

FOSTERING EFFECTIVE COLLABORATION AMONG COURSE TEAMS AT THE
SECONDARY SCHOOL LEVEL

by

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(Under the Direction of Karen Bryant)

ABSTRACT

This study aimed to address the impediments to course team collaboration and evaluate the impact of instituting the professional learning community (PLC) model on teacher collaboration in course teams. The following research questions guided the study: (1) Which perceived barriers are most responsible for impeding course team collaboration at the secondary school level? (2) What effect, if any, will the establishment of Professional Learning Communities among course teams have on teacher collaboration? and (3) What does an Action Research team learn when they collaboratively work to enhance course team collaboration? The action research team comprised four teacher leaders and the department chair, who together developed and implemented interventions based on the PLC model. Three cycles of action research were conducted with 26 teachers in the Social Studies Department of a secondary school. Initial findings determined that time, leadership and teacher resistance to teamwork posed barriers to collaboration, and that the inclusion of PLC components improved teacher collaboration in course teams. In sum, action research was found to be an appropriate approach to addressing problems in schools. Several recommendations were provided based on the findings of this study, including creating sacred collaborative time for course teams, work release

days, selecting capable leaders for course teams, providing professional learning opportunities for course leads, training course teams on the PLC model, providing district-wide professional development on course teams and the PLC model, and creating action research teams to address issues within the school or district.

INDEX WORDS: Collaboration, teacher teams, course teams, professional learning communities, action research

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DEDICATION

To

Ashley W. Stratemeyer,

My wife and companion

Thank you for being by my side for this long journey. Your unwavering love and support has made this feat possible.

and

Camden Christopher Stratemeyer,

My son

You are my inspiration. I strive to be a positive role model for you in every aspect of my life.

“An investment in knowledge pays the best interest”

- Benjamin Franklin

My hope is that my investment in education serves as an example for you.

and

Jeff Stratemeyer, Colleen Stratemeyer and Scott Stratemeyer,

My father, mother and brother

Words cannot possibly capture the love I hold for each of you.

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CHAPTER 1

INTRODUCTION

Early in my career, I realized the impact that teacher collaboration has on teaching and learning. I was lucky enough to be placed on a very successful course team in which organic collaboration took place daily, and for that reason I made tremendous strides in my ability to teach. Unfortunately, not all teachers are able to regularly enjoy the same experience of teacher collaboration. A variety of factors contribute to a lack of collaborative practice, but the result is that teachers often work in isolation. As a result, their ability to grow instructionally is limited, and there is often a negative impact on student achievement. In an era in which accountability and student achievement are at the center of all school measures, creating collaborative teacher environments is imperative to maximize success in all schools.

Organizational Context

This study took place at Eastside High School¹, a diverse secondary school within a large urban/suburban school district. The district is one of the largest in the southeast and serves over 176,000 students across the county. Eastside High School, one of the larger secondary schools, has just over 3,200 students in grades nine through twelve. Since the school opened in 2003, it has had a history of academic success. At the time of the study, the school had recently enjoyed a graduation rate that surpassed the 90% mark, a number that has improved several points over the years. The school also earned a number of distinctions for its successes within the Advanced Placement program, including AP Merit School and AP STEM school. The school, much like

¹ Pseudonym used to protect identities

the district, is racially diverse (see Figure 1) and maintains a free and reduced lunch rate of about 36%. Even with a diverse population and a significant number of students who are considered economically disadvantaged, it has achieved academic success in a number of areas.

Eastside High School Demographics

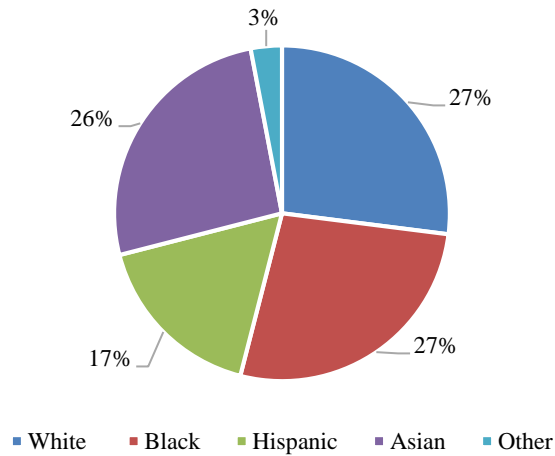


Figure 1. Demographics at Eastside High.

In addition to a large free and reduced lunch population, a number of students from affluent backgrounds also attend Eastside. One of the major neighborhoods in the community is a country club containing homes well above the median home price for the state and county. This made for an interesting dynamic within the school, as the affluent areas pressure the school to provide a very rigorous curriculum, while the rest of the population makes demands for closing the achievement gaps.

The school, which maintains a clean and aesthetically pleasing appearance, operates on a 4x4 block schedule that allows for students to earn up to eight credits a year. Most schools in the area only provide the opportunity for students to earn six credits through a more traditional schedule. A benefit of the 4x4 block schedule is that it allots teachers at Eastside High roughly

90 minutes of planning, as opposed to less than an hour at many of the surrounding schools. Because of the block schedule, students are then able to take a wide array of electives, which in turn, grants the teachers an opportunity to teach courses that might not be offered in any other school in the area. Consequently, there are a number of different course teams within the school, which was relevant to the research being conducted in this study.

