

PRE-SERVICE TEACHERS' PERCEPTIONS OF PROMOTING TEACHER
AUTONOMY THROUGH THE USE OF LESSON STUDY

by

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ABSTRACT

The intent of this thesis is to explore pre-service teachers' perceptions of using a form of professional development to promote teacher autonomy. Current evidence shows that autonomy is a recurring element desired by American teachers in their profession. However, research advocates for teachers who are initiating and carrying out research in their schools (as a form of professional development) to have the potential to promote autonomy. For American teachers to gain a sense of autonomy in their profession there needs to be a change in the way professional development is directed. One form of professional development that promotes teachers as researchers is Lesson Study. Teachers who participate in lesson study are given the opportunity to research, collaborate, and learn. A sample population of five Pre-service teachers were interviewed to discover their perceptions of using Lesson Study as a means to promote teacher autonomy. The results of this thesis are that lesson study was regarded, by three out of five of the participants, as an effective way to strengthen teacher autonomy. The implications of the results are discussed, and the descriptions and implications of Lesson Study are provided.

DEDICATION

This dissertation is dedicated to my parents, Denise and Michael Fulton, and to my spouse Yoandi Leon. Thank you for your guidance, support and love!

You have taught me so many important lessons about life; the perseverance to accomplish my goals is one example.

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CHAPTER 1: INTRODUCTION

"In recent years, the teaching profession has been given increasing attention. In international research, as well as in politics, the teaching profession is now seen as an important facilitator of effective schooling (Day, 2004 p. 12). The image of teachers as reflective, self-determining, life-long learning practitioners with high professional autonomy has become a hegemonic international discourse" (Surgrue, 2011 p. 61). Autonomy is one of the most recurring elements desired by teachers in their profession due to their lack of control in decision-making and curriculum (Luman, 2014). To have autonomy, one must have self-governance and self-directing freedom, however these are elements teachers are desiring. Autonomy is an important element in one's profession due to its connections of one's job satisfaction and perception of professional status (Bogler, 2001). There are different uses of the term teacher autonomy, but this research focuses on promoting the dimension of self-directed professional development. A form of professional development that brings the opportunity for teachers to direct what they learn is called lesson study. This is commonly used throughout Japan's education system, and it has been integrated in some U.S. schools, as well as other Asian countries. Lesson Study could be the form of professional development needed to help educators gain a higher level autonomy in their profession. Steps need to be taken to promote teacher autonomy in the sense of teacher's having control of knowing why, when, where and how pedagogical skills can be acquired in their profession.

Problem

"Over the past few decades, the pursuit of teachers-as-researchers has become an ideal for developing teacher autonomy to which many in the world of curriculum development and language teacher education try to promote" (Benson, 2001 p. 25). Although sophistication about the process of teachers-as-researchers, and the lack of autonomy is growing, it is still widely accepted in American education for teachers to learn, and follow curriculum and practices taught from workshops, or conferences. "Teacher's actively initiating and carrying out research in their own schools and classrooms have the potential to promote teacher autonomy, and it is also closely connected to curricular improvement" (Wang Qiang, 2013 p. 223). For American teachers to gain a sense of autonomy in their profession there needs to be a change in the way professional development is directed. Lesson study is a form of professional development that promotes teachers as researchers and has been successful in multiple counties. This is form of professional development that is widely used in Japan and has been adapted in some U.S. schools. Teachers become researchers in their profession, and publish work of strategies they have tested and found through their research and use in classrooms.

The use of Lesson Study

"Lesson study is an inquiry cycle conducted by a team of teacher's that is centered on a "research lesson" an actual classroom lesson designed to investigate and improve the teaching of a particular topic" (Lewis, 2012, p. 371). Lesson study focuses on the learning of students and not solely on teacher strategies. In Japan teachers begin engaging in this method of professional development when they start pre-service training. Teachers within the same grade will meet up regularly for several months to create a research lesson (a lesson created by research based data).

Teachers in Japan do not use lesson study to simply create a lesson, but to improve their teaching. "Teachers are now required to understand new learning perspectives and apply them to their classroom practice" (Oshima Jun, 2006 p. 50). Japan has developed a way for teacher's to continually be learning in their own classroom without having to seek for professional development outside of a school setting. This is a method that has caught attention to many countries due to its success and improvement in education. "Lesson Study has also been introduced in South-East Asian countries such as Indonesia and Malaysia, as well as South America, South Africa, and Australia" (Groves, 2011 p. 77). Lesson study can be a method, which has been studied by U.S. researchers, to help American teachers who lack the opportunities to gain autonomy in the aspects of decision making and curriculum. Researchers such as, Mills College, Catherine C.Lewis, Shelly Friedkin, have taken the time to participate in multiple in-depth studies on significant characteristics that embody lesson study.

In Japan "educational theories held by teachers are formed as a result of frequent contact with other teacher's and by sharing information. Rather than learning about theoretical or abstract principals, teachers are thought to acquire professional skills through planning, observation, ethnography and journal field notes, reflective on practice and collaborative research related to the classroom activities that comprises jugyoukenkyu" (Masami, 2006 p. 118). Lesson study promotes autonomy in the aspect of decision-making and curriculum, but there also other benefits of this form of professional development. This includes teachers being able to gain much more knowledge and experience through collaborative groups and research. With lesson study, teachers will be able to conduct a researched based lesson with their peers, observe the lesson in a classroom setting (while focusing on how the students learn), and reflect

together of how to improve the lesson. There are scholars who have suggested it is time to articulate a qualitative or ethnographic approach for teacher education and teachers' professional development (Masami, 2006).

Using lesson study can aid teachers in promoting teacher autonomy in their profession. There has been success in multiple schools in America that have implemented lesson study into their education system. This professional developmental tool is used throughout Japan and other countries, and it has given teacher's a new look on student thinking and collaborative learning.

Purpose of Study

The purpose of this study is to gather information from pre-service teachers about their perception of promoting autonomy through the use of lesson study. The information gathered will provide the following: a description of the perceptions of pre-service teachers' view of teacher's autonomy, views of teachers being perceived as researchers, and perceptions of lesson study promoting teacher autonomy.

Research Questions

1. How will pre-service teachers feel about educators who are lacking autonomy in their profession?
2. How will pre-service teachers view full time educators being perceived as researchers to promote teacher autonomy?
3. How will pre-service teachers think about lesson study (a form of professional development that promotes teachers as researchers)being used to promote a higher level of autonomy in a teacher's profession?

Tested Population

The study interviewed pre-service teachers from the University of Central Florida. The population will be college students who are majoring in elementary education and who are interning in area elementary schools. They are all completing internship I or II which includes their being in a classroom setting. This population interviewed based their responses on their opportunity to examine what takes place in school and what they have learned from college.

CHAPTER 2: LITERATURE REVIEW

The aim of this literature review is to present information describing teacher autonomy and the different elements, as well as, information of what Lesson Study is, outline and implementations in U.S. schools, and correlation with promoting teacher autonomy. It is organized starting with the description of autonomy, correlation of teacher autonomy with Lesson Study, definition and origins of Lesson Study, and implementations and adaptations of Lesson Study in U.S. schools.

