

# EDUCATIONAL PLANNING

Vol. 26 No. 1

The Journal of the International Society for Educational Planning  
PROMOTING THE STUDY AND PRACTICE OF EDUCATIONAL PLANNING





**International Society  
for Educational Planning**

**EDUCATIONAL PLANNING**

A JOURNAL DEDICATED TO PLANNING, CHANGE, REFORM, AND  
THE IMPROVEMENT OF EDUCATION

VOLUME 26

NUMBER 1

2019

---

From the Editors .....	3
About The Authors.....	5
Making A Difference: Increasing Elementary Pre-Service Teachers' Self-Efficacy in Mathematics <i>Jodie L. Brinkmann</i> .....	7
Chinese Teachers' Perceptions of School Family Collaboration: A Study of Elementary Schools in Zhejiang Province <i>Zhiding Shu</i> .....	23
Incorporating Social Events into School Curriculum: How It Relates to Student Growth <i>Dehua Liu and Xianghua Tan</i> .....	43
Invitation to Submit Manuscripts.....	51
Membership Application.....	53

## FROM THE EDITORS

This issue of Educational Planning is focused on both pre-service teachers and veteran teachers to examine how they plan to be a capable teacher to address academic and social issues of the time. Brinkman solicited the perceptions of pre-service teachers to investigate their efficacy in mathematics teaching. Shu examined elementary school teachers' perceptions on school and family collaboration planning in China. Liu and Tan advocated planning to incorporate social events in elementary and secondary school curriculum in China.

The focus of the Brinkman study was to investigate how teacher preparation programs can better prepare preservice teachers to teach mathematics in an elementary classroom. By more closely examining preservice teachers' self-efficacy in mathematics and examining specific strategies for increasing self-efficacy in teaching mathematics, teacher preparation programs can be more informed and bolster self-efficacy of teaching candidates. Findings from this study suggest growth in both participants' self-efficacy in mathematics and in teaching mathematics. These findings can shed light on how institutions of higher education can best prepare preservice teachers to be successful in an elementary mathematics classroom.

The purpose of the Shu study is to investigate Chinese teachers' perceptions on school and family collaboration. This is a descriptive study with mainly a quantitative approach to solicit the perceptions of seventy-five Chinese teachers toward collaborative effort between the school and the family. The findings of this study clearly indicated that Chinese teachers understood the importance of parental involvement to student success and that they planned to work with parents to foster a positive environment in support of school and family collaboration. The author recommended that a school-initiated comprehensive school and family collaboration plan be developed to accomplish higher efficiency and effectiveness.

Liu and Tan claimed that current events happening in society had direct impact on the physiological and psychological development of students in primary and secondary schools. Incorporating social events into primary and secondary school teaching could enhance student learning activities, increase their ability of social recognition, adaptation and contribution to society. Significant attention needs to be paid to selecting social events to fit into meaningful themes which are structured around a set of systematic concepts. Educational and psychological considerations need to be taken in incorporating social events in class activities. Students need to be prepared to assume their role recognition and critical thinking in their involvement of discussion in social events.

In the three articles selected for publication in this issue, the editors have identified a common planning thread across the articles. Even though the studies were performed at different school levels, it is clear that there is a planning intent embedded in the purposes of the studies. Brinkman was looking at planning for the reform of teacher preparation program in higher education. While Shu was focusing on how school and family collaboration could be better planned through the perceptions of elementary school teachers, Liu and Tan was working hard to plan to incorporate social events into elementary and secondary school curricula. All the articles in this issue serve well as excellent examples of educational planning effort.

Editor: Tak Cheung Chan

Associate Editors: Walt Polka and Peter Litchka

Assistant Editor: Holly Catalfamo

February, 2019

## ABOUT THE AUTHORS

**Jodie L. Brinkmann** is currently an Assistant Professor of Education in the College of Education and Human Services at Longwood University in Virginia. She has served in the field of education and educational leadership for over twenty-five years and has recently served as an elementary school principal for eleven years. She is a scholarly practitioner and enjoys writing and presenting her research at international, national, state and regional professional conferences.

**Dehua Liu** is Professor of Education of the College of Education Science, Hunan Normal University, Changsha, Hunan Province, China. He specializes in curriculum development and implementation. As senior faculty, Dr. Liu took the lead in many research initiatives of his college by sharing his unique professional experiences in science education and elementary education reforms.

**Zhiding Shu** is the Dean of the School of Education, Huzhou Normal University, Huzhou, Zhejiang Province, China. His previous experiences include serving as professor of educational leadership and chairing the Center of Educational Leadership at Shanghai Normal University and the Center of Teacher Training at Zhejiang Normal University, China. Dr. Shu's research interests include educational leadership, teacher education and educational philosophy.

**Xianghua Tan** is currently an Assistant Lecturer at Shu Ming College of Early Childhood Education, Shu Ming, Guangdong Province, China. Her academic interest includes the teaching and research of educational theories and methodologies. She is a frequent presenter of renowned educational conferences and has published in her area of specialization in major educational journals in China.

# MAKING A DIFFERENCE: INCREASING ELEMENTARY PRE-SERVICE TEACHERS' SELF-EFFICACY IN MATHEMATICS

JODIE L. BRINKMANN

Longwood University

## ABSTRACT

*Institutions of Higher Education across the United States strive to improve the quality of teacher preparation programs. The institution where this study took place discovered an acute problem when preservice teachers were completing practicum-embedded mathematics coursework during a senior level practicum experience. Preservice teachers reported varying levels of self-efficacy in mathematics and self-efficacy in teaching mathematics, which presented significant challenges when working with elementary students in their field placements. The focus of this study was to investigate how teacher preparation programs can better prepare preservice teachers to teach mathematics in an elementary classroom. By more closely examining preservice teachers' self-efficacy in mathematics and examining specific strategies for increasing self-efficacy in teaching mathematics, teacher preparation programs can be more informed and bolster self-efficacy of teaching candidates. Findings from this study suggest growth in both participants' self-efficacy in mathematics and in teaching mathematics. These findings can shed light on how institutions of higher education can best prepare preservice teachers to be successful in an elementary mathematics classroom. This study can also be used as evidence of how universities use research to drive program development and improvements, which closely align with CAEP standards and expectations.*

## INTRODUCTION

Institutions of Higher Education across the United States strive to improve the quality of teacher preparation programs to meet the diverse needs of 21<sup>st</sup> century students. Preservice teachers (PT) are often required to complete practicum-embedded mathematics coursework as part of their programming. The National Council for Teachers of Mathematics (2014) assert that “students’ understanding of mathematics, their ability to use it to solve problems, and their confidence in, and disposition toward mathematics are all shaped by the teaching they encounter in school” (p. 16-17). This places an enormous responsibility on teacher preparation programs to ensure that elementary teachers are equipped with research-based best practices that foster high-levels of self-efficacy and self-efficacy in teaching mathematics. Institutions of Higher Education (IHE) that prepare teachers must satisfy the standards set forth by The Council for the Accreditation of Educator Preparation (CAEP), The Council of Chief State School Officers and The Interstate Teacher Assessment Consortium (InTASC) to ensure their teacher candidates have the knowledge, skills and dispositions needed to be highly effective classroom teachers.

The institution where this study took place discovered an acute problem when PT was completing practicum-embedded mathematics coursework during a senior level practicum experience. Anecdotal records from professors, PT, and cooperating teachers in the field reflected varying levels of PT’ self-efficacy in mathematics and self-efficacy in teaching mathematics. For instance, some PT strongly disliked mathematics and were terrified to teach mathematics to young children; and others felt confident in their own mathematics abilities but were reluctant to teach mathematics to children. PT stated they needed more research-based strategies when working with diverse populations. They struggled to differentiate instruction and implement culturally

responsive pedagogy to help students build conceptual knowledge and understand the importance of mathematics in their everyday lives. According to Bates, Latham and Kim (2011), there is a direct correlation between PT' confidence in teaching mathematics, teacher self-efficacy, and student achievement. Hence, the researcher sought to investigate the following as part of senior level practicum-embedded coursework and field experience: 1.) What are PT' levels of self-efficacy in mathematics and; 2.) What are PT' levels of self-efficacy in teaching mathematics in the elementary classroom? These findings can shed light on how IHE can best prepare PT to be successful in an elementary mathematics classroom. This study can also be used as evidence of how universities use research to drive program development and improvements, which closely align with CAEP standards and expectations.

The institution of higher education referred to in this study is located in central Virginia, mid-Atlantic region of the United States. Pre-service teachers spend the majority of their field placement hours in a localized region surrounding the university. There are eight school divisions within a sixty-mile radius of the university. The demographics of the region include, school systems that serve high levels of students coming from economically disadvantaged communities. The authorities in local school divisions struggle to meet accreditation standards and Virginia Department of Education (VA DOE, 2016) data reflect that black, Hispanic, limited English proficient, and students with disabilities passing rates in mathematics are significantly lower than peers in passing minimum competency end of year standardized assessments. PT need to be prepared to meet the diverse learning needs of these students. Hence, a crucial need exists for IHE to examine self-efficacy in mathematics to identify possible clinical experiences that foster higher levels of self-efficacy, coupled with culturally responsive pedagogy, so PT are more prepared going into their field experiences and future classrooms. Furthermore, since teachers are models for students in terms of their levels of self-efficacy, then it becomes necessary to measure the teacher's level of self-efficacy with mathematics.

## LITERATURE REVIEW

### Self-Efficacy

According to Bates, et al. (2011), student achievement is directly correlated to PT confidence in teaching mathematics and teacher self-efficacy. For this reason, teacher educators must structure field experiences in ways to best build PT' self-efficacy in mathematics and in teaching mathematics if they are to positively impact their future students' mathematics achievement. In turn, institutions of higher education play an essential role in fostering PT' content knowledge and pedagogy, coupled with clinical experiences to advance their knowledge, skills, and teaching dispositions thus building higher levels of mathematics efficacy (Haverback & Scot, 2015). In addition, experiencing struggle, engaging in reflection, adaptation, and learning to be resilient are important parts of their training. According to Briley (2012), research suggests that mathematical beliefs play an important role in teaching efficacy of the PT, and mathematical beliefs were found to have a statistically significant effect on mathematics self-efficacy (p. 9).

It is important to clearly distinguish between a teacher's mathematics self-efficacy, (teacher's own beliefs in his/her ability to perform mathematics tasks) and a teacher's self-efficacy for teaching mathematics, (beliefs about one's own ability to teach others mathematics) (McGee & Wang, 2014). Albert Bandura, a leading researcher in the field of psychology, developed what is commonly known as Self-Efficacy Theory. Bandura (1997) refers to self-efficacy as "the belief

in one's ability to influence events that effect one's life and control over the way these events are experienced" (p.77). Bandura suggested that self-efficacy and, therefore, teacher efficacy, are formed through four sources: emotional and physiological state, verbal persuasion, vicarious experiences, and mastery experiences. Bandura (1997) believed that each type of experience results in a different amount of growth in self-efficacy with mastery experiences reported to have the greatest impact of all. Therefore, how can teacher preparation programs better prepare PT to teach mathematics in an elementary classroom? By more closely examining PT' self- efficacy in mathematics and examining specific strategies for increasing self-efficacy in teaching mathematics, teacher preparation programs can be more informed and bolster self-efficacy of teaching candidates.

## **Teacher Practice and Field Experience**

The research supports a greater emphasis on practice-based teacher education versus simple classroom instruction (McDonald, Kazemi, Kelley-Petersen, Mikolasy, Thompson, Valencia, & Windschitl, 2014). Practice-based teacher education has two central components. The most important for this study are the "range of pedagogical practices whereby novice teachers are engaged in representations, decompositions, and approximations of practice" (Anthony, Hunter, & Hunter, 2015, p. 11). In the university classroom setting, PT begin to practice and refine high-leverage teaching practices (HLTP), defined as a set of teaching practices with which novice teachers positively impact student learning (Ball, Sleep, Boerst, & Bass, 2009). For the mathematics classroom, practice-based assignments are invaluable in helping PT understand a variety of interactions (Zeichner, 2010) including using HLTP such as, tasks that foster problem solving and reasoning, using a variety of representations, facilitating mathematical discourse, asking purposeful questions, and building procedural fluency from conceptual understanding.