Problem Framing

Within Eastside High School, there were reports that several course teams would benefit from increased levels of collaboration between teachers. In conversation with the principal, the issue of ineffective collaboration within course teams was considered to be one of the top three issues the school faced at the time of this study's inception. Although "effective collaboration" was one of the stated school-wide goals, some serious collaborative gaps existed. This issue had been brought to the attention of the school's leadership in a variety of ways, providing us with some examples of failed collaboration. School leadership personnel, teacher leaders, and administrators identified the following issues concerning the ineffectiveness of course team collaboration at Eastside High School prior to this study:

- ❖ Lack of common pacing
- ❖ Varying teaching strategies
- ❖ Differing levels of teacher effectiveness
- ❖ Insufficient time spent engaging in collaborative practice
- ❖ Variance in student achievement across teachers of the same course

Reports from the local school testing office showed that several course teams were not engaging in common pacing with one another. This was evident through varying administration dates of the district required assessments. Pacing discrepancies became the status quo, at times

exceeding greater than one-week variance on any given assessment. Within a 4x4 block school, such as Eastside, that variance equates to eight hours' difference in instructional time. Accounts from assistant principals and department chairs who engaged in "lion walks" and evaluative observations recorded a wide variety of teaching strategies, as well as varying quality of instruction within classrooms. "Lion walks" are classroom observations, often brief and informal, in which another member of the faculty or staff visits a classroom to witness instruction and provide feedback or to take note of effective strategies being properly implemented. The wide variety of instructional strategies and varying levels of effectiveness observed made it evident that teachers were either not successfully sharing strategies with their team members, or that they were opting to plan their own lessons using their own teaching techniques. Moreover, informal conversations with members of various course teams called into question whether many courses were meeting regularly. Some teachers openly reported that their team did not meet and that one member of the group simply took care of any paperwork or tasks required. The course team lead usually offered to do this with the best of intentions and was simply attempting to assist his or her teammates. The lack of meeting time hampered the teachers' ability to effectively work together. It is important to note that the administration at Eastside High School valued common collaborative time, and for that reason, focused on embedding common planning time for its courses.

Quantitative data also supported the existence of this problem at Eastside High School. At the end of the 2015-2016 school year, Mrs. Jones², the assistant principal in charge of course team development, created a survey to measure the level of collaboration among course teams at

² Pseudonym used to protect identities

Eastside High. The survey was given to the course team leads in May of 2015. At Eastside, course leads were considered the team members who volunteered or were selected to serve as the teacher leader for their course. They were responsible for organizing meetings, relaying pertinent information, and an assortment of other duties. One of the major responsibilities was to support collaboration among the teachers on the course team. The results of the survey (see Figure 2) show that, on average, no component of collaboration was rated higher than a 2.91, which would fall into the developing range. Interestingly, the highest mean score of any of the survey items was “culture of collaboration,” but all the other collaborative measures had an average of 2.83 or lower. Even though the course leads perceived that the culture was collaborative in nature, collaboration was not taking place at high levels. The lowest of the scores was in the area of “goal setting,” which had a mean score of 2.05. This is especially significant given that the survey was completed by the course team leads, who were tasked with leading the teams in establishing course team goals every year, if not every semester. This data further supported the need for this study to be carried out at Eastside High School.

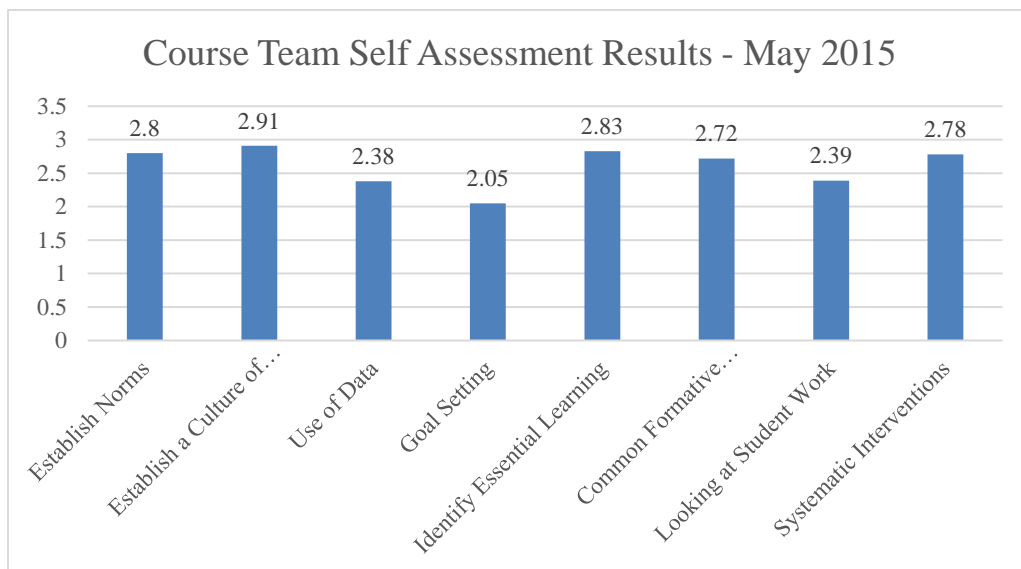


Figure 2. Course Team Self-Assessment results, May 2015.