Autonomy

Definition

The task to define autonomy can be problematic due to the various concepts, definitions, and elements; however, one definition stated by Collier John (2002) seems to be the umbrella of all concepts; autonomy means to be self-governed, and comes from a Greek word meaning independent (Collier, 2002). When focusing on teacher autonomy, it seems to "hinge on the ideas of professional freedom and self-directed professional development" (Phil, 2001). This may be having professional freedom in the classroom, in the school, in the county, or in professional development. Teacher autonomy also seems "to be very closely bound up with notions of the critically reflective teacher, teacher research, and action research" (Andy Barfield, 2001 p. 3). The premise of this is teachers can gain or have autonomy by developing their own teaching through self-directed professional development (Andy Barfield, 2001)

Concepts of Teacher Autonomy

Studied by researchers, teacher autonomy is not made of only one concept. It does not only focus on professional development, or on pedagogical skills, instead stated by Strong and Yoshida (2014) there are several elements that pertain to teacher autonomy. The first is teacher autonomy's are of operation. This is categorized into six aspects of curriculum, pedagogy, assessment, student behavior, classroom environment, and professional development. The second is in decision-making, which allows teachers to have the choice and self-determination in critical issues that surround their duties. Third, is freedom from demands or pressure from other teachers and administration. This could include freedom to determine one's work process, or in delivery of curriculum. The fourth element is having autonomy in having control of classroom responsibilities (Luman, 2014)

Teacher Autonomy

Though research has identified multiple elements that construct autonomy, the main elements being addressed in this research are the aspects of decision-making and curriculum. Teachers appear to acquire multiple improvements in their workplace conditions, such as higher salaries, greater support from administration, and greater resources. However, autonomy is the most recurring element desired by teachers. Studies have shown desires for greater autonomy in the decision-making in the school, and in curriculum. Teachers may feel they lack freedom to determine one's work processes and in the decisions made on the curriculum. "American education has faced tremendous change during the past several decades, most likely, has significantly affected teacher autonomy...standardized testing and the accountability surrounding results have made teacher autonomy nearly irrelevant in today's education"(Luman, 2004 p. 131).

From the 1960's sociological concepts concerning professions and professionals have been adapted to international education research in order to examine teachers and teaching (Evetts 2009, Terhart 2001). With this approach, professionals emerge from occupations that are concerned with socially important tasks, thereby performing a crucial function in society (Evetts 2003). The most prominent classical examples are doctors and lawyers, who are responsible for the physical health and legislation of the society. With the emergence of such professions, modern societies have dealt with the risks that occur in their citizens' everyday lives, aiming to achieve social stability. We will not discuss all aspects of teachers' professionalism in detail, or elaborate on why and how teachers are professionals, but we do however, state we will follow reasoning that teachers are fully professional (Terhart 2001), rather than suggestions that teachers are semi-professionals" (Höstfält, 2013 p. 60).

Teachers are professionals in the concept of educators having socially important tasks of society's children. However, teachers are lacking full autonomy in their profession. The teaching profession is a community made of different parts, such as the state, county, principal, administration, parents, and children. A teacher can have extended autonomy in the profession when all parts of the community work together; however, a teacher's autonomy can be lacking if they are part of a restricted work community. Such a community would have these key characteristics; "state regulated standards and measurement (product evaluation), accountability, legitimation through efficiency regarding the achievement of goals and results, and principal = administrator, manager (controls teachers)" (Höstfält, 2013, p. 62). Not all school institutes are restricted, but for those who are teachers may be lacking full autonomy in their profession. Lesson study may not change every characteristic of a restricted institute, but it can give teachers a more sense of self-governed or freedom in their professional development. Teachers will become researchers and have responsibility to discover what strategies or curriculum works in a classroom.

Teachers as Researchers; Lesson Study

Although autonomy is a recurring element that is desired, teachers who are carrying out research and have control over what is being studied do have the potential to promote teacher

autonomy. Those who are initiating research are able to promote professional growth which includes problem solving, reflection, and collaboration. "They begin to understand themselves better as teacher's, and make better decisions and choices of behavior as a consequence of their engagement in such research" (Wang Qiang, 2013 p. 224). Lesson study is a way to promote teachers as researchers because they are collaborating together to create a researched lesson based off of a new strategy or method. Teachers who participate in lesson study collaborate with peers and professionals, collect data, and research.

They perform these tasks to create a lesson together that will then be observed (by teachers, administration, other professionals) and reviewed multiple times. The observations do not focus solely on what the teacher is doing, but how the students are reacting or learning from the researched lesson. Once the team of teachers has completed their researched lesson they can then publish it. This broader form of professional development " moves teacher's beyond simply hearing about new ideas or about frameworks for understanding teaching practice to being actively involved in decisions about the substance, the process, and the organizational supports for learning in school" (Lieberman, 1995 p. 553). Teacher s being able to be more actively involved in their professional development can promote a higher level of autonomy in their profession.

Definition of Lesson Study

Lesson study or *JugyouKenky*, is a significant form of professional development that is part of Japan's fundamental program. It occurs along a continuum from school based to the national level. This is a form of professional development that allows teachers to exchange ideas and observe findings from a researched lesson. "JugyouKenkyo as collaborative research is

thought to make possible the exchange of experiences between teacher's collaborative planning, participatory learning, the enhancement of professional dialogue among teachers, and teachers' reflection" (Masami, 2006 p. 116). Teachers gain an abundant of knowledge form their own and shared experiences in school. Lesson study is a way to increase the collaboration between teachers in order to learn from each other and together.

"In Japan, lesson study enables teachers to test, refine, and share strategies to improve instruction and curriculum" (Lewis, 2011p. 8). Teachers within the same grade will meet up on a regular basis to create a researched lesson on a specific subject. They will collaborate with each other on past experiences, reflective papers, ethnography filed notes, data on students in school, and other professionals. Once they have organized and refined a lesson plan, one teacher will instruct the lesson to their class while the others observe. When observing the lesson, the teachers and other professionals will gather data on student thinking. They will watch how the students are learning or failing to learn from the lesson.

The main purpose of the observation is on how the students are learning, not on how the educator is teaching. After the lesson has been taught, the teacher's and other professionals will meet shortly after to revise the lesson. They will address student misunderstandings and problems observed from the first presentation, and they will meet up to several days before the next presentation. The lesson will then be taught by another teacher, and the cycle will continue until they have developed a final version of the lesson. They can then publish their work to the public for further use. Through this method, teachers are able to publish a researched lesson along with gaining pedagogical and epistemological related knowledge.

Variables that Differentiate Schools: America versus Japan

Even though lesson study has been successful in Japan and in other countries, there are variables that make it difficult for this form of professional development from being successful in the U.S. Such variables are, the population/diversity, standard curriculum, and the school culture. This does not mean lesson study is unattainable from being implemented into schools, but there are variables that differentiate both countries schools. There are schools in the U.S. that exercise lesson study, but some have had to embark into a school reform. According to Hawley and Valli (1999), schools that are able to adopt lesson study have shared goals, a sense of efficacy and commitment among teachers. These schools saw the potential and were willing to adjust in order for their teacher's to be successful in using lesson study.

Population/Diversity

The U.S. population is more than twice the size of Japan's population. With Japan's population only being 127,103,388 million, the US triumphs with a population of 318,429,178 million (Population Estimate, 2013), although Japan is not geographically as large as the U.S. Despite the differences in the amount of people in both countries, the diversity within them are completely different. Unlike the U.S., Japan has a small population of minorities. Schools in Japan are less likely to have a large population of students with different ethnicities or nationalities. This may make it easier for teacher's to create lessons without taking in mind the different cultures, religions, or languages.

In the U.S. it was recorded that 11,110 students who's ethnicity were African American, and 14,121 thousand students who's ethnicity were Hispanic enrolled into school (School Enrollment). Due to the great diversity in the U.S., there are schools where teachers must focus

on English as a second language, different cultures, and such a large variety of students. Creating a lesson or teaching, can be a challenge with such a variety of student backgrounds. American teachers do not only have students with different ethnicities, but they also have students in poverty. When students are part of families who are below poverty, it can cause them to have trouble in performing well mentally and physically. In the U.S., there are 15.9% of people below poverty (Bishaw, 2013), but Japan as well (since 2009), has a record of 16 % of people below poverty (Mizuho, 2012). It can be difficult for students to learn when they do not have a stable living space, security, and food.