Training PT must now be combined with an understanding of the context for their teaching, which calls for culturally responsive pedagogy. "Culturally responsive pedagogy" (Ladson-Billings, 1994) is a call for "acknowledging and responding to the unique needs of all learners and providing equitable educational opportunities for all students. . . . empower[ing] students intellectually, socially, emotionally, and politically... to impart[ing] knowledge, skills, and attitudes" (p. 17-18). Characteristics of culturally responsive teaching include, but are not limited to, communication of high expectations, student-centered instruction, reshaping the curriculum, and the teacher serving as facilitator. Culturally responsive pedagogy is one factor that can impact self-efficacy in teaching mathematics.

## **METHODOLOGY**

### **Research Design**

This study was guided by the following two research questions:

1. While enrolled in senior level practicum-embedded coursework, what are preservice teachers' levels of self-efficacy in mathematics?
2. While enrolled in senior level practicum-embedded coursework, what are preservice teachers' levels of self-efficacy in teaching mathematics?

This action research employed a quasi-experimental mixed-methods design collecting both quantitative and qualitative data. Complementary Design was used because it allowed the researcher to enhance, illustrate, and elaborate on the quantitative data rendered by the participants (Greene, Caracelli, & Graham, 1989). In this study, the quantitative data from the Mathematics Teaching

Efficacy and Beliefs Instrument (MTEBI) and Self-efficacy for Teaching Mathematics Instrument (SETMI) and the qualitative data from the focus groups helped detect PT' levels of self-efficacy in mathematics, and in teaching mathematics.

## **Participants and Setting**

This study was conducted in Fall 2016 with all 61 PT participating in senior level practicum-embedded coursework, which included over sixty hours of field experience. Demographic variables included: 60 females, one male; all undergraduates in their senior year, age range 20-22; 56 Caucasian, 3 African American, and 2 Other. All participants were in the PreK-6 teacher licensure program. Classes and training were held on the university campus. Practicum experiences took place at elementary schools in the region surrounding the university (approximately a 30-mile radius from the university campus). The schools in this region serve predominantly economically disadvantaged communities and many have had challenges obtaining full accreditation status from the state board of education.

## **Measures**

Pre- and post-data were collected from participants on the first and last day of the practicum-embedded course. Quantitative data were collected utilizing two professionally established instruments, the SETMI and MTEBI. Focus groups were conducted using a semi-structured protocol to obtain qualitative data. The SETMI, first created in July 2010, is aligned with Bandura's (1997) research on self-efficacy and Hoy and Woolfolk's (1990) proposition that teachers' efficacy was comprised of two different unrelated factors: teaching efficacy and personal efficacy. The SETMI consists of 22 Likert response items using a five-point scale. McGee & Wang (2014) investigated the construct validity of the SETMI using a rigorous scoring guide and confirmatory factor analysis and the "findings indicate that the SETMI is a valid and reliable measure of two aspects of self-efficacy: pedagogy in mathematics and teaching mathematics content" (p. 390).

Efficacy in teaching mathematics is measured by the MTEBI. The MTEBI was created by Enochs, et al., (2000) by revising their earlier published Science Teaching Efficacy Beliefs Instrument (STEBI; Riggs & Enochs, 1990) to be mathematics-specific. Its two subscales are consistent with the two-dimensional aspect of teaching efficacy. The Personal Mathematics Teaching Efficacy (PMTE) subscale addresses the PT' beliefs in their individual capabilities to be effective mathematics teachers. The Mathematics Teaching Outcome Expectancy (MTOE) subscale addresses the PT beliefs that effective teaching of mathematics can bring about student learning regardless of external factors. The instrument uses a Likert scale with five response categories (strongly agree, agree, uncertain, disagree, and strongly disagree) with higher scores indicating greater teaching efficacy. The results indicate high reliability (Chronbach's alpha = .88 for PMTE and .81 for MTOE) and represent independent constructs based on confirmatory factor analysis (Swars, S., Smith, S. Z., Smith, M. E., & Hart, L. C., 2009).

The researcher also utilized qualitative methods to gather data using a focus group protocol. As Rossman and Rallis (2003) theorized, focus group methodology assumes that people need to interact with one another to challenge their own thinking and to clarify their own beliefs, thus leading to an interactive discussion through open dialogue. PT volunteered to participate in focus groups by way of a Google Doc sign-up and the 30-minute focus group sessions were conducted by a graduate student trained in the use of the approved semi-structured interview protocol. In

total, approximately 34% (n =21) of PT participated in the focus groups. The demographic composition of the group was: 20 females, one male; 17 Caucasians, three African American, and 1 other ethnicity; senior level undergraduate students; age range of 20 - 22 years old; and currently enrolled in the teacher preparation program for Pre-K - 6 licensure. Before systematically collecting data, the researcher obtained permission from all participants involved in this study, as well as the university's Institutional Review Board. Confidentiality was explained to each participant and to ensure anonymity, pseudonyms were used for all participants. Focus group sessions were audiotaped and recordings were transcribed for theme-emersion analysis by the researcher.

*Semi-Structured Interview Protocol:*

1. How prepared do you feel to implement best practices in mathematics? Provide a rationale and experiences.
2. How prepared do you feel to differentiate mathematics instruction? Why do you say that?
3. What was the most beneficial part of your mathematics course-work and clinical experience? Why?
4. What did you learn about yourself as a future teacher of mathematics?
5. What did you observe about how children learn mathematics?
6. Teaching math to children can be\_\_\_\_\_.

**The Study**

A pilot study was completed in the spring 2016 with 21 participants. Changes were made from the pilot study to the experimental study based on outcome data and implementation recommendations. The number of participants in the pilot study was large because all preservice teachers enrolled in the university mathematics methods course were invited to participate. No participants from the pilot study (both quantitative or qualitative) were included in the actual sample of 60 participants selected for the study. The experimental study consisted of three main parts (professional development, writing and teaching a mathematics lesson plan, and teaching small group remediation lessons using the Informative Assessment for Data-Driven Intervention in Mathematics (IADDIM) framework). First, pre-data were collected prior to two five-hour workshops on best practices in elementary mathematics. Second, PT were required to write one complete mathematics lesson plan using a university template and incorporating NCTM and other components of student-centered mathematics (Van De Walle, 2012). They taught the lesson (and video-taped themselves teaching) while being observed by peers and coached by the university professor. Individual data-driven post-observation conferences were completed with the professor and peer observation group. While watching the video, PT completed an in-depth-self reflection protocol and wrote a reflective summary. Third, the PT utilized the IADDIM framework and facilitated a minimum of four small group lessons (twenty-minute each) using research-based strategies for teaching elementary mathematics focusing on the strands of mathematical proficiency. Throughout the semester, they completed approximately 20 hours of direct instruction in a university mathematics methods course and completed approximately 20 hours in a mathematics practicum setting.

**Informative Assessment for Data-Driven Intervention in Mathematics**

The IADDIM is an example of an assignment specifically developed to meet the instructional needs of PT in this region, incorporating high leverage teaching practices and culturally responsive pedagogy in teaching mathematics. Implementation of the IADDIM followed a specific step-by-step process. First, PT worked with their cooperating teacher to collect data from students who

demonstrated a specific conceptual or procedural gap in a certain strand of mathematics. Second, he/she conducted a one-on-one student interview utilizing Marilyn Burns' (2015) structured interview protocol. By triangulating data from the cooperating teacher's anecdotal records, student work sample, and transcripts of one-on-one student interviews, he/she utilized the data to specifically identify the conceptual and/or procedural gaps hindering the students' performance in mathematics. Third, the PT thoroughly completed the IADDIM Planning Tool which includes: identification of a specific math standard, error pattern, behavioral objective; strategies for building conceptual knowledge, procedural knowledge, application/real-world connections, positive dispositions; and manipulatives used in the intervention lessons (see Figure 1). Credit is given to Jeane M. Joyner and Mari Muri (2011) for providing a model for adaptation for the IADDIM. Next, they worked with a small group of students regularly over a two-week period (not less than four times, but the frequency was determined by students' needs). PT wrote a brief reflective summary at the end of each lesson and used that day's lesson data to drive subsequent sessions. Finally, he/she submitted a formal write-up at the completion of each two-week intervention. Each IADDIM submission

Figure 1.  
IADDIM Planning Tool

Error Pattern:	
Standard of Learning (SOL):	
Objective:	
Conceptual Knowledge	Procedural Knowledge
Application/Real World Connections	Dispositions
Manipulatives:	

included a summary of the learners' characteristics; a template of the four targets for each learner; diagnostic, formative, and summative assessments; samples of elementary students' work; pictures of the sessions; and data tables with graphs to document elementary students' growth. Finally, the PT created a reflective summary regarding the impact of the intervention on both the elementary students and themselves as future teachers. This student-centered comprehensive plan incorporates many high leverage teaching practices and the overall process aligns with Ladson-Billings' (1994) characteristics of culturally responsive pedagogy.

## **DATA ANALYSIS**

### **Quantitative and Qualitative Data**

To ensure validity of the quantitative findings, data analyses were conducted by an external party using SPSS. Paired sample t-tests were conducted for pre- and post-data from both the SETMI and the MTEBI with a statistical significance set at less than or equal to .05. Cohen's d values were calculated for all statistically significant items. For the qualitative data, the researcher utilized Erickson's (1986) interpretative method of data analysis to categorize themes or assertions from the focus group transcriptions. According to Erickson, these themes emerge from an in-depth analysis, and in this case, of the transcribed recording of focus group interviews. These themes were validated by continually confirming or disconfirming evidence from the data corpus (Erickson, 1986). Several steps were employed to complete a systematic review of the data. The researcher identified themes with each focus group meeting. As themes emerged, key links and assertions were documented from participants' responses and conversation during the focus group. Statistical analysis was conducted using frequency distributions and descriptive statistics to represent relevant findings. Final assertions had evidentiary data to confirm the findings.

## **RESULTS**

The Fall 2016 MTEBI results indicated 17 of 21 items were statistically significant. Effect sizes (Cohen's d) of .20, .50, and .80 were identified as small, medium, and large, respectively (Cohen, 1988). The study data yielded five items with medium Cohen's d values and ten items with high Cohen's d values. A few examples of data representing the high Cohen's d values were: knowing how and having the skills to effectively teach mathematics (even to a student who does not understand), understanding mathematics concepts well enough to effectively teach mathematics, effectively monitor mathematics activities, use manipulatives to explain mathematics concepts, and will continually find better ways to teach mathematics. Table 1 provides instrument questions and pre- and post-values for the 21 MTEBI items and indicates items determined to be statistically significant.

Table 2 provides pre- and post-values for all 22 SETMI items. Data further revealed statistically significant differences on all 22 items with large effect sizes for all 22. The highest effect sizes from fall 2016 were in the following areas: implement alternative teaching strategies (Cohen's d 1.88), motivate students who show a low interest in mathematics (1.63), help students value learning mathematics (1.57), discover and create mathematical patterns (1.55), as well as use a variety of assessment strategies and provide alternative explanations or examples for a confused student (1.52 each). Table 2 also indicates items determined to be statistically significant.