The qualitative and quantitative data available from Eastside High School evidenced the need for improved collaboration. Little doubt existed among the administrative and leadership teams that this should be an area of focus for the school moving forward. In fact, internal efforts began in an effort to move the organization forward in this area of need. More accountability was placed on the department chairs to ensure that collaborative meetings were taking place. Department chairs were also tasked with ensuring that the course team meetings were effective. A possible issue worth investigating was whether the teachers involved in the course teams had preferences towards isolationism, which has proven to limit professional development and collaboration (Flinders, 1988; Fullan & Hargreaves, 1991; Helterbran, 2008). If the teachers did not believe in the benefit of collaboration, then it would be difficult to expect much teamwork to take place. Each group member might also have their own set of values and beliefs that would cause them to engage their students differently than other teachers (Mezirow, 1997). Every educator has a different background that has helped to shape who they are as a teacher. It is important to understand that these differences exist and that all experiences could benefit a team within a school. These possibilities could have contributed to the failed efforts to establish high-functioning course teams that engage in regular collaborative practice.

The Problem District-Wide

Given that the school district consists of 19 traditional high schools, this study conducted at Eastside High School has relevance beyond its walls. Many of the high schools in the district are large and have teams of teachers that are expected to work together to improve their practice. While each high school has close to 100 teachers or more, the need for improved collaboration exists elsewhere in the district. No fewer than three of the high schools have yet to even develop course team training for the teachers. This study can be used as part of the blueprint for those

schools seeking to create course teams and training, which will help them to progress toward increased teacher teamwork. Even for the schools that have already developed course teams and subsequent training, not all of the teams are functioning at their highest possible levels. The information gained from this study can undoubtedly be applied to a number of schools within the district.

The Problem in the National and International Forum

Teacher collaboration has been a focus of educational research nationally and internationally. The impact of teacher collaboration and its effects on the quality of teaching and student achievement have been well documented (Fullan & Hargreaves, 1991; Lee & Smith, 1996; Little, 1982; Lomos, Hofman, & Bosker, 2011; Ronfeldt, Farmer, McQueen, & Grissom, 2015; Vescio, Ross, & Adams, 2008). Studies have been conducted across the United States and in numerous other countries. The concept of teachers working in isolation and failing to effectively collaborate has been identified in previous research as well (Fullan & Hargreaves, 1991). The problem addressed through this study has impacted schools across the world, and the implications of this research will contribute to a rich body of work in the area of teacher collaboration, with a specific focus on course teams at the secondary level. Ensuring effective teacher collaboration is a vital component to any secondary school, regardless of location.

Theoretical Framework

This action research study was founded on a combination of two theoretical models, the first of which is the community of practice theory. It was developed by Lave and Wenger (1991) and was used to study the process of learning. The theory indicates that when examining the learning process, it is imperative to account for the social interactions and implications of working in communities. Wenger (1998) describes a community of practice as a

collection of individuals who engage in “collective learning” and are sustained by the “pursuit of a shared enterprise” (p. 45). The community of practice theory has produced the derivation and research of teacher professional learning community models (Owen, 2014; Scott, Clarkson, & McDonough, 2011). This concept details the essential characteristics and functions of a Professional Learning Community (PLC) within schools. The concepts of the PLC can be applied to the course teams that this study investigates. Given that Eastside already had course teams in place and the goal was to improve the effectiveness of these teams, the community of practice theory was appropriate for this study.

The second theoretical framework used for this research was based on the work of Jack Mezirow and his transformative learning theory (Mezirow, 1991; Mezirow, 1997). This theory accounts for the way in which adults learn, which differs from that of adolescents. The theory contends that all adult learners have formed their own unique frames of reference across the years and that these frames of reference account for the way in which they understand and learn (Mezirow, 1991). Essentially, adults have created their own set of biases, both known and unknown, that have formed as a result of their upbringing and experiences to date. To continue to grow as an adult learner, it is imperative that each individual challenge his or her assumptions and become critically reflective. The more reflective one becomes, the more willing he or she will be to consider divergent ideas and ways of thinking (Mezirow, 1997). Self-reflective adults will become more open-minded. Open-mindedness and reflectivity are also critical to the process of teacher collaboration in course teams, because the teams are adults learning as a group. Mezirow (1997) even mentions teamwork, stating that “becoming critically reflective of the assumptions of others is fundamental to effective problem posing and solving” (p. 9). In order for teams to be effective, it is important that each member challenges his or her

assumptions, as well as the assumptions they have made in regard to their teammates. To this point, McComish and Parsons (2013) make the argument that “those who study teacher collaboration cannot fail to recognize that transformational learning will be both corporate and individual” (p. 241). Transformational learning impacts each individual adult learner, as well the learning of the group as a whole.

As applied to my study, these theories informed the research of the course teams as a whole, but also gave attention to each individual member of each group and their interactions with the team. Since the development of a PLC and the use of the community of practice theory require adult learning and professional development for all team members, it is imperative that it was coupled with the transformative learning theory. Several of the same concepts already overlap between the theories. From the combined use of these theoretical models, the intended goal was an improved culture of collaboration and the increased commitment of the course teams to a shared vision and purpose, which resulted in more effective course teams in the Social Studies Department at Eastside High.

Theoretical Model



Figure 3. Theoretical model.