Standard Curriculum

In Japan, there is one national curriculum created by MEXT, "and by U.S. and world standards, it is very spare" (Lewis, 1998 p. 43). Individual schools can organize the curriculum, but it must meet the necessary guidelines and assistance from MEXT (Komatsu, 2002). This is quite different from America's curriculum where each state creates their own, and each county within a state can organize it. This creates the issue of states not having a coherent curriculum or standards between each other. There has been a change recently evolving a new curriculum. "In 2009 the state school chiefs and governors that comprise CCSSO and the NGA center coordinated a state-led effort to develop the common core state standards" (About the Standards). The CCSS focuses mainly on improving math and language arts and also to unify the curriculum between all states. This could aid in closing the gap of education between the states. Since 2014 "forty-three states, the district of Columbia, four territories, and the Department of Defense Education Activity (DoDEA) have adopted the Common Core State Standards" (About the Standards).

Not only are the guidelines for the creation of the standards different between the countries, the average amount taught per grade level is greatly large. "As TIMSS (Third International Mathematics and Science Study) researchers found, Japanese eighth-grade textbooks cover just eight topics, compared to an average of more than sixty-five for U.S. eighth-grade textbooks" (Lewis, 1998 p. 36). With fewer topics to cover there is more substantial time for exploration on a topic where teachers are able to help their students master the content. Japanese teachers are also able to devote more time to creating and finding the most effective way to teach the content. U.S. curriculum is always progressing, but it may be a struggle to condense the topics and possibly delete certain topics as well.

The use of lesson study can greatly increase teacher quality, student relationships, and improve teaching practice. The process though is not perfect due to a lack of support. "As Catherine Lewis, a lesson study researcher at Mills College, points out U.S. teachers do not have a rich national curriculum, top-notch textbooks, informative teacher's manuals or a history of practicing lesson study" (Dubin, 2010 p. 27). Studies have shown that the U.S. curricula is "overstuffed" compared to Japan's. The U.S. has teachers going through many topics within a short period of time. There has been a demand for "coherent curriculum"; coherent curriculum does not only mean the same curriculum among the nation, but also means topics need to relate and build upon knowledge.

School Culture

A schools culture can determine its focus, its students, and opportunity to improve. "According to Forde et al (2006) school culture is composed of the quality of the interactions and the attitude and emotions expressed by members of the organization" (Eisuke, 2012 p. 570).

Positive characteristics are necessary for a school to adapt to a new way of professional practice. In Japan, lesson study thrives from a school culture that views collaborative work as the best form of professional development, as well as support from the district and administration. "A school culture that is grounded in a sense of community will support lesson study by creating a dynamic and congenial workplace and establishing relationships that encourage continuous inquiry and improvement" (Stepanek, 2007). With certain characteristics a U.S. school can be successful in implementing lesson study. Having a common goal, mutual trust and respect, collective inquiry, reflective dialogue, supportive and shared leadership, and continuous learning opportunities can create a collaborative school culture for lesson study (Stepanek, 2007)

The significance of Lesson Study

Many researchers have found a need for an ethnographic approach to teacher's professional development (Masami, 2006). Lesson study has attracted attention because of the success in teacher's going through professional development on the job, in their classroom, and together. Stated by Catherine C. Lewis (2012), educators need opportunities to see and try new approaches in practice. Today, most American teachers will learn of a new pedagogy of ethnology approach, but may not be able to practice the approaches to the full extent with proper feedback. By using lesson study it can reduce the isolation between teachers and form a collaborative environment. Teachers will be able to explore different perspectives from each other, materials, and other knowledgeable resources, such as a Math coach or professor.

" Collaboration can provide teachers with different perspectives of analyzing teaching practice, contributing to improvement in teaching efficiency as well as clearer understanding of teaching and education" (Wang Qiang, 2013). Through the process of lesson study there will be

continual improvement, as well as, an increasing knowledge of subject matter. Teachers can gain more self-determination in their profession by becoming researchers through lesson study because they can decide what topic to research, how to implement it, how to edit and reflect, and gain a better understanding of teaching and their students learning. These characteristics of lesson study can aid teachers in gaining a higher level of autonomy in their profession. "Lesson study addresses teaching as a cultural activity-one that is improved through deep thought, inquiry, and a collective focus on teaching rather than individual teacher's" (Stepanek, 2007).

The process of Lesson Study

Once a group of willing teachers decide to participate in lesson study, they go through multiple stages before completing the final version of their lesson. They must first set an overall goal that will focus on the students. This goal may also become their objective in the lesson as well. In some cases the goal will be for the whole program in the school. When planning the research lesson they will investigate materials, use knowledgeable others (math coach, professor, Japanese educator), and use past experiences. One important factor that must be incorporated into a research lesson is anticipated student responses.

These will be responses the teacher believes a student may say when given a certain problem. They could be incorrect responses, confused responses, or those of a different strategy for solving the problem. This will help the teacher to really deduct what a student may be thinking when given the lesson. After the lesson has been created one teacher from the group will teach the research lesson to their students. While the teacher is instructing, the other teachers from the group, as well as other professionals, will be observing the one teacher's students. The observers will be looking for how the students are responding, if they understand

the lesson or are confused, and if they seem emerged in the lesson. The main goal of observing is to gather data on the effectiveness of the research lesson. When the lesson is over, the teachers meet for a day or more to debrief on the data collected.

After discussing the data, the teachers will revise the lesson. They will address any student misunderstanding and correct any problems found in the lesson. Once the lesson has been revised a different teacher from the group will then conduct the lesson with his/her students while the others observe. The same process of revising will continue until the teachers have created a final version of the lesson. When the final draft is completed the group of teacher's will then reflect and share the results. The researched lesson can be published to the public as well as a detailed report of what they did. A reflection or summary discussion is usually written by each teacher to help them have the time to reflect on what they have learned and experienced. This can also be data for future research lessons.

Need of Supportive Materials for Lesson Study

Researchers have observed a variation of features within the U.S. and Japans textbooks and materials. Attention has been drawn to the lack of rich discussion within the U.S. teaching resources. Stated by Catherine C. Lewis, there are three features that appear more frequently in the U.S. teacher's manual compared to Japan's. The anticipation of student thinking is given by one correct answer, connects prior standards, and support on the different categories of students. Japanese teacher manuals do not only give one correct answer for student thinking. Instead, multiple interpretations of an answer will be provided in the manual. Connections of prior standards are not shown as frequently as in U.S. text book, but there is rich information in the textbook about student thinking and rationale for pedagogical discussion. "In both countries

textbooks are developed by commercial publishers who compete to have their textbooks adopted by district" (Lewis, 2011 p. 6). Although commercial publishers create the textbooks, they must go through a committee of MEXT.

In 2010 a study conducted by Lewis, Perry, and Friedkin, observed two lesson studies performed in the U.S. using Textbooks and Teacher manuals from Japan. The lessons were both only on polygon area, but the teacher's had the flexibility to allocate their time and choice of focus for their research. Both lesson study groups took advantage of the anticipation of student thinking and rationale for pedagogical decisions from the Japanese textbooks and teacher manuals. Through lesson study and the use of Japans resources the teachers were able to conduct a professional discussion and create a reliable lesson plan. Lesson study has been successful in other U.S. schools without solely using Japanese resources, but this study has shown that Japan's textbooks and teacher manuals can help improve professional development even more.

