Promoting Professional Student Learning Through Study Groups: A Case Study

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Abstract:

The purpose of this research was to analyze how 24 students perceived the study group experience and how study groups fostered a change in their knowledge and teaching of comprehension. Data sources included pre-post questionnaires, text concepts, International Reading Association process form, facilitator logs, and post-survey. Data were analyzed through traditional case study techniques. Results indicated the students' favored study groups as an avenue to learning. They also reported changes in their knowledge and teaching of comprehension. Implications for college professors are included.

Promoting Professional Student Learning through Study Groups: A Case Study

Throughout history the terms "college course" and "lecture" have been notoriously associated together. Lectures build on the premise that learners are empty vessels to be filled by a knowledgeable professor. In contrast, constructivism (Vygotsky, 1978, 1986) views students as active participants in building their knowledge with the professor as a facilitator. During the past decade, college instructors of various disciplines have turned to constructivism as an avenue to increase student achievement and retention (Leite, 2006; Stewart, Amar, & Bruce, 2007; Tien, Roth, & Kampmeier, 2002; Wamser, 2006).

Specifically, within the field of teacher education, there is often a mismatch between teaching and practicing constructivism. Too many times teacher educators do not develop and model constructivist learning to its full potential. Teacher educators ask students to participate in discussion and complete peer activities, but the instructor-driven activities limit students' deep engagement and building of knowledge. As a literacy education professor, I recognized I could grow in this area. So when I was given the opportunity to teach a regularly offered class for the first time, a graduate level course on teaching reading comprehension, I looked at the syllabus with a new goal – to incorporate more constructivist experiences.   After some reflection, I decided to incorporate study groups as a course requirement. Study groups would allow the students to have some choice in their selected text, provide small group accountability and responsibility, and promote the building of knowledge through peer dialogue and scaffolding within a tightly structured environment. So I arranged the class into two sections. The first part comprised the traditional readings and assignments I selected. The second section allowed for autonomy and choice as students selected a text to read and they engaged in small peer-group

discussions (i.e., study groups) to construct their learning. The latter is the focus of this article. Specifically I wondered,

1.   How did the students perceive the study group experience?

2.   How have study groups, embedded in a graduate course, fostered a change in students' learning and teaching?

Literature Review

Theoretical framework

Two theories are the conceptual framework of study groups. Vygotsky's (1978, 1986) social constructivist theory promotes language and learning through social interactions with others and through scaffolded experiences by a more competent peer or adult. Bandura's (1977, 1986) social learning theory asserted that people learn from observing others, and often times, people learn more from observation than from the consequences of personally experiencing situations. Bandura (1997) also emphasized the role of self-efficacy in learning; self-efficacy is the belief that one possesses the ability to attain specific goals. People with high self-efficacy are willing to take risks, believing they will succeed or they will persevere until they succeed at completing a task. A person's self-efficacy may differ from one's actual abilities.

Collaborative peer groups

In the field of education, study groups "have the potential to greatly affect how teachers teach reading" (Lefever-Davis, 2002, p. 197). They are defined as

> A collaborative group organized and sustained by teachers to help them strengthen their
> professional development in areas of common interest. In these groups, teachers remain
> in charge of their own independent learning but seek to reach personal goals through
> interaction with others (Cramer, Hurst & Wilson, 1996, p. 7).

Education study group research has primarily been conducted in elementary/secondary school settings, not universities (Arbaugh, 2003; Buskist, 2005; Clair, 1998; Devlin-Scherer, Devlin-Scherer, & Wright, 1997; Jenlink & Kinnucan-Welsch, 2001; Lubel, 2005). Based on these studies, numerous benefits have been identified. Teachers are able to connect theory, application and problem-solving to real-life situations (Cramer, Hurst, Wilson, 1996; Lefever-Davis, Wilson, Moore, Kent, & Hopkins, 2003). Study groups provide opportunities for individuals to pursue their own goals within safe communities. A positive interdependence occurs among members allowing teachers to feel connected rather than isolated. Sharing and accountability foster motivation (Cramer, Hurst & Wilson, 1996). Teachers develop and strengthen their confliction resolution, communication, and leadership skills (Lefever-Davis, et al., 2003). In essence, study groups provide participants an opportunity to grow personally and professionally (Jenlink & Kinnucan-Welsch, 2001).