Purpose and Research Questions

This action research study was developed in order to identify the issues that impede effective course team collaboration from taking place and to take action to improve teamwork among teachers. The research took place within the Social Studies Department of a high school that is part of a large urban/suburban school district. For the purpose of this study, course teams, sometimes referred to as content teams or instructional teams, are defined as small groups of teachers within a curriculum department that all teach the same, or a similar, course. Research has shown that teamwork among teachers often leads to improved quality of instruction and overall student performance (Lee & Smith, 1996; Little, 1982; Lomos et al., 2011; Ronfeldt et al., 2015). It is imperative that all course teams work together to offer the best quality of instruction possible, and this study aimed to find an approach that resulted in that outcome. The information ascertained through this study will be valuable to schools seeking to overcome collaborative obstacles and improve teacher collaboration.

Through action research, the study sought to answer the following research questions:

1. Which perceived barriers are most responsible for impeding course team collaboration at the secondary school level?
2. What effect, if any, will the establishment of Professional Learning Communities among course teams have on teacher collaboration?
3. What does an Action Research team learn when they collaboratively work to enhance course team collaboration?

Significance

There is a litany of research that supports the positive correlation between teacher teamwork and the improved practice of teaching and learning. This research provided insight

into the impact of the strategies employed in the study and the development of course teams into effective collaborative units. Although there is much research on teacher collaboration in general, a need exists for more studies involving small teacher teams or course teams. Students are directly impacted by the quality of instruction that they receive from teachers, and, given the effect of collaboration on teaching quality, the students will benefit from knowledge gained through this action research project. The significance of improved collaboration in schools is paramount, and educators must ensure they are doing all they can to make certain that teacher teamwork is taking place. This study serves as a guide for schools to develop effective teams at the most granular level within the building, course teams.

CHAPTER 2

LITERATURE REVIEW

This literature review includes an examination of research pertaining to this study, which assisted with the development of the conceptual framework applied to this project. The databases provided by the University of Georgia were used to access books, journals and articles that were related to collaboration and the work of course teams at the secondary school level. A number of sources were readily available, of which the most relevant and significant were selected to be included within the literature review. This chapter has been organized by themes, identified by the research, that pertain to this study.

Conceptual Framework

Two major theories, communities of practice and transformative learning, undergird the conceptual framework for this research. Based on these theories, the conceptual framework hinges on the transformation of course teams into effective PLCs. Each course team adopted major principles of PLCs and worked toward entrenching those within the team. In addition, it is important that each team member engaged in individual and collective reflective practice. Adult learners must be aware of the experiences that influence the way they learn, as well as the biases they have developed over time. The desired outcome of following these steps was increased effective collaboration among course teams at the secondary school level, which, as the literature supports, results in improved teaching and learning in the classroom (see Figure 3). The conceptual framework was used to guide the development of this research project.

Conceptual Model

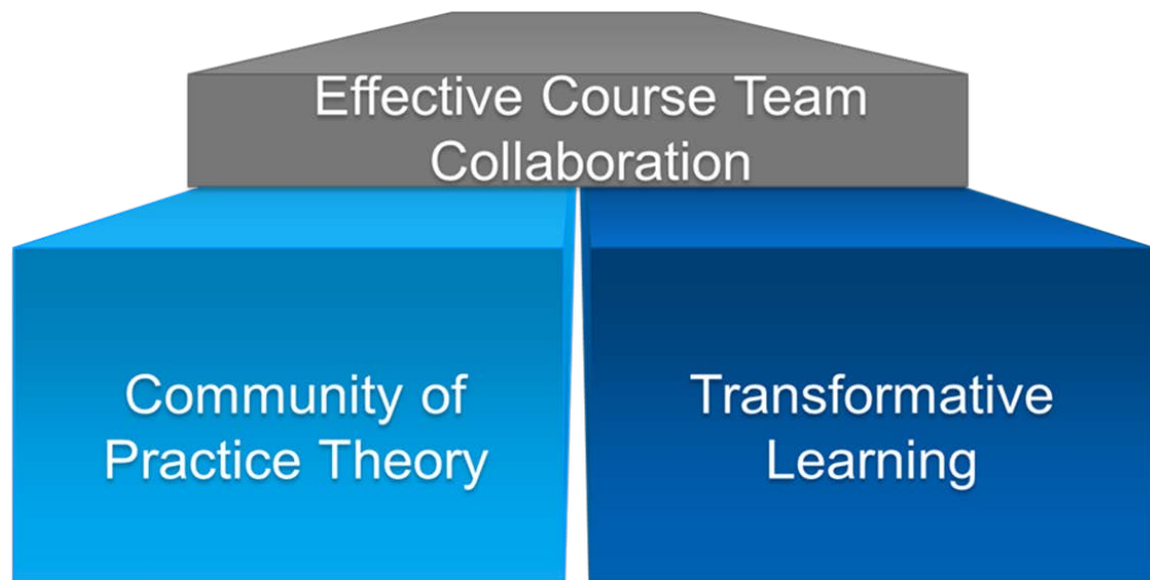


Figure 3. Conceptual Model.

Conceptual Model Explained

As shown in the model, this research relies on the development of Professional Learning Communities and reflective practice on the part of the teachers. With the implementation of interventions founded on these theories, the anticipated result was increased collaboration among the teachers within course teams. A number of components of effective collaboration, detailed in the literature review, help indicate whether or not the conceptual framework had the intended and desired effect on the teacher teams included in this study.