Seeking Time

Researchers have found the potential of implementing lesson study in U.S. schools, but it is difficult if teachers are not given the sufficient time to conduct it. Teachers in Japan are given multiple opportunities to observe each other's lesson, and to discuss their findings. "Lesson study requires two types of collaborative time: (1) time for meetings in which the team members develop and revise the lesson plan and (2) time to observe and discuss the teaching of the lesson" (Stepanek, 2007). Adjusting the school schedule can provide the necessary time for teacher's to collaborate, but an alternative could be providing all teacher's similar prep time. If changing the schedule or similar prep time is not an option then providing hourly compensation for meetings

after school hours could be another adjustment. Substitutes may be required for when observations of the research lesson are in process. Due to the other team teacher's observing the one class the other classes may need a substitute, or another teacher, or Para to supervise the class for a couple of hours. Japans school schedules may be different, but U.S. schools are able to take the initiative and make some adjustments for lesson study to be part of the school schedule. In the following section, initiatives involving Lesson Study currently being implemented in U.S. schools will be outlined for this thesis.

United States Initiatives

Volusia County, FL

In Volusia County, Florida, a group of teachers from Pine Trail Elementary came together to conduct a lesson study. "Becky Pittard, a fourth and fifth grade teacher at Pine Trail, brought the practice to her school" (Dubin, 2010 p. 25). In the beginning, the teacher's did not collaborate on improving instruction, though maybe shared some ideas and experience. One day, they gathered together and had the time to conduct a deep lesson study. They decided to create a lesson on teaching percentages to upper grades because it was often taught solely on doing the operation and not on why.

The teachers met on a regular basis using multiple resources from articles to textbooks from Singapore and Japan. About three months later, the teachers decided to teach a fourth grade class the concept of ratio using the game Guitar Hero. "Pittard and her colleagues wrote the lesson to illustrate that if players don't play the same number of games, their scores must be calculated as ratios-comparing the number of songs played with the number of songs passed-to determine the winner" (Dubin, 2010 p. 27). Pittard taught the lesson to her fourth grade class

with the teacher's and other professionals observing. The lesson was a success for the teacher's, and the students enjoyed the concept. The lessons study group was unable to follow the exact Japanese model. They did not have another teacher from the group teach it a second time, and they were unable to complete multiple observation discussions.

The group also had a lack of professional experts to assist them with certain concepts or to observe their research. Despite not following the exact Japanese model and lack of experts, the teacher's from Pine Trail Elementary were successful in creating a well thought out lesson plan and learned how to anticipate student thinking. Pittard and the principal soon made it reality for all teacher's each year by inviting them to participate and scheduled dates for teaching the research lessons. They even invited other principals to observe the research lessons to gain district wide support. After the difficulty of reforming Pine Trails Elementary school's professional development, they were successful in making lessons study a reality.

BASD District

A group of four BASD (Bethlehem Area School District) educators became leaders of a district wide workshop on lesson study. The leaders sent an opening letter to all teacher's within the district inviting them to the workshop. The teachers who attended were broken up into groups and were asked to complete 20 hours to lesson study over the school year. A stipend of \$500 dollars was provided to each participant, as well as two full-day substitutes for when observations took place. A district wide meeting was also provided at the end of the year for the teacher's to share and reflect. During the workshops provided by the district the teachers were able to work together giving them the opportunity to dive deeply into subject matter and instructional implications.

Teacher's also had the opportunity to ask questions and exchange ideas. Throughout the multiple years of success, the leaders reflected on better ways to provide the proper resources for the educators to perform lesson study to its fullest. This included templates of the process of lesson study, requested individual reflections from teachers, and developed tools to help teachers anticipate student answers. The reflections received from the teacher's showed their change of thinking about lesson study. Their initial thought of focusing on lesson study being an instructional product, to it being used for instructional improvement. District teacher's each year sharpened their techniques in the use of lesson study, and some have even taken the initiative to travel to Japan to observe lesson study there.

DELTA/California

In California about 90 mathematic teachers from Riverside County, Menifee Union, Nuview Union, Perris Elementary, Romoland County, RCOE, and Oak Grove at the Ranch served in Project DELTA (Developing Educators Learning to Teach Algebraically). "All the participating districts, as well as the Riverside County Office of Education, strongly support their schools in the Journey" (Jetter, 2012 p. 19). The project covered grade/course from third grade through Algebra I. Project DELTA followed a similar layout of lesson study, the team begins by studying frameworks, share knowledge, collaborate plans on a lesson, observe and collect data, and then reflect and revise. Before the participating teachers could being using lessons study they were provided an introduction of the Japanese lesson study model and 80 hours of professional development in mathematics through two weeks during summer. Over time the teams of teachers could see how the improved quality of instruction resulted from the lesson study method.

The RCOE Alternative Education Coordinator-Principal Robert Brough comments, "For the kids, DELTA is perfect because our kids like to do things their way. They don't like being put in boxes. The approach is not just about getting right answer. It is a varied approach...our kids like choices, and they really buy into this." (Jetter, 2012 p. 21) Teachers having the opportunity to closely observe the students aids them to learn new insight about how the students are learning, and the ability to anticipate student responses in a lesson. One teachers from the MCPT classes states, "As teachers, we are discovering things we didn't realize were going on. We approach the material ourselves as students." (Jetter, 2012 p. 21) During the first year of Project DELTA there was a positive impact on the students, based on the data collected by evaluators. "A higher percentage of DELTA students scored proficient or advanced on their grade level CSTs (grade 3- Algebra I) than the students in a matched comparison group, and the difference was statistically significant (50% vs. 44%)" (Jetter, 2012 p. 22).

JELS/New Jersey

The Japanese Elementary Lesson Study Project (JELS) was able to receive participants (third grade teachers) from a small urban, public school in New Jersey. The project was organized and facilitated by a local university mathematics education faculty member and a mathematics coordinator for the school system (Lynn, 2009). As the project began to be organized, the two facilitators realized there will need to be some adaptations made with the original outline of lesson study. They noticed there is an issue of the participants needing to first learn about what lesson study is, find the time for planning, a wide range of mathematical backgrounds, and the curriculum used in the system did not cohesively fit well to unit planning

outlined in lesson study. A total of three summer meeting days were scheduled to prepare and instruct the participants on lesson study.

On the first day, the third grade teachers observed videos about lessons study, created group norms, developed a common vision of good teaching, and set long-term goals. Between the first and second day they were asked to read "Handbook of Teachers-led Instructional Change". Finally on the third meeting they identified four topics they wanted to address from *Everyday Mathematics, Grade 3*. In August, the teachers came together to develop a research theme and plan the research lesson. This was the teacher's first immersion into the lesson study process. After some time of discussing about what they wanted their students to learn, they decided on: "Third graders will use prior knowledge and critical thinking skills to become problem solvers in mathematics" (Lynn, 2009 p. 40). Once the school year was over, results from the data collected from lesson study showed "that over the course of the year the teachers' developed qualitatively richer students and curriculum developer lenses"(Lynn, 2009 p. 34).

Lesson Study/ Action Research

In Ohio, a group of fifth and sixth grade teachers collaborated to use both lesson study and action research to test if using the 4-column writing method makes a significant difference in the student's extended-responses. Action research is a method for teacher's to assess the effectiveness of their classroom practices. "Lesson study and action research practices parallel and augment each other in a number of essential ways" (Keeney, et al., 2002 p. 5). Both methods focus on using student performance as a means of feedback to evaluate the effectiveness of a lesson or a teaching method, thus it is possible to utilize both methods together. The Ohio teacher's collaborated on a regular basis working together to develop lesson plans and to gather

data. Three hundred eight students in the fifth grade were divided into control and experimental groups.