Lesson study (Cerbin & Kopp, 2006) is another way for teachers to reflect on and improve their practice. In small groups teachers meet to "plan, teach, observe, analyze and refine individual class lessons" (p. 250). In this manner teachers can support each other as they collaboratively work on matters that are important and relevant to their classrooms. Lesson study promotes critical thinking for teachers because they investigate how students make meaning and analyze student thinking that occurs during a lesson.

In the sciences, research has indicated the success and benefits of peer-led team learning (PLTL). Tien, Roth and Kampmeier (2002) compared students who received traditional recitation to those who experienced PLTL in an undergraduate organic chemistry course. Tien et al. found statistically significant improvements in student performance, retention, and attitudes as a result of social constructivist learning. Wamser (2006) compared chemistry students' success,

persistence, and performance of those who did and did not participate in peer-led team learning. PLTL participants had significantly greater gains over their peers in each category —success rate (85% vs. 69%), three-term persistence (57% vs. 28%), and course performance (71% vs. 65%, course GPA of 2.90 vs. 2.51, ACS exam scores at the 77th vs. 69th percentile). Stewart, Amar and Bruce (2007) identified similar increases in student grades and retention, but also identified benefits for the students who were peer leaders: increased confidence, helpful preparation for career, reinforcement of content knowledge, and understanding of and interest in teaching.

In the field of science, mathematics, engineering, and technology, a meta-analysis of 39 studies showed small group learning positively impacted undergraduates' achievement, attitudes and persistence (Springer, Stanne, & Donovan, 1999). One challenge for the professors who teach in these disciplines has been large class sizes, where lecturing is easiest. A computer-based tool that supports small collaborative groups within large courses has potential for future use (Li, Landay, & Joseph, 2001). A second challenge in this field is the traditional solitary work of programmers. To counteract individual assignments and promote group work, Williams and Kessler (2000) discussed the value of 'pair programming' and 'pair learning' meaning one person controls the design and the second person observes, thinks, and considers strategic implications. Even though this requires programmers to leave their comfort zone, the quality of the final product is better due to each partner increasing his/her ownership and accepting constructive criticism. Williams, Layman, Slaten, Berenson, and Seaman (2007) found 'pair programming' and agile software methodologies effectively create a collaborative environment desirable to millennial students (born after 1982). Millenial students believe collaborative group work prepares them for the real world.

Although PLTL, paired programming and lesson study are not equivalent to study groups, the similarities of responsibility, ownership for learning, support and building of knowledge among group members show that collaborative peer-led grouping has benefits regardless of variation and discipline.   Specifically, minimal research has been published in the field of teacher education using study groups in a collegiate setting. This study aims to address this gap by analyzing the perceptions of students and discovering how study groups affect students' knowledge and teaching of comprehension.

Methodology

Participants

The students of this graduate class were classroom teachers pursuing their master's degree in curriculum and instruction with an emphasis in reading. The setting occurred at a research university located in the Midwest region of the United States. Twenty-four students, all females, were enrolled in the course entitled, "Comprehension and Study Strategies for Use with Multiple Texts." They came to the course with a variety of teaching experiences. Figure 1 displays the number of years the students reported teaching. As can be seen, most were early in their careers.   <INSERT FIGURE 1 HERE>