The Value of Collaboration

The value of effective collaboration within schools has been well documented to date (Fullan & Hargreaves, 1991; Lee & Smith, 1996; Little, 1982; Lomos et al., 2011; Ronfeldt et al., 2015; Vescio et al., 2008). Little (1982) was one of the first to investigate and document the importance of collaboration and operating within a workplace environment that fosters

continuous growth. His research found evidence of improved student achievement through teachers engaging in collaborative practice and collective responsibility for students' learning. Studies conducted by other researchers shared similar findings for secondary schools, but some of the research was specific to curriculum departments in schools (Lee & Smith, 1996; Lomos et al., 2011). The unique perspective of the effects of teacher collaboration within instructional teams has been researched and was found to have strong ties to student achievement as well as the overall quality of instruction in the classroom (Ronfeldt et al., 2015). The research concerning departments and instructional teams is key because the problem being faced within the organization was on small course teams, some of which were highly effective and others that were not. These course teams usually consisted of two to six teachers who all taught the same content area. These teams were smaller than the department as a whole; however, many of the same concepts from Lee and Smith (1996), as well as Lomos (2011), applied. The research conducted by Lee and Smith (1996) included departments with varying levels of collaboration, and at the conclusion of their research, the evidence showed a direct correlation between those departments that acted as professional learning communities and student achievement. Lomos, Hofman, and Bosker (2011) discovered that departments that engaged in more "professional" activities also showed greater student achievement. In both research studies, the more collaborative and professional the departments, the greater the success of the students.

Course Teams as Professional Learning Communities

A Professional Learning Community (PLC) can exist on varying levels, either at the school-wide level or on a smaller scale, such as the department level (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). When developing PLCs, the idea is to create a community in which teachers and administrators work together to improve the practice of teaching and learning

through the shared work of the group. Scott, Clarkson, and McDonough (2011) identified several key characteristics for building a strong PLC through examining a wide variety of literature on PLCs. Some of the key components included shared values and vision, a focus on student learning, engaging in reflective dialogue, a willingness to try new strategies, and making teaching more public, just to name a few (p. 4). These thoughts are supported by other researchers and by the robust research on PLCs to date (Huffman, 2001; Lee & Smith, 1996; Nelson, 2009; Stoll et al., 2006). Given that the intent of a course team is for the teachers to act together to strengthen and improve the quality of instruction and student achievement, these teams should be considered as PLCs, simply of a smaller scale.

Shared Values, Vision and Goals

Multiple researchers have emphasized the importance of a shared set of values (Hord, 1997; Hord & Sommers, 2008; Stoll et al., 2006). Hord (1997) considers a set of shared values and vision to be an essential component of a successful PLC. She argues that there must be a shared commitment that is reflected in the mission and vision of the community. Huffman (2001) reiterates the importance of a community with shared values and vision. She contends that some schools may be further along in their development as a PLC than others, and that barriers exist for some to create a shared vision. Huffman found that those schools that lacked a shared vision supported by their organizations were more likely to “bounce from one innovation or program to another,” which resulted in “fragmentation of efforts and lack of commitment by teachers and administrators” (p. 31). However, she does believe that these barriers can be overcome and that schools can continue to develop a community that “results in a vision that honors and develops the commitment and talents of the individuals, who seek to provide a culture of success for students and to improve their learning communities” (p. 32). To the point

of sharing common values, PLCs have also benefitted from the development of common goals (DuFour, 2004; Owen, 2014). Common goals among teacher teams demonstrate shared values and vision for the group, which contributes to group cohesion. Communities of teachers who are committed with regards to values, vision and goals are powerful in growing as professionals and impacting the quality of education provided for students.

Collective Responsibility and Efficacy for Student Learning

Another major component of a successful PLC is collective responsibility for student success (DuFour, 2004; Goddard, LoGerfo, & Hoy, 2004; Lee & Smith, 1996; Little, 1982; Wang, 2016). Collective responsibility can be defined as “teachers’ willingness to take responsibility for the learning of their own students as well as students throughout the whole school” (Qian, Youngs, & Frank, 2013). The notion of collective responsibility can also be applied to teacher teams, or course teams, as opposed to the broad view of the whole school. In that case, collective responsibility would require that the teachers take responsibility for not only their own students, but all of the students who are taking the same course (e.g., United States History). When teachers work in teams and take on collective responsibility for their students, their practice improves and students learn at higher levels.

Olivier and Hipp (2006) found that implementation of a successful PLC can lead to the development of collective efficacy for the team. Essentially, efficacy can develop over time through the work of course teams. Moolenaar, Slegers, and Daly (2012) also found that strong teacher teams fostered greater levels of collective efficacy among team members. By creating PLCs in schools, the teachers involved will, in turn, have a greater confidence in their work and in the ability of their students to learn. Social theory expert Albert Bandura (1993) supported the impact of collective efficacy through research that found that groups with a high sense of

efficacy were more successful. Course teams acting under the PLC model and successfully improving their levels of collaboration can also impact the teachers' belief in the work they carry out each day. Collective efficacy in schools has been shown to have a positive impact on teaching and learning, specifically student achievement (Goddard et al., 2004; Hoy, Sweetland, & Smith, 2002; Moolenaar et al., 2012). Course teams that act as PLCs will, in turn, have assumed collective responsibility for the learning of their students and will have higher levels of collective efficacy as a team.