Table 1

MTEBI Fall 2016

Question	Pre-St Dev	Post-St Dev	P Value	Cohen's <i>d</i>
1. When a student does better than usual in mathematics, it is often because the teacher exerted a little extra effort.	3.88 .812	4.14 .826	0.015	0.31
2. I will continually find better ways to teach mathematics.	4.52 .620	4.92 .277	<0.001	0.84
3. Even if I try very hard, I will not teach mathematics as well as I will most subjects.	2.24 .843	1.72 .636	<0.001	0.70
4. When the mathematics grades of students improve, it is often due to their teacher having found a more effective teaching approach.	4.19 .612	4.38 .553	0.040	0.32
5. I know how to teach mathematics concepts effectively.	3.02 .839	4.28 .552	<0.001	1.78
6. I will not be very effective in monitoring mathematics activities.	2.16 .706	1.38 .610	<0.001	1.19
7. If students are underachieving in mathematics, it is most likely due to ineffective mathematics teaching.	3.43 .899	3.59 .879	0.253	
8. I will generally teach mathematics ineffectively.	1.79 .727	1.26 .545	<0.001	0.82
9. The inadequacy of student's mathematics background can be overcome by good teaching.	4.21 .556	4.35 .578	0.117	
10. When a low-achieving child progresses in mathematics, it is usually due to extra attention given by the teacher.	3.97 .677	4.10 .676	0.220	
11. I understand mathematics concepts well enough to be effective in teaching elementary mathematics.	3.53 .740	4.49 .566	<0.001	1.46
12. The teacher is generally responsible for the achievement of students in mathematics.	3.60 .829	3.86 .724	0.021	0.34
13. Students achievement in mathematics is directly related to their teacher's effectiveness in mathematics teaching.	3.74 .752	4.12 .663	<0.001	0.56
14. If parents comment that their child is showing more interest in mathematics at school, it is probably due to the performance of the child's teacher.	3.80 .659	4.15 .654	0.004	0.55
15. I will find it difficult to use manipulatives to explain to students why mathematics works.	1.95 .869	1.21 .401	<0.001	1.09
16. I will typically be able to answer students' questions.	3.88 .543	4.24 .513	<0.001	0.69
17. I wonder if I will have the necessary skills to teach mathematics.	3.55 1.03	2.02 .695	<0.001	1.73

18. Given a choice, I will not invite the principal to evaluate my mathematics teaching.	2.31 .928	1.40 .751	<0.001	0.91
19. When a student has difficulty understanding a mathematics concept, I will usually be at a loss as to how to help the student understand it better.	2.28 .739	1.39 .525	<0.001	1.43
20. When teaching mathematics, I will usually welcome student questions.	4.31 .681	4.72 .444	<0.001	0.71
21. I do not know what to do to turn students on to mathematics.	2.87 .791	1.52 .644	<0.001	2.00

Significance for p value from 2 tailed t-test <0.05; N=58

*Table 2*  
SETMI Fall 2016

Question	Pre-Std Dev	Post-Std Dev	P Value	Cohen's <i>d</i>
1. To what extent can you motivate students who show low interest in mathematics?	2.97 .849	4.18 .619	<0.001	1.63
2. To what extent can you help your students value learning mathematics?	2.98 .859	4.20 .679	<0.001	1.57
3. To what extent can you craft relevant questions for your students related to mathematics?	3.18 .950	4.16 .663	<0.001	1.20
4. To what extent can you get your students to believe they can do well in mathematics?	3.39 .754	4.44 .696	<0.001	1.46
5. To what extent can you use a variety of assessment strategies in mathematics?	2.89 1.12	4.31 .696	<0.001	1.52
6. To what extent can you provide an alternative explanation or example in mathematics when students are confused?	2.77 .931	4.11 .676	<0.001	1.52
7. How well can you implement alternative teaching strategies for mathematics in your classroom?	2.76 .935	4.28 .662	<0.001	1.88
8. Describe characteristics of numbers (i.e. whole numbers, fractions, decimals).	2.61 .875	3.74 .835	<0.001	1.32
9. Perform strategies for composing and decomposing numbers by manipulating place value in addition and subtraction.	3.07 .990	4.28 .733	<0.001	1.39
10. Perform strategies for composing and decomposing numbers by manipulating place value in multiplication and division.	2.71 .965	3.97 .795	<0.001	1.42
11. Express their reasoning.	2.68 1.07	3.56 .847	<0.001	0.91

12. Compare equivalence of fractions and decimals.	2.74 .974	3.62 .778	<0.001	1.00
13. Interpret inverse relationships between operations (i.e. +, -, *, /).	3.26 1.01	4.33 .681	<0.001	1.25
14. Represent numbers on a number line.	2.82 1.17	3.74 .947	<0.001	0.86
15. Collect, plot, and interpret data (on any type of graph).	3.34 1.04	4.33 .831	<0.001	1.05
16. Measure area and perimeter.	3.48 1.04	4.28 .739	<0.001	0.89
17. Move between enactive (i.e. unifix cubes) and iconic (i.e. bar model) representations.	2.39 .912	3.41 .901	<0.001	1.13
18. Identify a mistake in a completed solution.	2.16 .927	3.05 .884	<0.001	0.98
19. Measure the length of objects.	3.90 .882	4.64 .633	<0.001	0.96
20. Discover and create mathematical patterns.	3.19 1.01	4.49 .622	<0.001	1.55
21. Interpret variables in an algebraic equation.	3.34 1.16	4.16 .757	<0.001	0.84
22. Solve contextual word problems.	3.23 .913	4.20 .771	<0.001	1.16

\* Two-tailed paired sample t-tests with significance set at < .05; N=58

## Qualitative Results

*Table 3*

### Emergent Themes Focus Group Interviews Fall 2016

Emergent Themes	Frequencies	Sample Verbatim Quotes
Teacher Efficacy- more prepared and/or confident	49	<p>"I felt a lot more prepared working with manipulatives and learned how to gradually scaffold instruction when students didn't need them anymore" (AM4, p.1).</p> <p>"I didn't realize how and what a difference I could make on a student until now. Seeing the IADDIM results before and after and comparing it really made me realize, I can do this and I have the knowledge to make a difference" (C4, p.8).</p>

		<p>"I learned that its okay to have fun and take risks... believe in your students" (AP3, p. 8).</p> <p>"I learned that all children learn differently, so I have to plan differently for different kids, and have a variety of strategies and manipulatives ready to go" (C4, p. 8).</p>
		<p>"I feel like now math is easier for me to be able to teach it and use best practices" (AM4, p. 1).</p> <p>"The more confident we feel teaching math, the more confident our students will be learning it" (AM4, p. 8).</p>
IADDIM Planning Tool and/or Training	30	<p>"I think that it is one thing to learn about best practice and it's another to implement it and see how powerful it can be for students" (AP8, P.3).</p> <p>"You can make your own IADDIM groups during class time to differentiate instruction for all learning levels" (N2, p. 9).</p> <p>"I love the real-world connections used in the IADDIM Planning Tool" (AM3, p. 10).</p> <p>"Using the IADDIM Planning Tool helped me create learning targets and taught me to think about "why" I was teaching this way...explain my rationale... conceptual and procedural knowledge...and how to motivate kids" (C6, p.2).</p>
Ability to build elementary students' self-efficacy in mathematics	24	<p>"The more confident I feel teaching the more confident our students will feel learning mathematics." (AM2, p.6)</p> <p>"I just think the IADDIM was so beneficial and so empowering and rewarding to hear students say they are smart and like math... I benefited from that in my confidence of teaching math as well" (C5, p.4).</p> <p>"I learned that a child's attitude towards math is reflected in how well they learn math" (AP3, p. 13).</p> <p>"I learned that children learn math through trial and error... they learn from their mistakes... I can guide their thinking" (N2, p. 10).</p>

Table 3 describes qualitative data collected from two focus groups conducted in the Fall 2016. The researcher coded the transcripts using inductive analysis and as themes emerged, key links and assertions were documented. These themes were collapsed and quotes were used to more clearly elucidate the findings. The four emergent themes included:

- 1.) Efficacy: PT felt more prepared and/or confident teaching the IADDIM (N=49);
- 2.) Scaffolding Instruction: PT felt more confident teaching mathematics using concrete resources (manipulatives), semi-concrete, and abstract teaching methods (N= 44);
- 3.) IADDIM Planning Tool and/or Training: PT indicated that the IADDIM Planning Tool and mathematics training workshops were beneficial (N=30);
- 4.) Building Elementary Students' Self-Efficacy in Mathematics: PT asserted that the more confident they became teaching mathematics, the more confident their students became learning mathematics (N=24).

### **LIMITATIONS**

While the findings of this study are encouraging, the researcher acknowledges the following limitations. Due to this action research occurring during a semester-long course, the participants were a convenience sample of elementary PT from one university; therefore, the generalizability of the findings is limited. The small sample size and demographics of the region also impacts generalizability. This study contributes to current research-based literature regarding specific types of field experiences that have the greatest impact on building PT' self-efficacy in mathematics and in teaching mathematics.

### **DISCUSSION**

The focus of this study was to investigate how teacher preparation programs can better prepare PT to teach mathematics in an elementary classroom. By more closely examining PT' self-efficacy in mathematics and examining specific strategies for increasing self-efficacy in teaching mathematics, teacher preparation programs can be more informed and bolster self-efficacy of teaching candidates. Given the diversity in public education and especially in the region where this study took place, the need was clear that more research was warranted to gauge preservice teachers' self-efficacy in mathematics while participating in senior level practicum-embedded coursework. Findings suggest growth in both participants' self-efficacy in mathematics and in teaching mathematics. Data from this study indicate the PT must have field-based teaching opportunities so they can practice HLTP and culturally responsive pedagogy, experience struggle, engage in reflection and adaptation, while learning to be resilient as part of their training. Experiences such as engaging in professional development, writing lesson plans and teaching large and small group mathematics lessons, and implementing practice-based teaching strategies, through the field-based IADDIM assignment (required PT to interview, assess, and remediate mathematical deficiencies with a small group of elementary students) were experiences that participants stated had an impact on fostering self-efficacy. It is essential that teacher educators structure field experiences in ways to best build PT' self-efficacy in mathematics and in teaching mathematics if they are to positively impact their future students' mathematics achievement.

## IMPLICATIONS

IHE and Education Preparation Programs are charged with the enormous responsibility of ensuring that elementary PT are equipped with data-driven, culturally-responsive pedagogy that foster high-levels of self-efficacy in teaching mathematics. The timeliness of this action research provides the opportunity for teacher educators to synthesize these findings and consider implications for university education preparation programs. When IHE are re-imagining their teacher preparation programs, an intentional concerted effort needs to be focused on practicum-embedded coursework. This assures that PT have the opportunity to engage in field-based authentic lesson planning and instruction; teaching with mathematics using manipulatives; implementing assignments like the IADDIM (that diagnose error patterns, build conceptual and procedural knowledge, real-world connections, and positive student dispositions towards mathematics); maximizing actual instructional time teaching; and overall, building elementary students' self-efficacy in mathematics. Through practicum-embedded coursework which incorporates professional development workshops, writing and teaching mathematics lessons (including coaching and in-depth reflection protocols) the university is meeting the vision of "Excellence in teacher preparation" (CAEP, 2015, Vision, para. 1) by providing rigorous and comprehensive education preparation programs to prepare PT for the challenges of the 21<sup>st</sup> century classroom.

## RECOMMENDATIONS

How can teacher preparation programs better prepare PT to teach mathematics in an elementary classroom? By more closely examining PT' self- efficacy in mathematics and examining specific strategies for increasing self-efficacy in teaching mathematics, teacher preparation programs can be more informed and bolster self-efficacy of teaching candidates.

First, it is essential that PT have the opportunity to practice their pedagogy in a smaller setting with on-going support and feedback of tenure-track faculty in the teacher preparation program. This is not to minimize clinical field placements that afford PT the opportunity to augment their self-efficacy in teaching mathematics. However, before being tasked with the responsibility of differentiating mathematics for a classroom full of students, PT would benefit from scaffolded instruction beginning with small group teaching assignments.

Second, this research supports the importance of content specific methods course work that correlate with specific field assignments requiring students to directly teach lessons using best practices in mathematics. Specifically recommended is a data-driven intervention lesson planning tool such as the IADDIM; integrating conceptual knowledge; procedural knowledge; real world connections; and negotiating opportunities to build positive dispositions in mathematics. Students reported in interviews for employment that field-based assignments like the IADDIM experience and entire process of data-driven intervention and instruction was a "game changer."