Class information

The class met once a week for 2 ½ hours from 4:30-7:00. After a day of teaching, the students came physically to campus to participate in a traditional class setting. The course was structured into specific topics such as narrative comprehension, expository comprehension, comprehension assessment, and related topics of vocabulary, motivation, study skills and test taking, and comprehension related to English language learners and struggling readers (although there are semester courses devoted to these last two topics). The students read numerous current,

professional articles on each topic focusing on either elementary or junior/senior high. The course requirements had four components. First, students demonstrated a research-proven comprehension or vocabulary teaching strategy such as Question-Answer-Relationship (Raphael, 1986; Raphael & Au, 2005) or Anticipation Guides (Duffelmeyer & Baum, 1992). The rationale for this assignment was to assist students in developing a toolbox to help them effectively teach comprehension and vocabulary. Second, students were asked to try different comprehension structures as they completed their required class readings (such as graphic organizers, ideas presented in class demonstrations (first assignment), and ideas found on www.readingquest.org). There was also a reflection component in this assignment, meaning the students shared their thoughts and experiences about each structure. Third, students completed a final project (literature review, professional development, or action research) on their choice of topic. This project allowed the students to develop and investigate an area of the course content that interested and applied to them. The fourth and final assignment was participation in study groups.

On the first night of class I gave book talks on a number of respected practitioner texts as options for study groups. The students had one week to review the titles independently through the Internet or other means. On the second week of class, the students chose the book that interested them and were asked to purchase it. The titles selected by the students were *Strategies that work: Teaching comprehension to enhance understanding* (Harvey & Goudvis, 2007), *Reading with Meaning* (Miller, 2002), *I read it but I don't get it* (Tovani, 2004), *Yellow brick roads* (Allen, 2000), and *Bringing words to life: Robust vocabulary instruction* (Beck, McKeown, & Kucan, 2002). There were six students interested in Miller's book and eight students who wanted to read Harvey & Goudvis' book so I placed these students into two groups

per book, considering factors such as grade level and previous teaching experience. In sum, there were a total of seven study groups simultaneously meeting from approximately 6:15-7:00 each evening over the course of six weeks. Prior to reading the book, the groups had two weeks to get acquainted with each other, set goals, and plan their reading assignments and facilitator schedule. Each group member was asked to be facilitator/leader at least two times during the experience. After they finished reading their book in the assigned six weeks, the following class period was designated for sharing their learning informally in small-groups through a jigsaw format (i.e., each member had read a different book).

Data collection and analysis

The students were informed about the research study and gave their approval on an IRB consent form. I asked them to complete three tasks. First, the pre-post questionnaire I created focused solely on the study group aspect of class and asked for short answers regarding their current teaching comprehension practices, goals for and reflections of the study groups, and probes into inter-personal group relationships (e.g., problem-solving and decision-making). Second, I asked them to complete a likert-scale study group process form provided by the International Reading Association (Irwin, 2002) at the conclusion of the semester. Third, I wondered what learned concepts they deemed most essential as a result of their reading, so the students individually submitted the two most important ideas from their text followed by an explanation .

While the study groups occurred each evening, I visited all seven groups. Further, I asked the weekly group facilitator to complete a sheet reporting present members, list the goals for that session and if the goals were met, topics that were discussed, and document any problems, what

they were doing in their classrooms as a result of their reading, and other such information. I read these facilitator forms each week to monitor group interactions for accountability.

A year later, the students were contacted and asked to complete a short online survey. The survey listed the aforementioned four course assignments and asked students to identify what assignment had the most impact on their teaching. Next the survey inquired whether the author directed or study group portion of the class was more beneficial, and whether study groups should be a part of future education classes.

Several different analyses resulted from multiple data sets. The pre- and post-questionnaire was typed into table form by question. For example, for question one, each student was assigned a number and the 24 answers were listed under this question. Next, I followed traditional case study techniques by Merriam (2009); the data were read several times, notes were taken, patterns were identified and pertinent themes established. I did this for each question and synthesized the results.

To analyze the important textbook content, I entered each student's responses into a two-column spreadsheet. Then I followed similar case study patterns as previously identified (Merriam, 2009). I looked for themes and frequency of those themes to see if there were similar important ideas among and between books.

The International Reading Association (IRA) process form (Irwin, 2002) had 14 statements and the students rated their agreement or disagreement on a scale of 1-7. *Highly effective* received a score of 1 and *highly ineffective* received a score of 7. The statements covered a variety of topics and are listed Table 1. The data were entered into an Excel spreadsheet. Each of the 14 statements received an average rating from the class.