Reflective Practice

As discussed in the theoretical foundation, teacher reflection is beneficial to the growth of individuals and the team. Going beyond acknowledging biases, the existence of reflective practice on teaching is an important component of a PLC (Stoll et al., 2006). As PLCs develop, it is important that members reflect on their teaching techniques individually and discuss them as a team. It has been shown over time that when teachers engage in reflective practice, their professional capacity expands (Belvis, Pineda, Armengol, & Moreno, 2013; Parsons & Stephenson, 2005; Schön, 1987). As the teacher's ability to teach improves, his/her students benefit. Going a step further, Le Cornu and Ewing (2008) discuss the concept of "reciprocity," which they describe as "commitment to and responsibility for their own learning as well as that of other members of the community" (p. 1808). Reciprocity goes beyond reflecting on one's own personal practice and instead includes reflection of the entire group. The authors argue that this notion of reciprocity develops within strong PLCs (Le Cornu & Ewing, 2008). In essence, strong teacher teams develop reciprocity, and a PLC cannot be successful without the community engaging in group reflective practice. Either way, reflective practice on the part of the educator

is vital to the success of the group and the development of teachers. When course teams engage as PLCs, there should be a component of reflective practice by team members.

Impediments to Collaboration

As established previously, a key component to a successful PLC is collaboration, but at times there are obstacles that interfere with effective collaboration. There are numerous variables that have been discovered to serve as impediments to collaboration to date. Previous research has investigated many of these obstacles by explicitly looking for them or by determining the positive characteristics of PLCs and collaboration, from which we can determine those that are mutually exclusive to their counterparts. For example, if the research shows that PLCs require embedded time to meet during the school day, an obvious problem would be a lack of time during school hours to gather as a group.

One issue that has been found to impede collaboration and make for ineffective PLCs is the tendency of teachers to prefer to work in isolation (Fullan & Hargreaves, 1991; Lujan & Day, 2009). Fullan and Hargreaves (1991) contend that at least some of the problem is rooted in the history of the teaching profession, in which isolation was simply the accepted practice. Flinders (1988) also discusses the significant presence of isolation in the teaching profession, while also advocating for a move toward more collaboration. His belief is that teachers need to become less isolated in order to grow as professionals, a notion shared by Fullan and Hargreaves (Flinders, 1988; Fullan & Hargreaves, 1991). It is also important to note that both studies share a concern that isolationism is a result of the lack of opportunity to collaborate.

Lujan and Day (2009) explicitly address the “roadblocks” to overcome in establishing PLCs in schools. To build upon the literature to this point, one of the major arguments made by the authors is that embedded collaboration time for the PLCs to meet must be built into

schedules. A lack of time to meet was seen as one of the major roadblocks to building a successful collaborative team. Lujan and Day (2009) discovered that the communities were more likely to meet and remain effective if required time to meet was during the school day, rather than before or after.

Other researchers have noted that the divergent views of teachers can act as a possible impediment to collaboration in PLCs (Dooner, Mandzuk, & Clifton, 2008; Lujan & Day, 2009). Teachers do not always agree on the goals of the group, how to achieve the goals, or the best way to measure success. This often leads to conflict between the members of the group, which can at times cause individuals of the PLC to become disconnected. To this point, Hargreaves (2001) states that “conflict in schools is seen as a problem, not an opportunity, where purposes are threatened, competence is questioned and undertones of status and power strain the fragile bonds that hold teachers together” (p. 19). For this reason, many authors feel that it is vitally important that PLCs are able to engage in open and reflective dialogue that allows the group to move past these differences (Hargreaves, 2001; Lee & Smith, 1996; Lujan & Day, 2009; Ohlsson, 2013).

Empirical Findings Table

The table (see Appendix A) includes ten empirical studies that relate to the research conducted at Eastside High School. Each one relates to teacher collaboration and/or PLCs in an educational setting. There is overwhelming support in favor of teamwork on the part of educators. Three of the studies concentrate on the impact of collaboration and PLCs on student achievement. Each of the studies showed that there was a positive correlation between teacher teamwork and the achievement of their students. Given the current state of education and the increasing focus on improving overall student achievement, this positive impact should be noted.

The other studies investigated the components of PLCs and collaboration in schools. Some key themes arose from the studies, including some potential issues with attempting to implement PLCs and foster collaboration in schools. The empirical findings table is intended to supplement the research already presented in the literature review.

Conclusions

The review of the literature focused on several of the key components of a professional learning community (PLC), all of which center upon collaboration. A successful PLC exhibits several characteristics that improve the practice of teaching. These teams share common goals, they believe in their ability to impact student learning and they reflect on their practice. The research of literature supports the PLC model as a vehicle to improve the level of collaboration in course teams. The data shows that the teaching profession as a whole reaps benefits when educators work together to grow professionally. There is also significant evidence that illustrates the impact collaboration can have on student achievement.

To achieve this goal of creating more collaborative and effective course teams at the secondary school level, the action research team engaged the problem through the community of practice and transformative learning lenses in an effort to create shared visions for each team and an overall culture that is more conducive to collaboration. The community of practice framework grounds the study by establishing the expectations of each course team, whereas the transformative learning theory addressed the ways in which adults learn and brought attention to the biases that each member of the community possesses. The combination of these two approaches was intended to improve the effectiveness of each course team within the department.

Gap in the Literature

Although the research on collaboration and PLCs is plentiful, there is little research as to creating course teams that act as a PLC. Most research to date concentrates on the school as the organization of focus, while some researchers used a slightly narrower scope by investigating the collaborative nature of departments. Essentially, this research study attempted to create collaborative PLCs on every course team, within a department acting as a PLC, and ideally this would take place within a school that could be considered a PLC of its own. The gap this study will address is cultivating collaboration at the course team level, something little literature focuses on to this point. Therefore, this study's unique focus on the lowest level of a PLC in a school building, the course team, benefits the already rich literature on collaboration and PLCs.

