, or by e-mail at nancy.reynolds@sedl.org.

Sincerely,

[Signature]
Nancy Reynolds for SEDL
[Date signed] May 4, 2011

Agreed and accepted:

[Signature] Catur Rismiati
[Date signed] May 3, 2011
APPENDIX E

LETTER OF COOPERATION FROM KANISIUS FOUNDATION
To,
Institutional Review Board
Loyola University Chicago
6439 N, Sheridan Road, Suite 400
Chicago, IL, 60626 – 5309
Phone: 773.508.2471

To Whom it may concern:

CATUR RISMIATI has requested permission to collect research data from teachers at "KANISIUS" Elementary Schools in Daerah Istimewa Yogyakarta through a project entitled: Teachers Concerns Regarding the Implementation of Integrated Thematic Instruction (ITI): A Study of Primary Grade Teachers in Catholic Schools in Yogyakarta, Indonesia”.

I have been informed of the purposes of the study and the nature of the research procedures. I have also been given an opportunity to ask questions of the researcher.

The data requested including teachers responses to the questionnaire can be provided to the researcher.

As a representative of “KANISIUS” Foundation, Branch of Yogyakarta, I am authorized to grant permission to have the researcher recruit research participants from schools.

If you have any questions, please contact me at +62 0274 – 373280 or my cellphone +62 08180269899

[Signature]
Sri Hartana S.J.
Director of Kanisius Foundation Branch of Yogyakarta
APPENDIX F

PHONE CALL SCRIPT
Hello _________________,

My name is Catur Rismiati and I am currently working on my dissertation at Loyola University Chicago. The focus of my dissertation research is the concerns of primary school teachers regarding Integrated Thematic Instruction (ITI) implementation, the degree of ITI implementation by primary school teachers in their classrooms, and the degree of administrative support for ITI implementation.

I am asking primary teachers from grades 1st, 2nd and 3rd to complete an anonymous questionnaire for this study.

The director of Kanisius foundation branch of Yogyakarta has agreed to the implementation of this study in your school, but participation in this study is voluntary. Those who do not want to be in this study do not have to participate. Even those who decide to participate are free not to answer any question or to withdraw from participation at any time without penalty.

Would you be willing to distribute the questionnaires for this study to your primary teachers?

Do you have any questions or concerns about the study that I can address for you?

If you are interested in participating, please let me know how many questionnaires I should send based on the number of primary teachers in your school. I will send the questionnaires by mail or courier to your attention.

Thank you for your time and consideration.
APPENDIX G

FOLLOW UP PHONE CALL SCRIPT
Good morning,

This is Catur Rismiati speaking. How are you? I contacted you a couple weeks ago regarding my survey research on Integrated Thematic Instruction. Since then, I have received responses from primary grade teachers across the DIY province. I wanted to be sure you received the surveys and let you know that I am continuing to collect responses.

The survey provides an opportunity for your teachers to describe the nature of their work and their concerns about ITI. The survey will close on Saturday, July 23, 2011.

This survey is voluntary. Those who do not want to be in this study do not have to participate. Even those who decide to participate are free not to answer any question or to withdraw from participation at any time without penalty.

If you did not receive my letter and questionnaire(s), I will resend them as soon as possible by mail or courier to your attention. I appreciate your taking the time to talk with me and for accommodating my research request within your busy schedule.

Do you have any questions or concerns about the study that I can address for you?

Thank you for your time and consideration.
REFERENCES


Catur Rismiati holds a B.A. degree in Accounting Education from Sanata Dharma University in Indonesia (1994 as the top graduate) and a M.A. degree in Elementary Education from the University of Iowa (1997). Since then, she has been working as a full time professor in Sanata Dharma University at both the Department of Accounting Education and the Department of Teacher Training of Elementary School. Her research interests include education reform and initiative, curriculum, and innovative instruction, mixed research as well as classroom action research. She also has been serving the Indonesian National Department of Education since 1997 at the Bureau of Primary and Secondary Education and at the Bureau of Education Quality Improvement and Education Workforce. Additionally, she is a member of the Higher Education Consortium and an accessor of Teacher Certification Program in Indonesia. Part of her duty with the Indonesian Department of Education includes constructing national curriculum documents, teaching materials and diagnostic tests; trying-out and disseminating the national curriculum; holding workshops for teachers and curriculum developer; supervising the implementation of the curriculum at the regional level throughout the Indonesian continent; making a national report, and being a jury for the national learning innovation competition. Catur has leadership experiences as a coordinator of teaching practice at the Faculty of Education and Teacher Training, head of micro teaching laboratory and secretary of the Economic Education study program. In
collaboration with her colleague(s), she has written six books and book chapters about social studies, classroom democracy, marketing, and integrated training material of competency based curriculum.
The dissertation submitted by Catur Rismiati has been read and approved by the following committee:

Ann Marie Ryan, Ph.D., Director  
Associate Professor of Curriculum and Instruction  
Loyola University Chicago

David Ensminger, Ph.D.  
Assistant Professor of Curriculum and Instruction  
Loyola University Chicago

Tarsisius Sarkim, Ph.D.  
Professor of Faculty of Teacher Training and Education  
Sanata Dharma University