The specific question about classroom applications on the facilitator form was used for data. I read through each answer and noted what was being implemented as reported by group members. The answers were tallied for frequency and included in the results.

The post-survey (one-year later) was delivered through Survey Monkey. Results were summarized and printed by frequency and percentage.

Results

The results will be presented by guiding questions.

How did the students perceive the study group process?

This question was answered by three data sources: pre-post questionnaire, IRA study group form, and post-survey. Twenty-three out of the 24 students positively rated their study group experience and learning on the post-questionnaire. Following are some comments that reflect their thinking; all names are pseudonyms to ensure confidentiality. Laura realized she should collaborate more and Misty liked the mixing of students (i.e., new and veteran teachers) for maximum learning and support. Leah stated, "I was blessed to work with motivated, interested, enthusiastic individuals who helped make collaboration seem more constructive, useful, and positive."

Ellen's group who read *Strategies that Work* (Harvey & Goudvis, 2007) was comprised of a first, fourth and sixth grade teacher. She concluded, "Our study group shows the great importance of collaborating vertically. Most schools mainly collaborate within grade levels or content areas. Teachers need to know and be involved in what is happening outside their classroom doors."

Leah, Misty, Allison, Sandra and Julie had prior negative collaborative experiences that shadowed the beginning of this experience. However, the dark clouds lifted by the end of this

research study so all five of them felt the invested time was worthwhile. Sandra said her

previous experiences "made me believe the risks of group work may outweigh the benefits, but

in this experience the benefits were surprising." Sandra reported she learned far more than if she

had read the book alone and truly enjoyed the process. On the post-questionnaire I asked how

they worked through challenges. I discovered respect, communication, flexibility, rotating

leadership, and agreeing to disagree were the prominent ways the students resolved differences.

The International Reading Association (IRA) form solicited ratings on group aspects such

as respect, responsibility, leadership, common purpose, supportive environment, participation

and openness. The results of 13 out of 14 statements ranged between 1.0 and 2.0, with 1 being

the highest possible rating. Rotating leadership abilities was the highest rated characteristic

(1.13) and new opportunities to work with peers was second (1.16). Most statements received

averages from 1.30 to 1.80 with the exception of the single focus. The lowest rated statement

(focuses on a single topic or teaching method) received a 2.32. Some students considered their

book to be a single focus and others believed their text covered multiple topics (or strategies)

under the umbrella of comprehension so they rated this statement with less agreement. See Table

1 for the statements and ratings. <INSERT TABLE 1 HERE >

The online 10-question survey administered one year later was completed by 22 out of

the 24 students, for a return rate of 92%. They were asked, "What assignment of the

comprehension class has had the most impact on your teaching?" Half of the class stated the

study groups while the remaining half of the class said either the teaching demonstration (27.3%)

or personally implementing comprehension structures (22.7%) of the assigned readings. When

asked if the author/professor directed or the study group portion of the class was more beneficial

77.3% said both were equally important and beneficial, indicating an ideal mix of the two

approaches. Thirteen percent said the study groups were more helpful. Finally, the students were asked if study groups should be implemented in future classes and 77.3% said they "highly" recommended them. Not one person was hesitant about recommending study groups in the future.

How have study groups, embedded in a graduate course, fostered a change in students' learning and teaching?

Study groups are "concerned primarily with cognitive growth" (Cramer, Hurst, & Wilson, 1996, p. 8.) Based on the post-questionnaire answers, seven themes emerged for students' growth in knowledge (see Table 2). <INSERT TABLE 2 HERE> The most frequent theme was the study groups helped them learn other students' teaching strategies. Thirteen of the twenty-four students mentioned this idea in various ways. Most verbalized they liked hearing the experiences of others, and reading about an expert teacher in the text. Leah summarized her knowledge by stating,

> The study group experience has definitely supported my growth in knowledge about comprehension. More than anything and most significant to me, I feel better equipped with the answer of how to teach comprehension. In my building, we promote using the 5 active reading strategies but I never felt that I knew how to explicitly teach them in my class.