CHAPTER 3

METHODOLOGY

This Action Research study was designed to identify the issues that impede effective course team collaboration from taking place and to take action in order to improve teamwork among teachers on course teams. The research questions developed to guide this study are: (1) Which perceived barriers are most responsible for impeding course team collaboration at the secondary school level? (2) What effect, if any, will the establishment of Professional Learning Communities among course teams have on teacher collaboration? and (3) What does an Action Research team learn when they collaboratively work to enhance course team collaboration? This chapter will discuss the Action Research approach, why it was appropriate for this study and how it was executed.

Case Study Design

The research for this study was conducted using a mixed methods Action Research approach. Action Research was the preferred research method because it allowed for the researcher to investigate how things happen, rather than simply what is happening (Stringer, 2014). A mixed methods approach, using both qualitative and quantitative data, provided ample data and a variety of data types that helped to better inform the study (Creswell, 2014). In working with teachers and course teams, qualitative information gained through Action Research proved to be invaluable, and the quantitative data helped to provide the statistical foundation for the research. Therefore, both forms of data were used to measure the impact of the planned interventions in this study.

As Coghlan and Brannick (Coghlan & Brannick, 2014) explain, Action Research occurs in a cycle or a series of cycles (see Figure 4). This study consisted of three Action Research cycles. Within each cycle there are four phases: 1) diagnosing, 2) planning action, 3) taking action and 4) evaluating action. The AR team continues to learn in each phase of the cycle as they determine what the problem is, decide how to address the problem with interventions, then execute the interventions and measure the impact of the actions taken. Creating three cycles for this study allows the AR team to gain in-depth knowledge on the problem and best way(s) to intervene. The specific timeline for each of the three cycles will be broken down and explained in detail later in this chapter.

The Action Research Team

The action research team consisted of the course leads, who serve as teacher leaders, from each of the content areas within the Social Studies department and the department chair. The course leads were a natural fit for the AR team because the focus of the study benefited each of them, as well as the teachers they work with. Including the course team leads on the AR team also ensured that the implementation was thorough and consistent among all teams. The inclusion of the department chair on the AR team was a natural fit as well, since he was ultimately responsible for each of the course teams. In addition to the course leads, every teacher in the Social Studies Department was involved in the study through their work within course teams. Each teacher would, in turn, take the information and skills learned in the course team meetings and apply them to his or her classroom. More detail on the AR team members will be provided in Chapter 4.

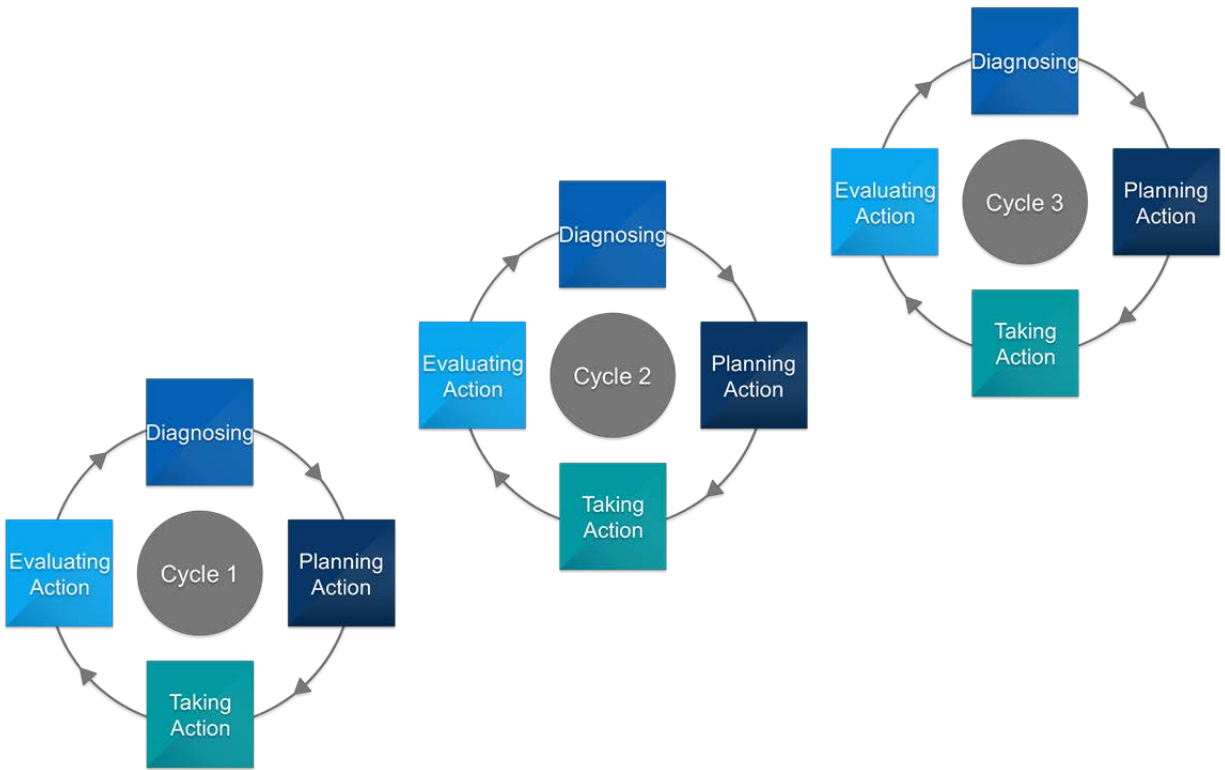


Figure 4. Action Research cycles. Adapted from *Doing Action Research in your Own Organization* (Coghlan & Brannick, 2014).