A total of 160 students were in the control group and one hundred forty-eight students were in the experimental group. After completing the lesson and collecting data, the teacher's then randomly surveyed 46 students from the experimental group (4-column student survey). The results showed 20 students would use the 4-column method while 22 students would not, and 4 were indecisive. The research completed by the fifth and sixth grade teacher's did not only conjure up data about the 4-column method, but it also has revealed "evidence to support the theory that teachers can target improvement of student learning though systematic improvement of lessons brought about by professional and collaborative dialogue around those lesson" (Keeney, et al., 2002 p. 14).

United States Adaptations

In both school and national level lesson study has been a very successful form of professional development in Japan. Interest has grown increasingly in the U.S., but others have noticed adopting lesson study is no simple task. Issues have risen concerning the differences between both countries. Lesson study has been part of Japan for a long time and works well with Japanese curriculum and culture. There are concerns about U.S. teacher's not having enough time for lesson study, or of not having a "coherent curriculum", but this has not stopped educators from taking on the task of adapting Lesson Study into U.S. schools.

Some educators have adapted to lesson study by using Japanese teacher manuals(See Appendix A).The educators are able to utilize the anticipated student responses in the manuals, as well as background information on student thinking. This helps teachers to gain more of

understanding of how students may learn or view a problem. The manuals also provide open ended question to give the students more of an opportunity to devise more ways of solving a problem. Using the Japanese teacher manuals gives teacher's a different perspective of teaching a lesson.

Besides the use of teacher resources to adapt to lesson study, schools have also taken the initiative to create time for lesson study. Schools may give the group of teacher's the same planning period so they will have the time to collaborate. Schools could also change the school schedule in order for there to be time to incorporate lesson study. If teachers must meet after school hours to complete lesson study then they could be stipend. The use of lesson study in the U.S. may not be precisely the same as in Japan, but both countries educational culture are not either.

Chapter Summary

Lesson study is a form of professional development that is implemented throughout schools in Japan, and has also been applied to U.S. schools. Through Lesson Study teachers are able to collaborate, research, test, refine, and share strategies to improve instruction and curriculum. This provides teachers the opportunity to become researchers in their profession. Those who are initiating research are able to promote professional growth. Lesson Study can become the professional development that promotes a higher level of autonomy.

CHAPTER 3: METHODOLOGY

Research Design

The design of this study is a qualitative study. “Qualitative research is aimed at getting a deep understanding of a specific organization or event, rather than a surface description of a large sample of a population.” (What is Qualitative Research). The data was gathered by a five question interview. Some advantages of interviews are that they are able to obtain detailed responses, achieve high response rate, and allow more detailed questions to be asked. Disadvantages may be that they are time consuming, interviews may interpret questions differently, and confidentiality. To insure the interviewee’s confidentiality, no personal data was collected or shared in the research. The objective of this study was to collect detailed information that describes pre-service teacher's views of implementing lesson study into the schools as a form of professional development to promote a higher level of autonomy. The interview consist of five carefully worded questions to ensure the objective is answered clearly and that there is no risk to the interviewee. The interview questions have been approved by the IRIS. Finally, the results have been reported in written form.

Selection of subjects

Pre-service teachers in their junior or senior year of internship at the University of Central Florida were tested on their views of the possible use of implementing lesson study in U.S. schools. They must be majoring in Elementary Education as well as completing internship I or II. This population was chosen over full-time educators due to the pre-service teachers have the opportunity to observe schools while comparing the observed methods to new methods learned from college. This study focuses on what pre-service teachers' views are about the full time educator's autonomy, based on their prior knowledge and experience working with teachers

in their internship. This brings up the opportunity to see what pre-service teachers may think about a teacher's autonomy from observing educators around them in their internships. This study also focuses on if pre-service teachers do see lessons study as form of professional development that could be beneficial to the teachers.

Instruments

The tested population was interviewed. This instrument will be best to use for this study due to the immediate feedback and ability to collect qualitative data. The interview will contain questions concerning: what the perceptions are of teacher autonomy, will teacher's being viewed as researchers help promote autonomy, and will lesson study be able to become that form of professional development that can promote teacher autonomy.

Predictions

My anticipated results were that lesson study would be seen as an effective way to strengthen teacher autonomy. Lesson study will be seen as a form of professional development that can promote a higher form of teacher autonomy, through the use of teacher's becoming researchers.

Procedures

Permission was received, and the interview questions and cover letter were approved by the Association for the Accreditation of Human Research Protection Program, Inc. Pre-service teachers were randomly chosen to participate in an interview. Participants were given a "Summary Explanation for Exempt Research" before the interview has taken place. The interviews took place at the participants' discretion. The interviewee was given a cover letter that explained the purpose of the research and definitions the participant may be unaware of

before being asked any questions. Once the interviewee has looked over the cover letter the interview then began. The participants' personal information was never collected during the interview and will not be shared in the study. The participants' answers will be recorded by an electronic device and written down. Once the interview is completed all data will be stored on a computer and device.

Limitations

This research comes with many limitations. Only a small population sample was obtained for this study, and it was unlikely to interview all pre-service teachers in the University of Central Florida. It will also not include any data about which schools the participants attended. Due to time constraints, the data collected most likely will be obtained between one to two districts. Every school is different, thus it is unlikely all participants have shared the same experiences during their internship. There is not an opportunity to interview teachers from all possible areas, meaning the data will not necessarily reflect the opinions of all pre-service teachers in Florida. It is not guaranteed that there will be a variety of schools represented, such as Title I or charter schools, since that data was not collected to protect the confidentiality of the participants.

Data Collection and Analysis

Responses for each interview is organized based on the questions below.

1. Do you think full time educators are lacking full autonomy in their profession?
Why or why not? If so where do you think teachers lack control in their profession?

2. Once you graduate how long do you think you will stay in the education profession if you think full time educators are lacking autonomy?
3. What do you think about teacher's being viewed as researchers (teachers actively initiating and carrying out research in schools and classrooms)? Do you think this can promote a higher level of teacher autonomy? Why or why not?
4. Do you agree if schools implement a form of professional development where teachers can focus their studies on student learning and curriculum could help them have more control in their learning?
5. Lesson study is a form of professional development that promotes teachers as researchers (where teachers can collaborate with each other on past experiences, reflective papers, ethnography field notes, data on students in school, and other professionals to create and publish a lesson). If teachers were able to use lesson study for their professional development, do you agree they could gain a higher level of autonomy? Why or why not?

CHAPTER FOUR: FINDINGS

Introduction

The purpose of this study was to gather information from pre-service teachers about their perception of promoting autonomy through the use of lesson study. The data gathered was used to describe: a description of the perceptions of pre-service teacher's view of teacher autonomy, views of teachers being perceived as researchers, and perceptions of lesson study promoting teacher autonomy. This chapter will factually present the results of the data collection, as well as present the data using descriptive statistics in paragraph form.

Demographics of the Research Sample

The research sample was made up of five pre-service teachers who were completing their I or II internship. All participants were majoring in Elementary Education at the University of Central Florida. All participants were 18 years of age or older.

Research Questions

1. Will pre-service teachers agree that teachers are lacking autonomy in their profession?
2. Will pre-service teachers view full time educators, who are being perceived as researchers, as a positive outlook to promote teacher autonomy?
3. Will pre-service teachers think lesson study could be a form of professional development (that promotes teachers as researchers) could promote a higher level of autonomy in teacher's profession?