Leah's statement is a strong example of how closely intertwined knowledge and practice are, leading to the second most frequent theme - reflection on their current practice and how to improve their instruction.

Sandra eloquently stated, "The discussion acted as a scaffold for my learning. The scaffold allowed me to further process the information for more immediate application of the information." Laura said,

Debbie Miller's ideas has made comprehension real to me and has given me the tools that I need to bring it into my classroom. Before reading this book, I knew about different comprehension activities, but I was unsure about how to incorporate them into a classroom.

A number of smaller themes also emerged. Among them was the clarification of information and strategies as well as deeper understanding of knowledge. Two students spoke specifically about the change in their own personal comprehension and three students discovered the importance of explicitly teaching comprehension. A serendipitous comment from Misty said "I learned I can't be afraid to take risks and try new things!"

Another source of data to help answer this question came from students' identification of the two most important concepts they learned when reading their selected text. The answers varied based on personal experience and interpretation of the text. The favored concept was specific teaching ideas and strategies (18 of the 24 students). Examples of specific ideas and strategies ranged from "digging deeper strategies" to "outlandish responses" to "what's important" and "visualizing and inferring." Seven students mentioned the gradual release model as a process for teaching comprehension and giving the responsibility to elementary/secondary students. Five students spoke of the environment that should occur in the classrooms. Three students emphasized the need for elementary/secondary student choice of text. The final category combined a number of unique responses that don't relate to one theme. These include the impact

teaching comprehension has on students, the importance of reflection and evaluation, and the

realization that it is possible to teach comprehension.

   The students were asked if they teach comprehension differently as a result of the study

groups. Half the class (N=12) said yes, their teaching was transformed. This division of students

indicated I needed to analyze both groups – those who reported change and those who did not

change practice. First, for students who changed instruction, the greatest difference was in

deeper teaching and active engagement of elementary/secondary students, as reported by 11 of

the 12 students. Teresa said, "I think about how I am teaching comprehension and what I need to

focus on." Misty said, "I don't really feel like I was teaching it [comprehension] or at least not

well." Allison wrote, "I'm teaching comprehension instead of just assessing it." Several other

emerging themes were the gradual release model and more effective modeling, the need to spend

more time and effort in preparation, and a need to allow daily time in the schedule to teach

comprehension (See Table 3). <INSERT TABLE 3 HERE> Second, I questioned why almost

half of the class did not report change. One reason was the number of students (N= 8) not

currently teaching while they pursued their degree full-time and this condition impacted their

ability to document change. Of the nonteaching group, those who had prior teaching experience

indicated they would change their instruction when they had a classroom in the future. Two

additional students were reading teachers who met with small groups throughout the day; one

reported lack of time to fully develop comprehension in 30-minute pull-out sessions and the

other said the text validated her current instruction. One graduate student said she had not made

changes because she wanted to wait until a new semester or school year to introduce a procedure

that can become routine (she reported that she made small, minor changes though).

Another source to triangulate the data was the weekly log submitted by the facilitator. One question asked, "What are we doing in our classrooms as a result of the study group?" Of the 42 completed facilitator sheets, only 2 sheets reported no application; both of these were during the first week of reading the text. The facilitator listed answers such as, thick and think questions, end of week check, anchor chart and questioning web, created a poster with specific strategies, and asking 'What do you wonder?' instead of telling students to ask questions. The list could continue but evidence shows concrete and practical attempts to modify instruction. A limitation of the facilitator sheet is that it did not require each student to individually report her changes. This limitation prevents us from knowing the exact number of students who incorporated change. However, one may still conclude overall that the students appeared to eagerly embrace and apply ideas.

Summary of results

In sum, the data showed students perceived the study group experience as positive. They viewed the opportunity to collaborate and work with peers in a setting with rotated leadership to be valuable to their growth as educators. While some students said the study group was the most important part of the course, many students also said a balance between the traditional professor-directed and collaborative student-led portions of class was important. These findings indicate that study groups should be used in future graduate class settings. The data also indicated the students learned numerous instructional strategies and reflected on their teaching. This led to clarification as well as deeper understanding, which then impacted their performance in elementary and secondary classrooms. The knowledge gained during study groups fostered a change in teaching practices.