I feel significantly more prepared to teach math because I have been taught strategies to use, and I have practice with it. I feel the IADDIM helped the most because I was able to sit down with students and actually work with them to figure out strategies to help them learn. All kids can learn! (A41, p. 1)

Content specific methods coursework like the IADDIM assignment have shown a positive impact on elementary PT' self-efficacy in mathematics and in teaching mathematics.

Third, according to Bates, Latham, and Kim (2011), there is a direct correlation between PT' confidence in teaching mathematics, teacher self-efficacy, and student achievement. Hence, it is imperative that IHE examine their current teacher preparation programs to see if there are opportunities for (senior level) practicum-embedded mathematics coursework, and if so, what assignments are required in those courses. This research supports that IHE should investigate their PT' levels of self-efficacy in mathematics and in teaching mathematics in the elementary classroom. IHE can then use these data to drive program development and improvements by focusing on practicum-embedded coursework with content specific methods assignments (e.g. data-driven intervention lesson planning using a tool such as the IADDIM).

IHE have a tremendous responsibility to prepare our PT to meet the unique and diverse needs of all learners. It is essential that teacher educators structure field experiences in ways to best build PT' self-efficacy in mathematics and in teaching mathematics if they are to positively impact their future students' mathematics achievement. The researcher continues to seek out opportunities to use student-driven, course specific research to make program improvements so we may continue develop PT that are "change agents" for the future.

## REFERENCES

- Anthony, G., Hunter, J., & Hunter, R. (2015). Supporting prospective teachers to notice students' mathematical thinking. *Mathematics Teacher Education and Development*, 17(2), 7-24. Retrieved from <http://eric.ed.gov/?id=EJ1085900>.
- Ashlock, R. (2005). *Error patterns in computation: using error patterns to improve instruction* (9th ed). Upper Saddle Hill, NJ: Prentice Hall.
- Ball, D. L., Sleep, L., Boerst, T., & Bass, H. (2009). Combining the development of practice and the practice of development in teacher education. *The Elementary School Journal*, 109(5), 458-474. doi:10.1086/596996.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman.
- Bates, A. B., Latham, N., & Kim, J. A. (2011). Linking preservice teachers' mathematics self-efficacy and mathematics teaching efficacy to their mathematical performance. *School Science and Mathematics*, 111(7), 325-333. doi:10.1111/j.1949-8594.2011.00095.x.
- Briley, J. S. (2012). The relationship among mathematics teaching efficacy, mathematics self-efficacy, and mathematical beliefs for elementary preservice teachers. *Issues in the Undergraduate Mathematics Preparation of School Teachers*, 5, (1-13). Retrieved from <http://eric.ed.gov/?id=EJ990482>.
- Burns, M. (2015). *About teaching mathematics: A K-8 resource* (4<sup>th</sup> ed). Sausalito, CA: Math Solutions.
- CAEP. (2015). Council for the Accreditation of Teacher Preparation. Retrieved from <http://caepnet.org>.
- Council of Chief State School Officers. (2017). *Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards: A Resource for State Dialogue*, Washington D.C. Retrieved from <http://www.ccsso.org/intasc>.
- Enochs, L. G., Smith, P. L., & Huinker, D. (2000). Establishing factorial validity of the mathematics teaching efficacy beliefs instrument. *School Science and Mathematics*, 100(4), 194-202. doi:10.1111/j.1949-8594.2000.tb17256.x.

- Erickson, F. (1986). *Handbook of research on teaching*. New York, NY: MacMillan Publishing Company.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274. doi.org/10.3102/01623737011003255.
- Haverback, H. R., & Scot, M. (2015). Shedding light on preservice teachers' domain-specific self-efficacy. *The Teacher Educator*, 50(4), 272-287. doi.org/10.1080/08878730.2015.1070942.
- Hoy, W., & Woolfolk, A. (1990). Socialization of student teachers. *American Education Educational Research Journal*, 27(2), 279-300. doi.org/10.3102/00028312027002279.
- Joyner, J. M., & Muri, M. (2011). *Informative assessment (formative assessment to improve math achievement)*. (1<sup>st</sup> Ed). Sausalito, CA: Math Solutions.
- Ladson-Billings, G. (1994). *The dreamkeepers*. San Francisco, CA: Jossey-Bass Publishing Co.
- McDonald, M., Kazemi, E., Kelley-Petersen, M., Mikolasy, K., Thompson, J., Valencia, S.W., Windschitl, M. (2014). Practice makes practice: Learning to teach in teacher education. *Peabody Journal of Education*, 89(4), 500-515. doi: 10.1080/01695. 6X.2014.93.
- McGee, J. R., & Wang, C. (2014). Validity-supporting evidence of the self-efficacy for teaching mathematics instrument. *Journal of Psychoeducational Assessment*, 32(5), 390-403. doi:org/10.1177/0734282913516280.
- National Council of Teachers of Mathematics. (2014). *Principles to actions: ensuring mathematical success for all*. Reston, VA: National Council of Teachers of Mathematics.
- Riggs, I. M., & Enochs, L. G. (1990). Toward the development of an elementary teacher's science teaching efficacy belief instrument. *Science Education*, 74(6), 625-637. Retrieved from: <http://eric.ed.gov/?id=ED308068>.
- Rossman, G., & Rallis, S. (2003). *Learning in the field: An introduction to qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Swars, S. L., Smith, S. Z., Smith, M. E., & Hart, L. C. (2009). A longitudinal study of effects of a developmental teacher preparation program on elementary prospective teachers' mathematics beliefs. *Journal of Mathematics Teacher Education*, 12(1), 47-66. doi.org/10.1007/s10857-008-9092-x.
- Virginia Department of Education, (2016). Retrieved from: [www.doe.virginia.gov](http://www.doe.virginia.gov).
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 6 (1-2), 89-99. doi:org/10.1177/0022487109347671.

# CHINESE TEACHERS' PERCEPTIONS OF SCHOOL FAMILY COLLABORATION: A STUDY OF ELEMENTARY SCHOOLS IN ZHEJIANG PROVINCE

ZHIDING SHU

Huzhou Normal University

## ABSTRACT

*The purpose of this study is to investigate Chinese teachers' perceptions on school and family collaboration. This is a descriptive study with mainly a quantitative approach to solicit the perceptions of seventy-five Chinese teachers toward collaborative effort between the school and the family. The findings of this study clearly indicated that Chinese teachers understood the importance of parental involvement to student success and that they planned to work with parents to foster a positive environment in support of school and family collaboration. It is recommended that a school-initiated comprehensive school and family collaboration plan be developed to accomplish higher efficiency and effectiveness.*

## INTRODUCTION

Research has clearly indicated that student achievement could improve with increased collaboration between parents and school (Brough & Irvin, 2001; Fan, 2001; Fan & Chen, 2001). In this collaborative relationship, teachers are always in the frontline in contact with the parents. Therefore, it is important that teachers bear a positive attitude, initiation and willingness toward building a strong tie between families and school. In China, it has been a cultural tradition that teachers work closely with parents for the continuous growth of the children. This study will examine the Chinese teachers' perceptions toward their efficacy, willingness, administrative support, student family background, parent association, barriers to and planning for school family collaboration.

## REVIEW OF RELATED LITERATURE

Families played an important role in promoting the academic success of their children (Swap, 1993). Parents saw that school sponsored community activities provided an inviting education involvement environment (Sanders, Epstein, Connors, & Tadros, 1999; Overstreet, Devine, Bevans & Efreom, 2005). Teachers must keep in mind that parents, regardless of their income levels or ethnic background, value education of their children (Lareau, 1990). Poor parental involvement could become a barrier to educating children in school (Voltz, 1998).

Epstein (1990) declared that school policies and teacher practices could determine whether parents would participate in their children's education. In response, many states in the United States have implemented policies to involve parents in early literacy education, school safety and dropout prevention programs (Zinth, 2005).

Six types of parental involvement can be identified (Epstein, 2002): (1) parenting knowledge and skills; (2) communicating between home and school; (3) volunteering at school and in the community; (4) supporting student learning at home; (5) involvement in decision making and advocacy; (6) collaborating with the community.

Communication between schools and parents is a key component of a school and family relationship. Educators have worked on effective communication to keep parents informed of school events (Ekvall & Arvonen, 1994; Hoy & Miskel, 2005; Hughes, Ginnett, & Curphy, 2002; Yukl, 2002) and have identified communication skills and channels that would facilitate communication (Lucas, 1985). Meanwhile, Moller, et al. (2005) claimed that schools needed to alternate their communication strategies with parents to accommodate different social and educational settings.

Fan (2001) and Fan and Chen (2001) declared that increased parent teacher collaboration could help improve student academic performance. Brough and Irvin (2001) also discovered similar findings. Epstein and Sheldon (2002) also found that close parent-teacher collaboration could result in improved student school attendance.

In advancing the school and family connections, Chinese educators found that direct meetings between teachers and parents proved to be very effective in tightening the school and family tie (Jiang & Chan, 1990). Kristoffersson, Gu and Zhang (2013) disclosed that a “parent spokesman” system in China with community representatives worked in making suggestions for school improvement.

Chen and Li (2003) concluded in their study that combining school education and home education could enhance children learning. In their recent study of Chinese school and family relationship, Shu, Jiang, Xu and Chan (2014) claimed that Chinese teachers and school administrators could improve school and parent relationship by involving parents in student community experiences.

### **PURPOSE OF THE STUDY**

Schools in China are advocating the creation of school and family collaboration. It is hoped that through this collaboration, schools and families could work closely together for the overall growth development of the children. Research has indicated that teachers play an important role in this school and family collaboration. Therefore, the purpose of this study is to investigate how the Chinese teachers perceive school family collaborative efforts and what part they could play in this significant collaboration.

### **RESEARCH QUESTIONS**

The following research questions are developed to guide the process of this study:

1. How do Chinese teachers perceive the school family collaboration efforts of their schools?
2. How do Chinese teachers perceive the adequacy of school administrative support?
3. What do Chinese teachers contribute to the school family collaboration?
4. How do Chinese teachers understand their students’ family background?
5. How do Chinese teachers perceive the parent association at school?
6. What do Chinese teachers perceive as barriers to school family collaboration?
7. What do Chinese teachers perceive as essentials in planning for school family collaboration?

### **SIGNIFICANCE OF THE STUDY**

In China, Beijing Institute of Educational Administration (1981) urged for school-parent communication to enhance healthy child development. In 2001, the State Council of the People’s Republic of China specifically asked for schools to help parents create a

positive learning environment at home. In 2004, the State Council also called for schools to establish parent schools to prepare parents to work with their children at home. In recent years, the Chinese Department of Education (2012) has stressed the employment of effective strategies in developing sustainable school community relationship. Teachers in China have felt the pressure to react to the Central Government's repeated calls for better school and family relationship. This study was initiated just in time to investigate the Chinese teachers' perceptions on school and family collaboration. The findings of this study not only will add to the scarcity of literature in this field but also disclose teachers' perception tendency toward better school and family collaboration.

## **RESEARCH METHODOLOGY**

### **Design**

In this study, a basic quantitative approach was employed in the research design. In a descriptive survey of research participants, mainly quantitative data were solicited for use in the study. An open-ended question was also included to allow non-restrictive comments from the research participants. This methodology allowed the researchers to obtain an overall picture of educators' perceptions of school and family issues while at the same time provided opportunities to solicit additional detailed information through open-ended questions (Wiersma & Jurs, 2005).

### **Participants**

One hundred teachers were invited to participate in this study. They were randomly selected from twenty elementary schools located at Huzhou, Zhejiang Province, China. They were informed that their participation was voluntary. Seventy-five teachers (75%) accepted the invitation and responded to the survey attesting their honesty in responding to all the survey items.