Research Question one

How will pre-service teachers feel about educators who are lacking autonomy in their profession?

According to the data, five out five participants agreed that teachers need to require a higher level of autonomy in the education profession. Three out of the five participants shared a similar feeling that teachers need to gain more control in their profession, yet they have not seen anything being done to aid teacher autonomy. Two of the participants made a statement about how all decisions for education are made by either the state or local government, never really by the teacher. One out of five participants agree that teacher's need a higher level of autonomy, but it cannot happen until the negative views of an educational profession is changed. Three out of five participants think teachers are lacking autonomy in curriculum and decision making, while two out of the five think teachers are lacking autonomy in professional development and in teaching techniques. All five participants think they will stay in the profession, however four out five stated they will not stay as teachers and will gain a higher position.

Results from Interview Questions related to Research Question one

Do you think full time educators are lacking autonomy in their profession? Why or why not? If so where do you think teachers lack control in their profession?

Participant 1

"Yes teachers do need to require a higher level of autonomy. At my school, 9 teachers are on a team and they split up the subjects. I thought that each teacher would create the lesson, but instead they made broad lesson plan that were not completely followed. Teachers need to feel like they have more control in what they are teaching. So many of the decisions about education are made by the state. Teachers lack preparation in new curriculum. They lack control in the say of curriculum and teaching techniques, and in professional development."

Participant 2

"Yes, I have seen many teachers complaining about the lack of autonomy yet not saying or doing anything about it except sit back and dealing with it or secretly doing more autonomy than they are allowed. They are constantly being told what to do by the government and people who are long gone from the classroom, and do not remember what it is like being with the kids all day anymore, so they have to follow strict guidelines when they themselves should know what is best for their students."

Participant 3

"Yes. Teaching is a profession that many people seem to think is a simple job, on par with just babysitting. They don't realize how much goes into that, and how much work it is to reach every student. I think that a lot of the decisions made about education today, both by state and local government as well as administration, puts even more pressure on teachers to do their job effectively but within constraints that don't always make sense. For instance, a 90 minute reading block doesn't really make sense, since teachers will teach reading literally all day, even in history and science. It makes it hard to do what we were taught to do when we got our degree, to tie in subjects together, when they tell us when and how to teach them. I think teachers lack control in the designing of curriculum. Sometimes teachers' opinions are asked, but ignored, and other times they just assume they know what needs to be done to fix the problems. A lot of it comes from people running the education system who have no background in education."

Participant 4

"Yes, I agree teachers need to have a higher level of autonomy. The teachers I have been with during my internships always complained about never having say and that it's best to just follow what administration tells you to do. Teachers need to have more control in their profession. I

see them complaining, yet they do not try to do anything about. They won't speak up for themselves. Being a teacher is a great profession, but a lot of people do not see it that way anymore. Teachers lack control in the decision making for education and in curriculum design. The people who do make these decision do not remember or have no real clue of how it is in the classroom."

Participant 5

"I do agree teachers are lacking autonomy, and there needs to be something done about it. The only thing is in order for teachers to gain a higher level of autonomy the whole education system needs to change. Teachers need to be seen as real professionals and have more independence. The state is putting way too much pressure on teachers. I think the teachers are lacking control in decision making, professional development, and in say of how they can teach. "

Once you graduate how long do you think you will stay in the education profession if you think full time educators are lacking autonomy?

Participant 1

"I am not sure. I know I will stay in education, but I do not think I will stay as a teacher. I do want to go back for my masters so I could then move up in the profession and possibly be in administration."

Participant 2

"I know I will be staying in education, but maybe not as a teacher. I want to one day have my own charter school where we are not controlled by the county."

Participant 3

"I definitely see myself staying in this profession, but maybe not as a teacher forever. I want to be able to move up and make a change in education."

Participant 4

"I do love education, but sometimes I wonder if I chose the right profession. I think I may stay in education, but not as a teacher forever."

Participant 5

"I do see myself staying in this profession and probably staying as a teacher. I really do love education. Not everything is perfect and I think education is always changing and things may get better."

Research Question Two

How will pre-service teachers view full time educators being perceived as researchers to promote teacher autonomy?

According to the data below, five out five participants agreed that teachers being viewed as researches would benefit a teacher's profession. Four out of the five participants agreed that is could also promote a higher level of autonomy, however one participant is not sure if it will. Participant two stated, how teachers may prefer seeing research from other teaches compared to those who may never have worked in a classroom. Two out of five participants both stated, they think teachers becoming researchers can help them have better control in the element of decision making because teachers would then have research and data to support their opinions.

Results from Interview Questions correlated to Research Question two

What do you think about teacher's being viewed as researchers (teachers actively initiating and carrying out research in schools and classrooms)? Do you think this can promote a higher level of teacher autonomy? Why or why not?

Participant 1

"Yes because formative assessment is needed. Having control in researching and assessing in the class can be beneficial. Teachers having their own evidence to prove their research can promote higher autonomy. It also gives teachers a chance to see how students are learning, and how teachers are gaining experience through their form of professional development. "

Participant 2

"I love the idea as it gives the teaching profession a better name and better outlook and not like a robot doing what it is told which is how it seems now, with the role as a researcher I think it would definitely give the teacher more autonomy and feel like what they do in their classrooms matter and has an effect on the education community. Also being a teacher seeing someone else's researched lesson it would be more inviting to try it with my own students than a lesson made by a researcher that is not a teacher and not in a classroom."

Participant 3

"I think it definitely could. Teachers have to do research as part of their job, to make sure they are reaching to students and to keep their instruction as up to date as possible. I think recognizing that teachers are researchers may help it to be seen as more respected and would maybe help to have their voices heard when curriculum is being designed. I also think teachers can bring research to a government while they are trying to design a new curriculum, then it can

only help their design. The more research involved, even if some of it is conflicting, the better the design can be."

Participant 4

"I think it would be beneficial for teachers to be seen as researchers. That would help their profession to probably be seen in a more positive way. Teachers do research on their own any ways, so being credited for it would be amazing. Teachers could take researching at a whole new level. Teachers could feel like they have more of a purpose in their profession if there are acknowledged more."

Participant 5

"I do agree teachers being seen as researchers would be very good for their profession. I think this could help their autonomy a little because teachers would feel they have more of a real profession. Teachers should be taken more seriously when they voice their opinion, so I think if they back it up with research this could help them with maybe having more control in decision making. I am not so sure if this would solve the issue of teachers lacking autonomy."

Research Question Three

How will pre-service teachers think about lesson study (a form of professional development that promotes teachers as researchers)being used to promote a higher level of autonomy in a teacher's profession?

According to the data below, five out five participants agreed that having a form of professional development that promotes teachers as researchers would be beneficial to teacher autonomy. Four out of the five participants shared a similar statement on teachers having more control or freedom in professional development. One out five participants agree this form of

professional development could be more beneficial for teachers than workshops, but they do not think this would help them have more control in their profession. Three out of five participants made a statement on how using this form of professional development could help teachers gain a better understanding on student learning. Five out of five of the participants agreed lesson study could be beneficial, however two out of five participants stated there is not enough time for teachers to participate in lesson study. Participant 1 states that there might not be enough time for lesson study, however they think the school system can make some modifications in the schedule in order for lesson study to be implemented. They agree it will be beneficial for teacher's autonomy and should be implemented. Participant 5 states, lesson study could be beneficial to teacher's professional development, but not as a tool to help promote autonomy.

Results from Interview Questions correlated to Research Question three

Do you agree if schools implement a form of professional development where teachers have the opportunity to work together and choose what to focus their studies on, such as student learning and curriculum, this could help them have more control in their learning?