Discussion

I began this study to evaluate study groups embedded in a graduate course. My goal was to learn more about the opinions of students involved in the process and to discover effects on their knowledge and teaching of comprehension.

The first question was simply a perception of students. Responses were favorably positive and study groups were liked. Previous studies indicated small group participants were challenged in their working relationship with others (Clair, 1998; Jenlink & Kinnucan-Welsch, 2001). Li, Landay, and Joseph (2001) found many difficulties arise in the area of member communication. Surprisingly, the students in this study reported minimal challenges. Rather than being entirely optimistic or even idealistic, it is possible that a challenging experience resulted and was never reported. That said, the final feedback from the questionnaires, weekly facilitator sheets, and my observations did not identify weaknesses, tensions, or problems. Factors that may have impacted this positive result include the small group size that allowed everyone to participate, and the fact the students were financially and mentally committed to learning. This is a more idealistic and positive setting than a traditional school setting where teachers are overburdened and may view study groups as a top-down administrative mandate, or in an undergraduate course where students' practical pedagogy and experiences are minimal. Even though this research focused on a select group of students, the high percentage (99%) of them desire to participate in learning communities in their schools or in another graduate class is promising.

Evidence for the second research question indicates how people learn. The students were not passive; each member participated fully in the group discussion. As Bandura (1977, 1986) said, much is learned from observing others and in this research study, some learning occurred

through reporting and sharing of peers' thoughts and practices. This language and scaffolding

that took place was critical to learning (Vygotsky, 1978, 1986). Students had the opportunity to

reflect and examine their instructional practices within small supportive groups; reflection or

knowledge of thinking that impacts the present and the future is a metacognitive practice

(Pressley, 2002). Self-efficacy (Bandura, 1997) and confidence were built as students engaged in

their learning through a highly structured environment where cooperative learning structures

were made explicit and transparent to students. In sum, people learn through social interactions

with others built on language and scaffolding, and through metacognition and reflection. These

aspects contributed to the students' education.

Peer-groups are supported by social constructivist theories and are becoming more

common in collegiate classrooms across various disciplines. Previous research has shown peer

groups increased students' knowledge based on grade point averages, course grades, and

retention (Stewart, Amar, & Bruce, 2007; Tien, Roth, & Kampmeier, 2002; Wamser, 2006) and

yielded greater quality of products (Williams & Kessler, 2000). Yet the study groups in this

article are different than the aforementioned peer groups. How can study groups be adapted to

undergraduates, or non –professionals, and what will the results be like in mixed-gender courses

and with other instructors? These questions remain to be answered and some are currently under

investigation. Even though adaptations may be necessary, and the subtleties can only be

speculated since they are not yet documented, I have several recommendations identifying key

characteristics of study groups that promote success regardless of setting or audience. These are

also listed in Table 4. <INSERT TABLE 4 HERE>

First, professors should select a number of book choices that support the class goals. The

students can choose within the available selection based on their own prior knowledge, text

preferences, and learning goals. Often, we search for the perfect textbook to meet our

curriculum goals or designated standards and hope the text reaches most students. A selection of

texts allow for a variety of author styles and perspectives to be read and discussed. Further,

providing students' some choice promotes internal motivation, and motivation is critical for

learning (Pintrich, 2003). Providing multiple books for small group discussion is one option to

consider as we plan our courses.

Second, professors should work to keep group sizes small, preferably around four

members. Large groups (more than 5 students) minimize opportunity for all members to

contribute whereas students are unlikely to be passive in small groups. Groups of approximately

4-5 members provide support and individual accountability. On the other hand, if groups are too

small (say 3 students) it is challenging for the group members to have a rich discussion when one

person is absent.

Third, providing quality time is worthwhile. Finding the right balance of time within a

semester may vary, but approximately six-eight weeks is ideal. Fewer than six weeks minimizes

group bonding and learning. Group members who meet more than twelve weeks may begin to

burn-out or may start to feel like their time was not used efficiently. Consistent class time spent

each period may vary by discipline, but 30-40 minutes in this study allowed all students to have

time to talk and reach a depth in their discussion.