### **Survey Instrument**

The 38-item survey instrument in this study was designed by the researcher with reference to current literature. It contains a participant's demographics section, and other sections to reflect on teacher efficacy, administrative support, teacher willingness, understanding of student family background, parent association, barriers to school family collaboration, and planning for school family collaboration. To accommodate the nature of the survey questions, for the first twenty-two items, a five-point Likert scale was used to solicit teachers' responses whereas multiple checking of a single item was allowed for the rest of the twelve items. An open-ended question was also added to allow space for teachers' additional comments. The instrument was field tested with ten teachers to confirm its appropriateness in contents, language and format for instrument improvement. The instrument was then revised to accommodate the teachers' recommendations for improvement. The revised version of the instrument was used for surveying teachers in the study.

### **Data Collection and Analyses**

The survey instrument was delivered to randomly sampled teachers of the twenty elementary schools of Huzhou, Zhejiang Province, China. One hundred survey forms, five from each elementary school, were electronically delivered to the sampled teachers with 75 responses.

Quantitative data were analyzed by descriptive statistics to display frequencies and means as indications of the directions of the participants' preferences. Qualitative data collected in the open-ended question were tabulated and coded by themes and responses. Analysis was made by closely examining emerging themes and consistent patterns of similarities and differences.

## FINDINGS

### Participants' Demographics

An analysis of the teachers' demographic information indicated that all the participating teachers were certified with 85.4% of them holding a Bachelor of Arts degree in elementary education, 9.3% of them had four-year college education and 5.3% graduated from two-year junior colleges. In teaching experiences, most of them (86.6%) have been teaching from one to fifteen years with 33.3% of them in their first five years of teaching. (See Table 1 and Table 2.)

Table 1 Education Levels of Teachers

Education Level	Number of Teachers	Percentage
Junior College	4	5.3
4 Year College	7	9.3
B.A. (Elementary Education)	64	85.4
M.A.	0	0
Doctorate	0	0
Total	75	100

The report of the findings of this study will follow the order of the research questions as shown below:

1. How do Chinese teachers perceive the school and family collaboration efforts of their schools?

Ten items are included in this section of the survey to solicit the teachers' general perceptions of the school and family collaboration. The items that were rated high include: (1) *Teachers and parents work more patiently with children with school and family collaboration* (mean=4.44); (2) *Teachers and parents work in closer relationship in school and family collaboration* (mean=4.43). The relatively low rated item was *I have sufficient knowledge and skill to manage large scale school and family activities* (mean=2.96). The overall average of the teachers' responses in these ten items was 3.692 which is above average. In fact, almost all the teachers' responses in the ten items are positively above average except one. (See Table 3.)

Table 2 Years of Teaching Experience of Teachers

Years of Teaching	Number of Teachers	Percentage
1 to 5 years	25	33.3
6 to 10 years	13	17.3
11 to 15 years	27	36.0
16 to 20 years	7	9.4
21 and over 21 years	3	4.0
Total	75	100

Table 3 Teachers' General Perceptions of School and Family Collaboration

Survey Items	Mean (on 1-5 Likert Scale)
* Students have higher achievement as a result of school and family collaboration.	4.24
* Teachers and parents work more patiently with children in school and family collaboration.	4.44
* Teacher and parent relationship improves in school and family collaboration.	4.43
* Parent cooperation enhances student achievement and behavior.	3.48
* Parents should be involved in planning school family activities.	3.55
* School family collaboration helps my class teaching.	3.69
* Parents share with teachers their children's learning and growing activities.	3.52
* I contact parents when their children are performing particularly good or bad.	3.21
* I have the ability to organize large scale school and family collaborative activities.	2.96
* School and family collaborative activities in my school are satisfactory.	3.40
Overall Rating	3.69

2. How do Chinese teachers perceive the adequacy of school administrative support?

Three items are included in this section of the survey to solicit the teachers' responses to the school administrative support of school and family collaboration. All three items were rated above average by the teachers. *School encourages parents to participate in school and family collaboration* was rated the highest (mean=3.63). *School initiates activities with family*

*support* was rated the lowest (mean=3.13). The overall teacher rating of this section was 3.364 indicating that teachers recognized the administrative support to the development of school and family collaboration. (See Table 4.)

Table 4 Teachers’ Perceptions of Administrative Support of School and Family Collaboration

Survey Items	Mean (on 1-5 Likert Scale)
* School administrators are working hard to involve parents in school activities.	3.63
* School provides teacher training opportunities to work with parents.	3.33
* School administrators organize school and family activities with parental support.	3.13
Overall Rating	3.36

3. What do Chinese teachers contribute to the school and family collaboration?

This section of the survey includes five items intending to examine the teachers’ contributions to the school family collaboration through their expression of willingness to participate in the collaborative effort. Teachers’ responses to all the five items were above average indicating the teachers’ enthusiasm in participating in the school and family collaboration. The overall average of all five items in this section was 3.795. The item with the highest rating (mean=4.15) was *to reserve sufficient time to interact with parents during school and family collaboration functions*. The comparatively lowly rated item was *to regularly update children’s growth development to parents who do not live with their children* (mean=3.41). (See Table 5.)

Table 5 Teachers’ Perceptions of Their Contributions to School and Family Collaboration

Survey Items	Mean (on 1-5 Likert Scale)
* I treat the parents as my partners in teaching.	3.81
* I will learn all the skills needed to communicate with parents.	3.81
* I will participate in school sponsored workshops to help promote school and family collaboration.	3.79
* I will regularly report children’s activities to parents who do not live with their children	3.41
* I will provide sufficient time for parent responses in PTA meetings.	4.15
Overall Rating	3.79

#### 4. How do Chinese teachers understand their students' family background?

This section of the survey includes four items aiming at investigating how Chinese teachers understand their students' family background. The teachers rated all the four items to be above average with an overall average rating of 3.4. The highest rated item was *understanding the cultural and financial background of the students' family* (mean=3.52). The lowest rated item was *parents want to know more about the school curriculum* (mean= 3.25). In general, the teachers expressed their intention and desire to understand more of the students' family background to be able to offer appropriate assistance to the students. (See Table 6.)

Table 6 Teachers' Perceptions of Their Understanding of Student Family Background

Survey Items	Mean (on 1-5 Likert Scale)
* I understand the cultural and economic backgrounds of the students' family.	3.52
* Children's academic achievement is the parents' most concerned item.	3.48
* Parents have time to work with their children on homework assignments.	3.35
* Parents want to know more about the school curriculum.	3.25
Overall Rating	3.40

#### 5. How do Chinese teachers perceive the parent association at school?

In their responses to parent associations in school, the teachers indicated that 94.7% of the schools had parent association established and were in operation. However, when they were asked if they took initiative to contact parents in the association, most of them (56.8%) responded that they did not take the initiative. Approximately 14.8% of the teachers indicated that they did not know how to properly contact the parents. (See Table 7.)

Teachers perceived that parent representatives in the parent association could reflect the parents' wishes to the school (30.5%) and make suggestions for improving teacher and parent communication (37.9%). They thought of the major functions of the parent association as (1) to help parents better understand the school programs and operation (24.3%) and (2) to communicate to teachers and school administrators the demands and recommendations of the parents (29.2%). Teachers considered it a great opportunity during the parent association meetings to discuss (1) student school performance (30%); (2) parental cooperation in their children's education (38.3%); and (3) parental perspective on school improvement. (31.7%). (See Table 7)

#### 6. What do Chinese teachers perceive as barriers to school family collaboration?

Unsupportive situations could create barriers to school and family collaboration. Teachers evaluated these barriers and summarized the main causes of these barriers to be (1) too busy in daily life (24.6%); (2) school lack of collaborative environment (34.3%); and (3) uncooperative parents (35.8%). The teacher identified problematic issues of school and family collaboration

to include (1) parents not actively involved (26.3%); (2) school not taking it seriously (21.8%); and (3) teachers and parents do not agree (18.4%). Teachers also examined the reasons of ineffective school and family collaboration as (1) lack of multiple channels of communication (48.2%); and (2) lacking ways of systematic management (35%). (See Table 8.)

7. What do Chinese teachers perceive as essentials in planning for school family collaboration?

Most of the Chinese teachers (60%) perceived the most significant goal of school and family collaboration was to provide appropriate education programs to suit the children’s needs. In planning for school and family collaboration, Chinese teachers preferred to communicate with parents by using telephone (39.6%) and by taking advantage of parents participating in school activities (27.2%). In their contact with parents, they were prepared to mainly discuss the student learning process (28.9%), student behaviors (32.4%) and student psychological development (25.4%). In the collaboration approach, teachers would like to start with teacher initiation (43.6%) followed by routinely scheduled meetings (32%). When asked how they would plan to participate in school and family collaboration activities, most teachers (40.9%) indicated that they tended to stay in touch with parents through telephone and Internet devices. [See Table 9.]

Table 7 Teachers’ Perceptions of Parent Association

Survey Items	No. of Responses	Percentage
Is there a parent association in your school?		
*Yes	71	94.7
*No	4	5.3
Do you communicate with members of the parent association?		
*Yes	21	28.4
*No	42	56.8
*Don’t know how to	11	14.8
Parent representatives should do the following (Check all that apply):		
*Deliver the parents’ voices	53	30.5
*Suggest better teacher parent communication	66	37.9
*Present successful teacher parent collaborations to other parents	39	22.4
*Participate in school development planning	16	9.2
The functions of the parent association are (Check all that apply):		
* Help all parents to have a better understanding of the school	55	25.2
* Reflect the parents’ opinions to the school	66	30.3
* Help organize school family activities	35	16.0
* Motivate parent resources to support the school	39	17.9
* Allow parents participate in school planning	23	10.6

Teachers discuss the following in the parent association meeting (Check all that apply):

* Report on students' academic achievement	54	30.0
* Request parents to work with the school	69	38.3
* Present parents' suggestions to the school	57	31.7

### Other Teacher Responses

A space was made available in the survey instrument for teachers to freely express themselves beyond the limitation of the survey questions. A few teachers took advantage of the opportunity to voice their opinions as follows:

"Routinely scheduled meetings with parents have proved to be very helpful in understanding the children's behavior and performance both at school and at home."

"School open day is a good time to exchange opinions with parents about the children's activities."

Another teacher strongly recommended the use of available technology to improve parent and teacher communication. The teacher claimed that "the use of Internet devices such as school websites would be a convenient way of school and family communication." The communication issue was also brought up by another teacher who suggested "the use of multiple channels of activities in contact with parents so that not the same parents are in touch at all times".

Table 8 Teachers' Perceptions of Barriers to School and Family Collaboration

Survey Items	Number of Responses	Percentage
The causes of barriers to school family collaboration:		
* Too busy in life	33	24.6
* School does not create the collaborative environment	46	34.3
* Uncooperative parents	48	35.8
* Parents do not know of school family Collaboration	3	2.3
*Other	4	3.0
Problematic issues in school family activities:		
* Activities are not significant	0	0
* Parents are not actively involved	47	26.3
* School does not take the collaboration seriously	39	21.8
* Collaborative format is unattractive	22	12.3
* Teachers and parents do not see eye-to-eye	33	18.4
* School does not provide appropriate participating Opportunities	26	14.5
* Lack of real communication between school and Family	3	1.7
* School taking the lead without mutual initiative	9	5.0
What prevent(s) school and family collaboration activities to be effective?		
* No frequent activities of interest	7	5.1

* Lack of multiple channels of collaboration	66	48.2
* No attention was paid to the collaboration effectiveness	15	10.9
* No system of management and evaluation	48	35.0
* Other	1	0.8

## DISCUSSION

As a result of data analysis, the findings of this study have generated several significant points worthy of discussion in the following:

First, the participating teachers in this study commonly recognized that there was a definite need for school and family to work together for the betterment of children growth. This significant finding is reflecting the same ideas as expressed by Brough and Irvin (2001), Fan (2001), and Fan and Chen (2001) who claimed that close school and family relationship helped improve student performance. It also echoes Voltz (1998) who expressed that poor parental involvement resulted in barrier to student achievement.