Participant 1

"Yes, Teachers having the opportunity to focus their studies on student learning can help them to create lessons that may use new curriculum or techniques. They can then see if students do learn from what the county has been telling them to use. I think this would give them more control because now they have the chance to have more responsibility with school decision. "

Participant 2

"Yes, because instead of telling them how to teach it lets the teacher see how they learn and give their own approach to the learning style of the student in the classroom. This give the teachers more freedom."

Participant 3

"Yes. I do feel that most of our studies are focused on implementation, but if we could see how curriculum is designed, we may be in a better position to offer advice and be heard. Having the opportunity to research the curriculum could help teachers gain a better understanding. I also like the idea of being able to gain more knowledge about how our students learn. It can be hard sometimes when you're just not so sure what the students are thinking."

Participant 4

"I think this would be great for teachers to have more control in their professional development. A lot of times I have heard teachers, from my internship, complain about what a waste of time some of these workshops are. I think having the freedom to actually decide what to learn would be great. That would definitely give them some control."

Participant 5

"I agree teachers using this form of professional development would be something really different compared to the workshops I have been to with my supervising teacher. This would

definitely be nice for the teachers to have the chance to really get together to study the curriculum. I don't know if this would help them have more control or autonomy in their profession, but I guess it could if they are given the freedom of what to study for their professional development."

Lesson study is a form of professional development that promotes teachers as researchers (where teachers can collaborate with each other on past experiences, reflective papers, ethnography filed notes, data on students in school, and other professionals to create and publish a lesson). If teachers were able to use lesson study for their professional development, do you agree they could gain a higher level of autonomy? Why or why not?

Participant 1

"Yes, there may not be enough time for lesson study, but I do not totally agree with that. You have to make time for it. In order to have lessons study as part of the year it should be done in a way to split components or delegate jobs between team members. Teachers may have more control being researchers because they can change and go back to alter curriculum, and implant new strategies from their own form of professional development."

Participant 2

"Yes of course as it certainly gives the teacher control over their own learning and career experiences instead of being a mindless monkey doing what the school board says to do, with only the school boards research to back it up."

Participant 3

"I do, but at the same time I don't think it will happen because of time. There is so much happening and so much discussion can be done about reflecting on just one lesson that by the

time the teachers have finished talking about the data of one student or lesson, their planning time or meeting is done."

Participant 4

"Yes I think lesson study could definitely help promote teacher autonomy. It would be wonderful for teachers to have the chance to actually get together and research. From my experience I have seen PLC's, but sometimes there is nothing really going on. This is seems close to a PLC to me, but takes an extra step further giving teachers more control."

Participant 5

"I think lesson study would be beneficial for teachers because they can gain some freedom in their professional development. I really like the idea of teachers becoming researchers, and since lessons study promotes that than I think that would be great to implement. Teachers having the opportunity to perform research would be beneficial to their profession, but I am not sure if there would be time for lesson study or if it could promote a higher level of autonomy. This does seem like a lot of extra work and teacher are very busy, but maybe there would need to be some changes in the school system before using it."

CHAPTER 5: DISCUSSION, RECOMMENDATIONS, AND CONCLUSION

Discussion

Perceptions of teacher autonomy

According to researcher Luman E. G. Strong, autonomy is one of the most recurring elements desired in a teacher's profession. There are different elements of teacher autonomy, however this study is focusing on the element of areas of operation, which include professional development. This includes teachers having control or freedom in the operations of professional development.

According to the results of this study, all participants agreed that teachers are lacking autonomy in the education profession. This reveals that pre-service teachers do see a need for teachers to gain a higher level of autonomy. Based on previous experience from internships, the participants identified a lack of control in curriculum, decision making, professional development, and teaching techniques. All of these areas are part of the elements of operation, and decision making. The majority of the participants felt that teachers are to pressure by the state and administration.

Teachers as Researchers

According to researchers, teachers who have the ability to initiate and carry out research in the schools and classrooms have the potential to promote teacher autonomy (Wang Qiang, 2013). Teachers begin to have a better understanding of themselves, and make better decisions and choices as a consequence of their engagement in research (Wang Qiang, 2013).

According to the results of this study, all participants agreed that teachers becoming researchers would be beneficial. The majority of the participants view teachers as researchers as

a way to promote a higher level of autonomy. Participant 3 states " Teachers have to do research as part of their job, to make sure they are reaching to students and to keep their instruction as up to date as possible. I think recognizing that teachers are researchers may help it to be seen as more respected and would maybe help to have their voices heard when curriculum is being designed. I also think teachers can bring research to a government while they are trying to design a new curriculum, then it can only help their design. The more research involved, even if some of it is conflicting, the better the design can be." This concludes pre-service teachers do view teachers as researches as a positive method to promote autonomy.

Lesson Study Promoting Autonomy

Lesson study is a form of professional development that promotes researcher, collaboration, and reflection. According to Catherine Lewis, over time with the use of lesson study teachers see an improvement in the quality of instruction(Jetter Madeleine, 2012). This form of professional development gives teachers the opportunity to have more freedom and control in decision making, and improvement in understanding of curriculum and student learning. With lesson study implemented into schools teachers will be able to collaborate with each other on past experiences, research, use ethnography filed notes, collect data on students in school, and collaborate with other professionals to create and publish a lesson.

According to the results of this study, the majority of the participants view lesson study as a form of professional development that could provide a higher level of autonomy. The majority of the participants agreed that lesson study could be beneficial as a mean to provide full time educators more control in professional development and gain deeper knowledge in education. Participant 1 states, "Teachers may have more control being researchers because they

can change and go back to alter curriculum, and implant new strategies from their own form of professional development."Some of the participants though, think there would not be enough time to implement lesson study in today's education system. In some U.S. schools the original layout of lesson study was altered to fit the school system. Lesson study is a means for teachers to become researchers and develop autonomy in their profession.

Future Research

Future contributions to this topic can be varied. This study can be replicated with a larger sampling of pre-service teachers, or with full time educators. This study can also be furthered through looking at the length of a teacher's careers to their level of autonomy. This study could also look into the levels of autonomy for Japanese teachers who use lessons study. So many factors could have influenced the reasons for the participant's answers to the questions that it would be very complicated to complete the reasoning behind it. An analysis of pre-service teacher's experience in their internships could correlate with this study.

Conclusions

In conclusion, three out of five pre-service teachers view lesson study as a form of professional development that could benefit educator's autonomy, however two out five participants think there will not be enough time could prevent it from being successful.

REFERENCES

- About the Standards*. (n.d.). Retrieved July 13, 2014, from Common Core State Standards Initiative: <http://www.corestandards.org/about-the-standards/>
- Andy Barfield, T. A. (2001). Exploring and Defining Teacher Autonomy: A Collaborative Discussion. *Tokyo: The Japan Association for Language Teaching* .
- Benson, P. (2001). *Teaching and Researching Autonomy in Language Learning*. Longman.
- Bishaw, A. (2013). Poverty: 2000 to 2012. *American Community Survey Briefs*, 1-16.
- Bogler, R. (2001). The Influence of Leadership Style on Teacher Job Satisfaction. *Educational Administration Quarterly* , 37(5) 662-683.
- Collier, J. (2002). What is Autonomy? *Department of Philosophy* , n/a.
- Day, S. (2004). *Professionalism, performativity and empowerment: discourses in the politics, policies and purposes of continuing professional development*. n/a: Maidenhead, UK : Open University Press.
- Dubin, J. (2010). American Teacher's Embrace the Japanese Art of Lesson Study. *American Educator*, 26(6) 23-29.
- Eisuke, S. (2012). Strategies to promote lesson study in developing countries. *International Journal of Educational Management*, 26(6) 565-576.
- Groves, B. D. (2011). Japanese Lesson Study: Teacher Professional. *Mathematics Teacher Education and Development* , 77.