Fourth, each group member should be a leader at least one time. Often there are quiet

and effective leaders who may never speak in large class settings. The group members bond

when no one person is in control and conflicts are minimized when all members can share the

leadership role. Respect for peers is strengthened, responsibility is shared, and self-efficacy

grows from leadership experiences. This is supported by Stewart, Amar and Bruce (2007) who

discovered peer leaders grew in confidence and felt more prepared for their career.

Fifth, peer scaffolding (Slavin, 1997) plays a role in success. In this study,

encouragement, breaking teaching into steps, providing examples and discussing thoughts and

reflections enabled students to grow as a learner.

Sixth, the instructor should provide a highly structured environment that provides

flexibility, with clear expectations and transparent learning.

We, professors, possess much knowledge and are passionate about our expertise. Yet, I

have been reminded that teaching a college course isn't just about passing on information or

focusing on my knowledge. Rather, the coursework should enable students to meet their

personal and professional goals through nontraditional learning experiences settings such as a

study group. College educators should provide constructive learning experiences that teach

leadership skills, require responsibility and promote bonding and trust (Jenlink and Kinnucan-

Welsch, 2001). As much as we want our students to learn information when enrolled under our

tutelage, we should also desire they learn these professional skills they can use in their working

relationships.

Limitations and final conclusions

As with all research, this one has its limitations. Since the information is self-reported I

recognize it may not always be the most accurate and true. I recognize that some students may

have sensed the need to 'please' the instructor or 'report' what she thought the instructor wanted.

I attempted to rectify this by stressing honesty (not correctness) and using multiple data sources

(questionnaires, surveys, textbook concepts and observations). I recognize that without

elementary-secondary classroom observations I can only assume students tried methods if they

said they did, and I do not know about sustained change in students' teaching practices. An area

for further research is to include lesson study, where a small team of instructors work together to

design, teach, study and refine a class lesson (Cerbin & Kopp, 2006). I also note that one

limitation of this study is the select group of students. The students were mature, experienced,

and intrinsically motivated, so they needed little direction or guidance from the professor.

Evidence shows their commitment to learning that may have influenced the results of this study.

Finally, this study was conducted with female students in one practitioner-oriented discipline.

The narrowness of this population, discipline, and setting limit the generalizability of the

findings. These limitations remain questions for further investigation. For example, it is

possible that a book study assignment can be adapted to advanced undergraduate and graduate

courses in the humanities and social sciences.

To conclude, I have learned that providing study groups in a college course is one way to

positively impact students to begin the process of taking ownership and making instructional

changes to better impact elementary, junior and senior high students. Study groups were

unanimously a favored part of class with very positive experiences for all. I will leave you with a

few thoughts from students. Teresa said, "The study group reminded me that collaboration can

give me so many more tools and ideas to improve my instruction and benefit students. It makes it

all real." Leah wrote, "The discussion enhanced my understanding and made me enthusiastic to

try new strategies in my classroom." Misty wrote, "Hearing the ideas of other people sharing

your passion is so beneficial!" In sum, study groups embedded in college classes promote

constructivist learning through book choice, small group dialogue and scaffolding, accountability

and dynamic learning.