Second, the teachers perceived that parents were not actively involved in school and family collaboration activities and that they were not cooperative in participating in school functions. On the other hand, many teachers agreed that schools did not work hard enough in building an inviting collaborative school environment for parent participation. This is contrary to the findings of Sanders, Epstein, Connors, and Tadros (1999) and Overstreet, Devine, Bevans & Efreom (2005) who indicated that parents saw school sponsored community activities to have inviting education involvement environment. At the same time, the teachers recommended that school and family collaboration should start with teacher initiation to foster an inviting environment.

Third, teachers in the study clearly indicated their intent to get to hear more from the parents and to understand more of the students' family background. However, many of them did not take the initiative to communicate with parents because they admitted that they did not have enough knowledge and skill to professionally manage large scale school and family collaboration functions. After all, over one third of the teachers in the study were young teachers with only five or less years of teaching experiences. Schools need to offer training workshops to better prepare teachers to work with parents.

Table 9 Teachers' Perception of School and Family Collaboration Planning

Survey Items	Number of Responses	Percentages
The purpose of school family collaboration is:		
* To improve student achievement	5	5.3
* To provide children with suitable education programs	57	60.0
* To better understand children development	24	25.3
* To promote love and respect for teachers and parents	9	9.4

Communication channels preferred:		
* Home visits	22	13.0
* Through parent association	26	15.4
* Parent workshops	8	4.8
* Telephone	67	39.6
* Parent participation in school functions	46	27.2
Topics for discussion with parents:		
* Student academic achievement	50	28.9
* Student behavior	56	32.4
* Student psychological mindset	44	25.4
* Student Interest	23	13.3
* Other	0	0
Teacher and parent communication should take the following approach:		
* Parents take initiative to contact teachers	17	21.8
* Teachers take initiative to contact parents	34	43.6
* Communicate as needed.	2	2.6
* Meeting on a regular schedule.	25	32.0
Teachers' preferences to participate in school family collaboration activities:		
* Meeting face-to-face with parents	35	11.3
* School open day	24	7.7
* Home visits	21	6.8
* School family networking	32	10.3
* School workshops	7	2.3
* Through Wechat or Whatsapp devices	63	20.3
* Large school functions	31	10.0
* Through telephone	64	20.6
* School website	5	1.6
* Parents come to school'	19	6.2
* Parent association	9	2.9

---

Fourth, in the teachers' observation, the schools were trying hard to get the parents involved in school activities. However, at the time of the study, the teachers thought that there was not enough parental participation in school activities. Schools need to reconsider the entire approach in encouraging parent involvement and come up with more effective strategies in managing school family collaboration.

Fifth, in their study of school and community relationship, Kristoffersson, Gu and Zhang (2013) found that a "parent spokesman" system with community representatives helped make school improvement recommendations. The findings of this study also pointed to the same direction that schools could work closely with members of the parent associations for enhanced school and family collaboration.

Sixth, the findings of this study indicate that school-initiated community activities were unattractive and that schools needed to consider more effective alternative approaches

in working with parents such as the employment of new technologies. The findings are in alignment with those of Lucase (1985) and Mollar, et al. (2005) who clearly stated that schools needed to consider alternate strategies to effectively communicate with parents.

Seventh, the State Council of the People's Republic of China (2001) asked for schools to help parents create a positive learning environment at home. More specifically, the State Council (2004) also called for schools to establish parent schools to better prepare parents to work with their children at home. However, according to the perceptions of the teachers in this study, schools had not done enough in this respect to help parents to work with their children at home.

### **IMPLICATIONS**

The findings of this study have delivered a strong message that teachers in China recognized the importance of building a strong school and family collaboration for the continuous development of the children. They need to take more initiative to work with parents to get them involved with school activities. On the other hand, schools need to consider starting to develop an overall plan for improvement of school and family relationship. The plan could include programs to prepare teachers with knowledge and skill to better work with parents efficiently and effectively. The plan could also include a component of parent workshops to prepare parents to get more involved in school and family functions. Parents can be invited to help develop the school and family collaboration plan so they can claim ownership of the plan. These constituencies in the school and family collaboration plan are all included in Epstein's types of parental involvement programs (2002).

### **CONCLUSION**

The findings of this study, as a result of data analyses, indicated that teachers were in full support of school and family collaborative efforts. They started from understanding students' family background and showed strong willingness to work with parents in the continued development of their children. However, many of them admitted that they needed help to prepare them to become better communicators with parents. The findings of this study are in agreement with the findings of several previous studies. At the same time, this study has generated new discoveries. Teachers clearly indicated that parents also need help to better understand the direction they need to follow in working with teachers and administrators at school. Therefore, the findings of this study strongly point to the need to develop a comprehensive school and family collaboration plan in response to the call for positive school family relation by the Chinese Department of Education.

### **REFERENCES**

- Beijing Institute of Educational Administration. (1981). *School administration*. Beijing, China: Educational Science Publisher.
- Brough, J. A., & Irvin, J. L. (2001, May). Parental involvement supports academic improvement among middle schoolers. *Middle School Journal*, pp. 56-60.
- Chen, N., & Li, D. (2003). On the characteristics and meaning of school-based management. *Journal of Educational Development*, 8, 47-50.
- Chinese Department of Education (2012). *Relating to the establishment of parent association in kindergartens, elementary and secondary schools*. Beijing, China: Author.

- Ekvall, G., & Arvonen, J. (1994). Leadership profiles, situation and effectiveness. *Creativity and Innovation Management*, 3(3), 139-161.
- Epstein, J. L. (1990). School and family connections: Theory, research and implications for integrating sociologies of education and family. In D. Unger & B. Sussman (Eds.). *Families in community settings: Interdisciplinary perspectives* (pp. 99-126). New York: Haworth Press.
- Epstein, J. L. (2002). *School, family and community partnerships: Your handbook for action* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Corwin Press.
- Epstein, J. L., & Sheldon, S. B. (2002). Present and accounted for: Improving student attendance through family and community involvement. *Journal of Educational Research*, 95(5), 308-318.
- Fan, X. (2001). Parental involvement and students' academic achievement: A growth modeling analysis. *Journal of Experimental Education*, 70(1), 27-61.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1-22.
- Hoy, W. K., & Miskel, C. G. (2005). *Educational administration: Theory, research, and practice* (7<sup>th</sup> ed.). Boston: McGraw-Hill.
- Huges, R. L., Ginnett, R. C., & Curphy, G. J. (2002). *Leadership—Enhancing the lessons of experience*. New York: McGraw-Hill.
- Jiang, Y. S., & Chan, T. C. (1990). *A conceptual framework of modern educational administration*. Guangdong, China: Guangdong Higher Education Press.
- Kristoffersson, M., Gu, L., & Zhang, Y. (2013). Home-school collaboration in Sweden and China. *US-China Educational Review B*, 3(3), 188-201.
- Lareau, A. (1990). *Home advantage*. Philadelphia, MA: Falmer Press.
- Lucas, B. G. (1985). The Saskatchewan principalship study report three: The principals and school-community relations. Available at <http://www.saskschoolboards.ca/old/ResearchAndDevelopment/ResearchReports/Leadership/125.htm>
- Moller, J., Eggen, A., Fugestad, O., Langfeldt, G., Presthus, A. M., Skrovset, S., et al. (2005). Successful school leadership: The Norwegian case. *Journal of Educational Administration*, 43(6), 584-594.
- Overstreet, S., Devine, J., Bevans, K., & Efreom, Y. (2005). Predicting parental involvement in children's schooling within an economically disadvantaged African American sample. *Psychology in the Schools*, 42(1), 101-111.
- Sanders, M. G., Epstein, J. L., & Connors-Tadros, L. (1999). Family partnerships with high schools. *The Parents' Perspective*, 32, 24.
- Shu, Z. D., Jiang, B., Xu, M., & Chan, T. C. (2014). Educator' perceptions of the significance of school-community relations in China. *Journal of School Public Relations*, 35(4), 477-493.
- State Council of the People's Republic of China (2001, June 15). Decision on the reform and development of elementary education. Beijing, China: *People's Daily*.
- State Council of the People's Republic of China (2004, February 26). Some suggestions on further strengthening and improving minors' ideological and moral construction. Beijing, China: *People's Daily*.
- Swap, S. M. (1993). *Developing home-school partnerships: From concepts to practice*. New York: Teachers College Press.

- Voltz, D. L. (1998). Challenges and choices in urban education: The perceptions of teachers and principals. *Urban Review*, 30, 211-228.
- Wiersma, W., & Jurs, S. G. (2005). *Research methods in education*. Boston, MA: Pearson Allyn and Bacon.
- Yukl, G. A. (2002). *Leadership in organizations* (5<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.
- Zinth, K. (2005).

## APPENDIX

### A Survey of Teacher Perceptions on School Family Collaboration

#### Section A: Teacher Demographic Information

- How many years have you been a teacher?  
 Less than 5 yrs.     6–10 yrs.     11–15 yrs.     16–20 years  
 More than 20 yrs.
- What is your highest level of education?  
 Junior College     Four Year College     Bachelor Degree  
 Master's degree     Doctoral degree

In the following sections, for each question, choose from ONE of the following 5 ratings:

#### Section B: Teaching Efficacy

- Students have higher achievement as a result of school family collaboration.  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree
- Teachers and parents work more attentively with children in school family collaboration.  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree
- Teacher and parent relationship improves in school family collaboration.  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree
- Parental cooperation enhances student achievement and behavior.  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree
- Parents should be involved in planning school family activities  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree
- School family collaboration helps my class teaching.  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree
- Parents share with teachers their children's learning and growing activities.  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree
- I contact parents when their children are performing particularly good or bad.  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree
- I have the ability to organize large scale school and family collaborative activities.  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree
- School and family collaborative activities in my school are satisfactory.  
 Strongly Disagree     Disagree     Slightly Agree     Agree     Strongly Agree

**Section C: Administration Support**

- 1. School administrators are working hard to involve parents in school activities.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree
- 2. School provides teacher training opportunities to work with parents.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree
- 3. School administrators organize school and family activities with parental support.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree

**Section D: Willingness to Contribute to School and Family Collaboration**

- 1. I treat the parents as my partners in teaching.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree
- 2. I will learn all the skills needed to communicate with parents.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree
- 3. I will participate in school sponsored workshops to help promote school family collaboration.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree
- 4. I will regularly report to parents their children's activities in school.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree
- 5. I will provide sufficient time for parent responses in PTA meetings.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree

**Section E: Understanding of Student Family**

- 1. I understand the cultural and economic backgrounds of the students' family.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree
- 2. Children's academic achievement is the parents' most concerned item.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree
- 3. Parents have time to work with their children on homework assignments.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree
- 4. Parents want to know more about the school curriculum.  
 Strongly Disagree    Disagree    Slightly Agree    Agree    Strongly Agree

**Choose your most appropriate answer(s) in the following sections:**

**Section F: Parent Association**

- 1. Is there a parent association in your school?  
 Yes                       No



3. What prevent(s) school and family collaboration activities to be effective?

<input type="checkbox"/>	No frequent activities of interest	<input type="checkbox"/>	Lack of multiple channels of collaboration	<input type="checkbox"/>	No attention was paid to the collaboration effectiveness	<input type="checkbox"/>	No system of management and evaluation	<input type="checkbox"/>	Other
--------------------------	------------------------------------	--------------------------	--	--------------------------	--	--------------------------	--	--------------------------	-------

**Section H: Planning for School Family Collaboration**

1. The purpose of school family collaboration is

<input type="checkbox"/>	Improve student achievement	<input type="checkbox"/>	To provide children with suitable education programs	<input type="checkbox"/>	To better understand children development	<input type="checkbox"/>	To promote love and respect for teachers and students	<input type="checkbox"/>
--------------------------	-----------------------------	--------------------------	--	--------------------------	---	--------------------------	---	--------------------------

2. I contact parents through the following channels:

<input type="checkbox"/>	Home visits	<input type="checkbox"/>	Parent association	<input type="checkbox"/>	Parental workshop	<input type="checkbox"/>	Telephone	<input type="checkbox"/>	Parent participation in school functions
--------------------------	-------------	--------------------------	--------------------	--------------------------	-------------------	--------------------------	-----------	--------------------------	--