- Hawley, W.D., Valli, L. (1999). Essentials of Effective Professional Development: a New Consensus. *Teaching as the Learning Profession: A Handbook of Policy and Practice*, 127-150
- Höstfält, W. W. (2013). Contextualizing Teacher Autonomy in time and space: a model for comparing various forms of governing the teaching profession. *Journal of Curriculum Studies* , 46(1) 58-80.
- Japanese Lesson Study: Teacher Professional 2011 *Mathematics Teacher Education and Development* 77
- Jetter Madeleine, H. G. (2012). Japanese Lesson Study Comes to California. *Leadership* , 18-21.
- Keeney, M. A., Paganelli, S., Smith, J., Quinn, K., Krane, A., Jacobs, B., et al. (2002). Lesson Study with Action Research: Is the 4-Column Writing Method 4 Real? 15(4) 1-24.
- Komatsu, S. (2002). Transition in the Japanese Curriculum: How is the Curriculum of Elementary and Secondary Schools in Japan Determined? *International Education Journal* ,3(5) 50-55.
- Lewis Catherine, T. I. (1998). A Lesson is Like a Swiftly Flowing River. *American Educator* , 22(4) 12-52.
- Lewis, C. C. (2011). Using Japanese Curriculum Materials to Support Lesson Study Outside Japan: toward Coherent Curriculum. *Educational Studies in Japan: International Yearbook* , (6) 5-19.

- Lewis C. Catherine, P. R. (2012). Improving Teaching Does Improve Teacher's: Evidence from Lesson Study. *Journal of Teacher Education* , 63(5) 368-375.
- Lieberman, A. (1995). Transforming Conceptions Of Professional Learning. *Phi Delta Kappan*, 76(8) 591-596.
- Luman, S., Yoshida, R. (2014). Teachers' Autonomy in Today's Educational Climate: Current Perceptions From an Acceptable Instrument. *Educational Studies* , 50 123-145.
- Lynn, H. (2009). Study of Japanese Lesson Study With Third Grade Mathematics Teachers in a Small School District. *SRATE Journal* , 17(1)32-43.
- Matoba Masami, R. S. (2006). Ethnography for Teacher's' Professional Development: Japanese Approach of Investigaton on Classroom Activities. *Comparative Education in Teacher Training* , 4 116-125.
- Mizuho, A. (2012). Poverty a Grwoing Problem for Women. *The Japan Times* .
- Organization*. (n.d.). Retrieved July 15, 2014, from Ministry of Education, Culture, Sorts, Science, and Teachnology-Japan: <http://www.mext.go.jp/english/organization/index.htm>
- Oshima Jun, H. R. (2006). Changing Teacher's' Epistemological Perspectives: A case study of teacher-researcher collaborative lesson studies in Japan. *Teaching Education* , 17(1) 43-57.
- PISA 2012 Results*. (2012). Retrieved July 6, 2014, from National Center for National Statistics: http://nces.ed.gov/surveys/pisa/pisa2012/pisa2012highlights_3a.asp

Population Estimate. (2013, July 1). Retrieved July 10, 2014, from United States Census

Bureau: <http://www.census.gov/popest/>

School Enrollment. (n.d.). Retrieved July 12, 2014, from United States Census Bureau:

<http://www.census.gov/hhes/school/data/cps/2012/tables.html>

Shigehisa Komatsu, (2002). Transition in the Japanese Curriculum: How is the Curriculum of

Elementary and Secondary Schools in Japan Determined? *International Education*

*Journal*3(5) 50-55

Stepanek Jennifer, A. G. (2007). *Leading Lesson Study*. Thousand Oaks: Corwin Press.

Surgrue, C. (2011). Autonomy and accountability. *Leading and Managing Schools* , 59-74.

*Tokyo Shoseki's Mathematics International*2012Madison, NJGlobal Education Resources

Wang Qiang, H. Z. (2013). Promoting Teacher Autonomy Through University-School

Collaborative Action Research. *Language Teaching Research* , 18(2) 222-241.

What is Qualitative Research. (n.d.). Retrieved November 9, 2014, from PPA 696 Research

Methods Data Collection Strategies II:Qualitative Research:

<http://www.csulb.edu/~msaintg/ppa696/696quali.htm>

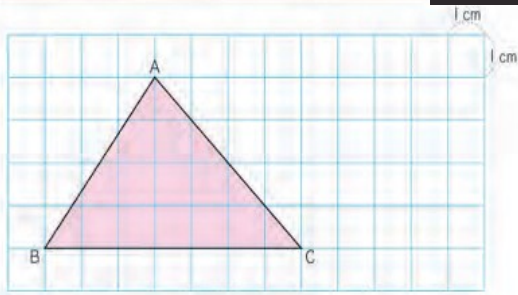
APPENDIX

A sample page from Tokyo Shoseki's Mathematics International

2 How to Find the Area of Triangles



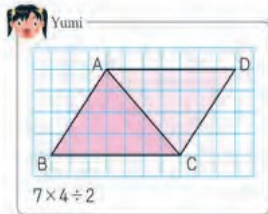
1 Think about how to find the area of triangle ABC.



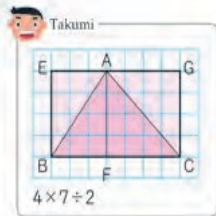
I wonder if we can change the shape into something that we already know how to find the area of.

Different solution methods help students understand multiple ways to solve problems while presenting opportunities for them to discuss their ideas.

★ Explain the three students' ideas below using diagrams and math sentences.



Shinji: Yumi used the fact that you can make a parallelogram using two copies of triangle ABC, and ...



Kaori: Takumi made rectangle EBCG using 2 copies each of triangle ABF and triangle AFC, and ...

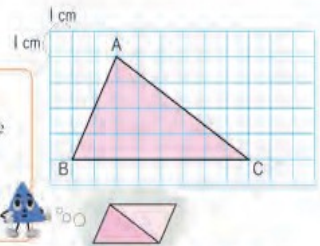


Hiroki: Miho made rectangle LBCM by moving triangle AHJ and triangle AJK, and ...

★ What is the area of triangle ABC?

You can find the area of a triangle by changing its shape to a rectangle or a parallelogram.

2 Based on Yumi's idea on the previous page, calculate the area of triangle ABC on the right.

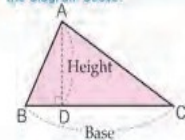


★ Let's come up with a formula for calculating the area of a triangle.

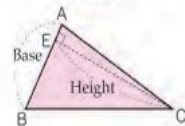
★ The area of the triangle above is a half the area of a parallelogram. What is the base and the height of the parallelogram? Which parts of the triangle correspond to the base and the height of the triangle?

★ Draw the segment that will be equal to the height of the parallelogram in the diagram above.

In triangle ABC on the right, the length of segment AD, which is perpendicular to the base BC, is called the **height** of the triangle.



If side AB is considered the base, then the height is the length of the segment on the right.



★ Calculate the area of the triangle above using BC as the base.

The area of a triangle can be calculated using the following formula:

$$\text{Area of triangle} = \text{Base} \times \text{Height} \div 2$$

I wonder if we can make this formula using Takumi's or Miho's ideas, too?

This means that the Area of triangle = Area of parallelogram $\div 2$, doesn't it?