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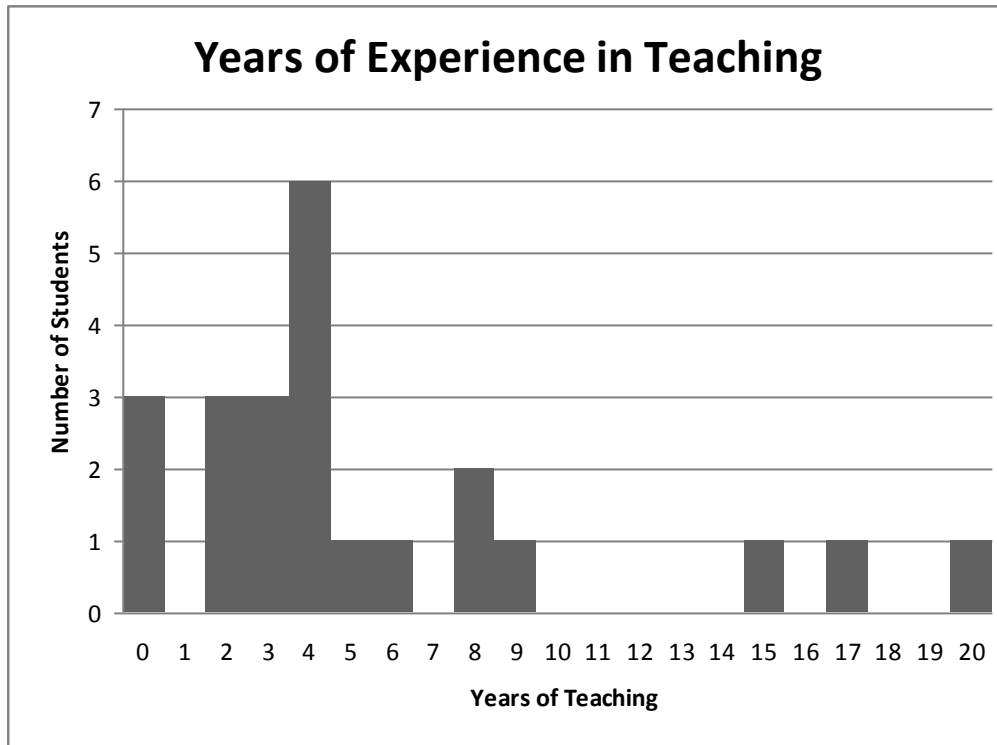published in 1962).

Figure 1. Years of teaching experience

Table 1.   International Reading Association literacy study group process form

Study group characteristic	Rating*
1. Focuses on a single topic or teaching method	2.32
2. Gives participants a common purpose and identity	1.50
3. Offers participants a range of learning opportunities	1.80
4. Provides a supportive environment to discuss teaching problems	1.30
5. Emphasizes building community and fostering respect for one another	1.50
6. Views all participants as having equal status	1.46
7. Rotates leadership responsibilities	1.13
8. Creates new opportunities to work with peers	1.16
9. Provides new opportunities to assume leadership roles	1.50
10. Encourages participants to suggest ideas and topics	1.40
11. Encourages participants to admit what they do not know	1.79
12. Encourages participants to share what they do know	1.30
13. Encourages participants to express reservations	1.70
14. Encourages participants to express enthusiasm	1.58

*Score of 1 = highly effective; score of 7 indicates highly ineffective

Table 2. Themes for growth in knowledge

Theme	Number of Students
Understand/learn teachers' strategies	13
Reflect on current practice and how to improve instruction	11
Deeper understanding how to teach comprehension	4
Learn a completely new approach	3
Increased understanding the importance of teaching comprehension	3
Change in their personal reading comprehension	2
Clarify information about comprehension	2

Table 3. Themes for teaching comprehension

Theme	Number of Students
Deeper teaching/active engagement of students	11
More effective preparation before teaching lesson	3
More effective modeling/use of gradual release model	2
Greater confidence	2

Table 4. Characteristics of successful study groups

Characteristic	Explanation
Book choices	Present students with several text selections that match course goals. This text selection promotes variety of writing styles and different foci for a class of diverse readers.
Small group sizes	Groups of 4-5 students are ideal. Smaller groups are challenged when a member is absent, and larger groups diminish the role each person can have in a discussion.
Quality time	Students need approximately 30-40 minutes to be able to dive deep into the content. This time needs to be given on a consistent basis.
Leadership	Students should rotate leaders at every session. This allows each group member to grow as a leader and to promote a variety of leadership styles without a dominant head.
Peer scaffolding	As students discuss their reading, they should ask questions, provide examples, offer words of encouragement, and break down the content so it is understandable.
Highly structured environment	The professor can structure the environment with expectations for on-task behaviors, monitor group participation, and provide time for class sharing after the students meet in small groups.