3. I usually discuss with parents in the following aspects of their children:

<input type="checkbox"/>	Student academic achievement	<input type="checkbox"/>	Student behavior	<input type="checkbox"/>	Student psychological mindset	<input type="checkbox"/>	Student Interest	<input type="checkbox"/>	Other
--------------------------	------------------------------	--------------------------	------------------	--------------------------	-------------------------------	--------------------------	------------------	--------------------------	-------

4. Teacher and parent communication should take place in the following format:

<input type="checkbox"/>	Parents take initiative to contact teachers	<input type="checkbox"/>	Teachers take initiative to contact parents	<input type="checkbox"/>	Communicate as needed.	<input type="checkbox"/>	Meeting on a regular schedule.	<input type="checkbox"/>
--------------------------	---	--------------------------	---	--------------------------	------------------------	--------------------------	--------------------------------	--------------------------

5. I participate in the school family collaboration effort in the following ways:

<input type="checkbox"/>	Parent association	<input type="checkbox"/>	School open day	<input type="checkbox"/>	Home visits	<input type="checkbox"/>	School family networking	<input type="checkbox"/>	School activities
<input type="checkbox"/>	Phone contact	<input type="checkbox"/>	School website	<input type="checkbox"/>	Parents visits to school	<input type="checkbox"/>		<input type="checkbox"/>	

6. Do you have any recommendations for better schoolfamily collaboration?

---

---

---

END OF SURVEY

### **ACKNOWLEDGEMENT**

This research project represents a collaborative effort with strong support of the research team (Tak Cheung Chan, Yanghee Kim and Zhiding Shu) from Kennesaw State University, USA and Huzhou Normal University, China. Research funding was granted by the Center for Excellence in Teaching and Learning, Kennesaw State University and the Chinese Education Department Humanity Foundation (Research Project Permit No.: 18YJC880032).

# INCORPORATING SOCIAL EVENTS INTO SCHOOL CURRICULUM: HOW IT RELATES TO STUDENT GROWTH

DEHUA LIU

*Hunan Normal University*

XIANGHUA TAN

*Shu Ming College of Early Childhood Education*

## ABSTRACT

*Current events happening in society have direct impact on the physiological and psychological development of students in primary and secondary schools. Incorporating social events into primary and secondary school teaching could enhance student learning activities, increase their ability of social recognition, adaptation and contribution to society. Significant attention needs to be paid to selecting social events to fit into meaningful themes which are structured around a set of systematic concepts. Educational and psychological considerations need to be taken in incorporating social events in class activities. Students need to be prepared to assume their role recognition and critical thinking in their involvement of discussion in social events.*

## INTRODUCTION

The many social events happening everyday are causing uneasiness to many people particularly teachers and students in school. Social events such as kidnapping, campus bullying, school principal misbehaviors, toxic milk powder, food safety, city mismanagement, officer corruption, and international conflicts have called for wide public attention and will have direct and indirect influence over the physiological and psychological development of students. Some educators prefer to let students close their ears to what are happening in society while some only share news that carry positive impact and reject those with negative effect. These educators intend to present to students a superior social environment with purity. Other educators have attempted without success to turn negative social events into useful educational resources because there was no consideration given to their relationship to educational thoughts and applications. Professor Ye (2015) declared the two kinds of student activities as in-school and out-of-school. He claimed that the effects of these two kinds of student activities could cause complementary or conflicting outcomes to students' individual development. What he did not like to happen was the resulting split of the students' character and their loss of selfness leading to not knowing who they were, whom they wanted to be, whom they could possibly be and what they could do to become whom they wanted to be. Consequently, many people have wandered around aimlessly in their lives without success.

Education today has served as a function to influence human beings and society as a whole. Educational activities are developed in particular social environments and work in conjunction with many components in society. It is almost impossible to stop students from hearing what is happening in society today. In school, social events with negative association could possibly infiltrate students' mind more effectively than those with positive association. Therefore, educators need to examine the significant relationship between social events and educational activities, to retrieve the educational value of social happenings and to explore wise solutions to social conflicts.

## THE RELATIONSHIP BETWEEN SOCIAL LIFE AND SCHOOL EDUCATION

The influence of social events on elementary and secondary school education is multiple. Dewey (1900) stated that an educational movement was based on a broad social concept. He claimed that education was like everyday life and that school education had to reflect the real social life. He further emphasized that the process of education was actually what was happening in society. If not, school education would become poor, dull and lifeless. Dewey recognized the serious consequences of closeness in educational policies and recommended the incorporation of social events into the educational activities of the students in school so they could understand the social significance of education. In discussing the social benefit of education, Dewey (1900) pointed out that knowledge acquisition was private and could become selfish in personal academic gains; and that education closeness and privacy in learning were related. He stressed that school education had to have a social motive to be beneficial to others and society in general. Dewey was interested in capturing the essence of real life and had them introduced into the students' school work to stimulate their enthusiasm in learning.

Dewey's main conceptual background of education is to get the students acquainted with society by making all school activities close to real life activities. He saw the function of education was to help social reform and improvement by not only educating the students as learners but also preparing them to contribute to social goodness. He also considered school education as a tool to implement the planning of a better society and counted on educators and many social activists to support and accomplish this important mission. Dewey (1900) paid special respects to teachers by honoring them as fighters for maintaining social order and continuous growth. Teachers need to prepare students to recognize their social responsibilities by playing their special contributing roles through learning in school. Dewey strongly urged educators to earn their professional dignity by helping students and society to serve just like "directors to heaven" and "God's representatives".

Influenced by Dewey, Chinese educator, Xingzhi Tao, claimed that school was society and education was life and that teaching, learning and acting should all be molded under the same theme (Dong, 1991). He advocated that life in society was like an imaginary university that we needed to recognize and take advantage of the opportunity to learn. He further emphasized that

"If it is life related, it is education; if it is not life related, it is not education.

If it is good life, it is good education; if it is bad life, it is bad education.

If it is serious life, it is serious education; if it is not serious life, it is not serious education.

If it is reasonable life, it is reasonable education; if it is not reasonable life, it is not reasonable education." (Dong, 1991, p. 292)

It is obvious that Tao took the relationship between life and education to the extreme to indicate that life was education. He overlooked the differences that existed between life and education in reality. However, it can be generalized that both Dewey and Tao agreed on the significant relationship between school and society and education and life. Both of them liked to work on improving society by preparing a new generation of students who were conscientious of social events and could learn through social experiences and were aware of what they learned could contribute to a better society. The educational concepts of Dewey and Tao have provided strong implications to current educators that social life is a valuable component of school education. Social events are good indications of the continuous development of a society and turn out to be great assets for educational use.

Professor Ye (2016) considered that people, time, places and businesses in society have hidden educational value and potential that could be summarized and best be developed for good

educational purposes. Back in the 1980's, Ye disclosed that previous educational research only focused on the impact of micro-environment on education and the impact of macro-environment was ignored. This is not causing a whole lot of confusion in a slow developing society. However, in a rapidly developing society today, ignoring the impact of macro-environment could cause confusion to future educational development. Rapid social development not only demand for human adaptation but also for educational reform with challenging requirements. For example, the speedy development of social communication with pressing demand for new technology has significant impact on the learning approach of the youngsters. Ye (2016) urged educators today not to lean themselves toward old and conservative paradigms that would only lead astray to inability of addressing new issues. Conservatism would divert people's attention to conveying personal beliefs as standard measures rather than responding to reality of social needs. In his reiteration of the relationship between school and society, Ye brought the impact of macro-environment on human development to the highest. He could foresee the rapid development of technology that penetrates into human lives. He further reminded educators not to freeze their acknowledged concepts and pass them onto their students, or else, the process of education would fall behind time and social problems would not be resolved. In general, Ye has reviewed the social development of China in recent years and previewed the intensive relationship between school education and social life with the hope that educators could lead educational reforms by exploring a new path through social experiences.

### **PLANNING TO INCORPORATE SOCIAL EVENTS INTO ELEMENTARY AND SECONDARY SCHOOLS**

Social events as important records of social life have become live educational resources to enact as forces to improve students' educational development. It is important to recognize how we could possibly incorporate social events into elementary and secondary school curriculum to enhance students' social development. We would initially ask educators to learn and to understand their teaching resources, their students and the current society they live in. On this basis of understanding, the authors would like to make recommendations to review the path to connect school and society in three different perspectives.

#### **(1) Theme Selection and Systematic Academic Design**

Theme selection relates to particularly how the nature of social events could best fit into the specialization of academic disciplines. Themes of social events can be selected in alignment with curriculum standards and the requirements of different disciplines. The systematic design of theme selection basically starts with the academic discipline as base. The requirements of disciplines will determine the criteria for selecting social events to support the discipline delivery. Through the employment of social events, social life can be reflected in school curricular activities allowing the two worlds of school and society be well connected.

## Social Events as Themes in Elementary and Secondary School Curriculum

Level	Self Protection	Human Relations	Science & Technology
Primary School	Children kidnap Sexual harassment Corporal punishment Drown in swimming Campus bullying Safety in traffic, fire, And earthquake	Conflicts among students and students' siblings Conflicts in families Conflicts between teachers and students Conflicts between students and strangers Conflicts between groups and individuals	Unsafe toys Diminishing animals Diminishing plants Food poison Toxic food in market Environmental issues in house remodel
Junior Secondary School	Fire and gas poison Hand phone explosion Disorder in school Disorder in shopping Student kidnap Group fighting	Suicide behaviors Gender relationship Neighborhood disputes Gang conflicts and fights Parents hurting children Children hurting parents	Toxic milk powder Superstition activities China-US plane crash Nobel Price - Science Research plagiarizing Safety in scientific experiments
Senior Secondary School	Student drowned dead Girl student attacked Student dropped dead running on campus Student get hurt or died at video game bar Student suicide for self closeness Drunk and reckless Driving	Campus violence Committing crime and self-defense Cases of misjudgment Racial conflicts Cases of corruption Under-society gangs Presidential election	Contamination of natural environment Group poisoning US bombing Chinese embassy International effort of peace maintenance Installing the missile defense in Korea Military competition Regional wars

Based on the students' daily lives and survival needs, the authors can attempt to identify three major themes of social events to be incorporated into school curriculum. First is the theme on student self-protection which include students learning to protect their physical bodies from being hurt and personal properties from getting lost or stolen. The second theme is on human relations which include the relationship between individuals and groups. These individual and group relationships can be elaborated to indicate generation relations: children, parents and grand-parents. Peer relations could involve classmates and neighbors. Other relations could include acquaintances and non-acquaintances, good guys and bad guys, and public and private spatial configuration. Typical social events are disserted children, non-filiality to parents, persecution of relatives, noise disturbance in the public, and pre-marriage pregnancy. The third theme of social events is related to science and technology. Examples of these social events could include natural disasters,

formaldehyde above standard allowance, animals and plants coming to distinction, toxic food, and mistake in bombing Chinese embassy. The above table on incorporating social events into school curriculum can be used as practice references. It is a clear indication that the effort of incorporating social events into school curriculum needs to be highly structured to demonstrate how the selected events are related to the value of knowledge acquisition. The themes in the structured series need to cope with the intellectual, physiological and psychological development of children. The selected social events need to possess educational values and different social events could emerge the same theme for educational use.

## **(2) Rework of Social Events in Educational and Psychological Perspectives**

When social events are selected for incorporating into school curriculum, they are not ready to be used for instructional purposes. They need to be trimmed by teachers into different formats to show the best of their hidden values to suit the educational and psychological needs of the students. In this reformatting process, social events grouped by essential themes could best generate positive reinforcement in support of education.

Some social events contain a large amount of information extending to a long process. Some are circled around with rumors that need substantial clarifications. By nature of the social events, some are positive and constructive while some are negative and destructive. Both types of social events could have great potential for hidden educational values and strengths. When immersing into school instructional activities through careful reformatting, these social events could become valuable educational resources. In other words, both positive and negative social events need to be turned into positive reinforcements to support education. In fact, not only positive social events have educational value, but negative social events may even be more effective in education values.

In reworking the social events, two aspects need to be explored: the educational aspect and the psychological aspect. The educational aspect deals with how social events could best be retrieved as educational resources for their educational values. The purpose is to make sure that through the inclusion of social events, students could have a better understanding of the reality of social happenings, including the complexity, stability and flexibility of human character, the fostering of harmonious human relationship and the co-existence of human beings and natural environment. Selected social events will be judged together with other aspects of educational considerations and will be reconstructed to facilitate their application with existing teaching resources. Positive social events could generate positive educational outcomes as well as negative educational outcomes. Negative social events could also generate negative education outcomes as well as positive educational outcomes. Considering positive social events to only generate positive outcomes and negative social events to only generate negative outcomes is over simplifying the in-depth nature of society. If only positive social events are considered for inclusion into school curriculum and negative social events are not, students could be presented with the impression of a society with absolute blind spots and will be totally confused in the practical real world. As Dewey (1900) said that things happening in society were so complex that it was impossible for students not to be perplexed in their initial social contacts. The reworking of social events is to attempt to present to students the many aspects of a complex society for discussion so they can be prepared to face social reality with the use of high value educational resources such as social events.

The psychological aspect of reworking social events is to focus on the essentials of children psychology such as age and its associated characteristics to shape and present social events to them in such a way that could be easily acceptable. Students are encouraged through the employment of

social events to understand and discuss the reality of social happenings. Basing on the educational psychology philosophies, educators need to work hard to prepare for some fundamental work:

First, we need to acknowledge the psychological needs of children. For example, children at age 12 or under may have special needs for personal safety. Thus, social events could include student safety concerns, kidnapping and sexual assault, car accidents and drowning events. However, care has to be taken not to over exaggerate the seriousness of on and off campus happenings so they could get scared. Students in junior secondary schools are commonly mistaken as youngsters of rioting age. In fact, students at this special age are beginning to be active in independent thoughts and behaviors in conflict with the older generation. Including social events of generation gaps and differences as educational resources could help them resolve many mysteries in mind. Students in senior secondary schools are both under the pressure of serious studies as well as attraction of the opposite sex. They are a responsible group of youngsters most sensitive to social events and their consequences. The inclusion of social events to indicate existence of social class differences is most interesting to them.

Second, social events can be simplified by deleting details of violence and sexuality, and social complexity beyond children's understanding at their ages. In principle, social events of violence and sexuality should not be presented to students of lower grade and younger age. Junior secondary students need to learn more about human relations particularly working with peers. Therefore, they should be presented with social events more dealing with generation conflicts while events to indicate violence and brutality should be avoided. Senior secondary students need to be presented with more cases of corruption. However, details of corruptive behaviors and mistress relationship could be deleted.

### **(3) Role Playing and Critique of Social Events in Education**

Role playing is to lead students to think through the roles of people involved in the social events and to role play these characters to get a better understanding of their motives, their thoughts and behaviors at the time of the events. Students can interact and learn among themselves through their role-playing experiences. The critique is based on the acts of the characters in the social events to critically discuss how these characters acted the way they did. Through their thorough discussion, students begin to understand the background of what happened and ask what we could do together to construct a better society for the future.

Characters in social events are involved in cultural, personal, political and financial conflicts which cannot be resolved by straightly going by political theories or ethical codes. Even though personal political instinct and ethical conduct could help address some of the conflicts among the characters in the social events, however, primary and secondary students simply cannot have a good understanding of the essence of social events by mere memory of political and ethical regulations. They could not grasp hold of the wisdom of resolving social conflicts through such memorization approach. If students are allowed to play different roles as characters in the social events, they will have first-hand experiences and better feel of what each character's individual perspective is. The role-playing approach will help students examine ways to resolve social conflicts with attachment of personal feelings. It is not the amount of accumulated experience that counts. It is role playing that creates the opportunity for students to get involved and to have direct contact with inside stories. They learn from comparative roles, thoughts and behaviors of characters and acknowledge socially acceptable behaviors as their ways to follow.

Students are encouraged to collect related information of similar social events to draft their own plays to act. They can alternatively play different roles to demonstrate what actually happened

during the events and better understand the background of the conflicts. In going through this role-playing process, students will comprehend what could possibly lead to the social events and what they could do in the future to address such happenings. As an event of children kidnapping, the roles of people involved could be the children and their peers, their parents, their grandparents, their uncles and aunts, their neighbors, their teachers, the kidnappers and their families, the police, the judge, government employees, the media and concerned people in society. For the many roles involved in one case, everyone in class could have a chance to participate to play a role. Inviting students for role playing in social events encourages students to collect related information about the events so they can have an-depth understanding of what actually happened in the real events. Playing different roles allows them the opportunities to enlighten their viewpoints in different perspectives, directs them the possible approach to systematically organize the information in hand, and leads them to the process of offering potential solutions to social problems.

Social events are embedded in complex backgrounds, continuous changing process and multiple reasoning environments with some anticipated consequences. If students treat social events with their traditional stagnant concepts, then, their recognition of social events will become stereotyped. As Alfred North Whitehead (1929) said that, in helping children in their thinking process, we need to avoid the stagnant conceptualization which only stays in the brain unused and unexperienced with the challenges of new ideas. To fully develop the educational values of social events, we need to leave behind the conservative paradigm. For example, students need to understand the seriousness of corruption behaviors and to explore the background of their complications. Students need to be directed to consider sensibly that things are not always in absolute black or white. In the open reform movement of our country, attention needs to be paid to the interweaving of rules by law and by common sense. The recent television series “In the Name of the People” will serve as an excellent resource of learning about corruption by inviting students for sensible discussions. Topics for discussion about corruption can include but not limited to the following: Why and how do government officials get involved in corruption? To what extent are government officials act corruptively? Do government officials corrupt because of greediness or under bad social influence? Why do government officials still have the courage to commit corruption even knowing that they could face death penalty? How effective are the campaigns for anti-corruption in society? As a government official, could you possibly resist the temptation of dollars? Why is corruption more active in some countries than others? How does corruption affect the development of a society? What are some of the strategies to social integrity? Through this series of questions, teachers can lead students to think in the sensible path and explore some potential solutions to address these social issues. In other words, there are many interpretations to social events even though these events are connected to official instincts or people’s arguments. In critically discussing social events in different perspectives, students have a chance to challenge current conceptualization and traditional conclusion to these events and to analyze the reasoning, interpretations and limitations of social happenings behind the scene. What students learn through these experiences would carry great social and educational values.

## **CONCLUSION**

From mere memorization of basic knowledge to role playing of social events and from total acceptance of conservative traditions to critically discussing complex social issues, students have gone through a significant process of socialization. As Rousseau (1762) claimed that if we did not teach the children to take advantage of their best potentials to seek a fruitful life, these children would enter society with psychological weakness, stupidity, arrogance and awful behaviors and we

would be sorry to witness the pain and evilness of mankind. Incorporating social events into school education is the best utilization of social resources to allow students to better understand the society they live in so they will be in a position to adapt to and reform the society for a better future.

### REFERENCES

- Dewey, J. (1900). *School and society*. Chicago, IL: The University of Chicago Press. (Chinese translation by C. H. Wu, 1994, Beijing: People's Education Press).
- Dong, B. L. (1991). A selection of educational publications of Tao Xingzhi. Beijing: People's Education Press.
- Rousseau, J. J. (1762). *Emile*. (Chinese translation by P. H. Li, 1996, Shanghai: Commercial Press.)
- Whitehead, A. N. (1929). *The aims of education*. New York: The Free Press. (Chinese translation by Y. Z. Xu, 2002, Beijing, United Education Press.
- Ye, L. (2015). *Return and conflict*. Shanghai: East China Normal University Press.
- Ye, L. (2016). The educational power of society: concepts, current conditions and future development. *Curriculum, Instructional Resources and Methodology*, 10, 4.

### ACKNOWLEDGEMENT

This research project was conducted through funding support from the Chinese National Social Science of Educational Studies. (Research Item No.: BHA160094)

## INVITATION TO SUBMIT MANUSCRIPTS

The editor of *Educational Planning*, a refereed journal of educational planning issues, invites the submission of original manuscripts for publication consideration. *Educational Planning* is the official journal of the International Society for Educational Planning. The audience of the journal includes national and provincial/state planners, university faculty, school district administrators and planners, and other practitioners associated with educational planning.

The purpose of the publication is to serve as a meeting place for scholar-researcher and the practitioner-educator through the presentation of articles that have practical relevance to current issues and that broaden the knowledge base of the discipline. *Educational Planning* disseminates the results of pertinent educational research, presents contemporary ideas for consideration, and provides general information to assist subscribers with their professional responsibilities.

Manuscripts preferred for inclusion are those from practitioners, reports of empirical research, expository writings including analyses of topical problems, or case studies. Unsolicited manuscripts are welcomed.

The following criteria have been established for the submission of manuscripts.

**STYLE:** All formatting should adhere strictly to the current guidelines set in the Publication Manual of the American Psychological Association.

**LENGTH:** The manuscript, including all references, figures or illustrations, charts, and/or graphs, should not exceed 20 pages. In addition, an Abstract (between 150-500 words on a separate sheet of paper) describing the focus of the manuscript should be included at the beginning of the manuscript.

**WORD PROCESSING: SINGLE-SPACE** all text using TIMES NEW ROMAN with a 10 point type. Headings and sub-headings should be in ARIEL with a 10 point type. Provide 1.0 inch margins top and bottom, and 1.5 inch left and right, with 1.0 inch header and 1.0 inch footer. The body of the manuscript must be no wider than 5 ½ inches to fit the paper. Lengthily tables, drawings, and charts or graphs should be scaled to the dimensions given and should preferably be camera-ready.

**FORM of SUBMISSION:** Send the manuscript to the Editor electronically in Microsoft Word as an attachment to an email. The email address is: [tchan@kennesaw.edu](mailto:tchan@kennesaw.edu)

### **The manuscript should include the following:**

#### **Title Page**

Title of the manuscript

Date of Submission

Author(s) name, mailing address, telephone number, email address, and fax number

Biographical sketch not to exceed 75 words

#### **Abstract**

An abstract not to exceed 500 words on a separate page

#### **Body of the Manuscript**

Text of the manuscript not to exceed 20 pages, including references, tables, etc.

**If the manuscript does not meet the guidelines exactly, it will NOT be reviewed and will be returned to the author.**

Author(s) name or any other identifying information should not be included on the abstract or the manuscript. Authors are responsible for copyright clearance and accuracy of information presented and submission implies that the same manuscript has not been submitted to other publications.

Editorial reviewers and editors will review all manuscripts. Points of view are those of the individual authors and not necessarily of ISEP.

**Please send manuscripts to: Dr. Tack Chan – [tchan@kennesaw.edu](mailto:tchan@kennesaw.edu)**

**For more information about ISEP go to: [www.isep.info](http://www.isep.info)**



**Forty-Ninth Annual Conference  
International Society for Educational Planning**

Lisbon, Portugal  
October 5-18, 2019

Conference Registration Includes:  
Registration & Membership  
Breakfasts, Luncheons  
Journal Subscriptions

To Register Visit:  
[www.isep.info](http://www.isep.info)

For further information contact:

**Maria Bacharel**  
maria.bacharel@technio.lisbo.pt

Conference Hotel  
Double Tree by Hilton Fontana Park

Reservations:  
011-351-21-04-0410600  
lisbonfontanapark.info@hiltoncom

Mention ISEP

**50<sup>th</sup> Anniversary Conference**  
2020-Washington, DC

# EDUCATIONAL PLANNING

**EDUCATIONAL PLANNING**  
Dr. Glen I. Earthman  
Publication Center  
2903 Ashlawn Drive  
Blacksburg, VA 24060  
USA