Research Participants

The targeted population for this study consisted of all the teachers within the Social Studies Department at Eastside High School. No exclusion criterion was used in selecting participants for this study, and the only requirement for inclusion was that the participant needed to be a member of the Social Studies Department. 26 teachers from the department were included in the target population, five of whom served on the AR team. All of the teachers approached to participate in this study, AR team members included, agreed to take part in the study. This group was targeted because of the researcher's previous position as both a teacher within the department and as the department chair. Furthermore, focusing on only one department limited the number of individuals involved and maintained a narrow focus for the

study. Overall, the teachers hesitated very little to participate in the study, and their greatest concern was regarding the amount of time the study would require of each participant. Once it was explained that teachers would only be asked to participate in a maximum of two interviews and complete two surveys, all reservations dissolved. The AR team was addressed in a separate meeting. In this meeting, it was made clear that acting as an AR team member would require additional meetings and involvement beyond that of the other teachers in the department. As mentioned previously, the nature of this study benefited each of the course leads, and for that reason the researchers experienced no issues in gaining all participants' consent to participate.

After the potential subjects were made aware of the research and its requirements, each individual was given the opportunity to opt into the study by signing an informed consent document (Appendix A). The document clearly stated that participation in this research study was voluntary and that participants could elect to leave the study at any point. Privacy and identity protection were clearly addressed and participants were informed that all efforts would be made to protect those involved. Once the individuals had reviewed and signed the informed consent document, the forms were collected from each teacher in the department. As soon as all forms were collected, the research project began immediately with full participation.

Data Collection Methods

Data collection for this study was designed to adequately and accurately address the research questions. Both qualitative and quantitative data were collected to ensure that a robust data set was available. Each form of collection was intended to directly correspond with one or more of the research questions (see Table 1).

Table 1

The Research Approach

Research Question	Data Collected	Analysis Approach	Timeline
1. Which perceived barriers are most responsible for impeding course team collaboration at the secondary school level?	<ol style="list-style-type: none"> 1. Collaboration surveys 2. Teacher interviews 	<ol style="list-style-type: none"> 1. Quantitative 2. Qualitative 	Surveys were given early in August 2016.
2. What effect, if any, will the establishment of Professional Learning Communities among course teams have on teacher collaboration?	<ol style="list-style-type: none"> 1. Collaboration surveys 2. Teacher interviews 3. Course team observations 	<ol style="list-style-type: none"> 1. Quantitative 2. Qualitative 3. Qualitative 	<p>Collaboration surveys and teacher interviews took place around the same time. They were conducted in August 2016 and again at the end of the study in February 2017.</p> <p>Course team observations were conducted between October 2016 and December 2016.</p>
3. What does an action research team learn when they collaboratively work to enhance course team collaboration?	<ol style="list-style-type: none"> 1. Teacher interviews 2. AR meeting transcripts 	<ol style="list-style-type: none"> 1. Qualitative 2. Qualitative 	<p>Final AR team teacher interviews were conducted in February 2017.</p> <p>AR meeting transcripts were generated throughout the study.</p>

The four major forms of data collection were 1) course team surveys, 2) teacher interviews, 3) observations of course team meetings and 4) AR team member interviews. The Course Team Collaboration survey (Appendix B) was adapted from *Becoming a Learning School* (Killion, Roy, & National Staff, 2009). The purpose of the survey was to measure the perceived levels of collaboration in the course teams at the start of the study and again at its conclusion. The major themes included in the survey correspond to the characteristics commonly found in a PLC, which served as the conceptual foundation for this research. The survey was given to the participants for the first time as soon as informed consent was obtained in August 2016. The results from the initial survey provided the baseline for the study and were eventually compared to those of the second survey, which was administered at the conclusion of the research in February 2017.

Teacher interviews were used as a qualitative form of collecting data on the effectiveness of course team collaboration. Two interview protocols were developed, the first of which was intended to be used prior to the implementation of the interventions decided on by the AR team. The first set of interview questions (Appendix C) were designed to identify any possible impediments that hampered collaboration among teachers in course teams. The other purpose of the interview protocol was to validate the survey results by reinforcing the status of each course team. The AR team used the data from the August teacher interviews to plan interventions that were intended to improve teacher collaboration in the course teams. The February interview protocol (Appendix D) was designed to help measure the progress made from the start of the study to its conclusion. The questions were designed to help gauge the level of collaboration taking place in course teams, which could then be compared to the initial interviews. Both sets of interviews were audio recorded and transcribed, which allowed for a more in-depth analysis.

The third form of data collection used in this study was researcher observation of course team meetings. The researcher attended at least one meeting for each of the courses in the Social Studies department. The observations of the course team meetings were recorded and transcribed, and the data from these meetings were used to help determine how collaborative the group was and how effectively the planned interventions improved each group's ability to work together. In each of the meetings, the major components of collaboration were identified, based on the review of the literature previously outlined. Course team meetings were an expected practice of all course teams at Eastside High and occurred approximately once a week. Each team was visited towards the end of the fall semester, which allowed time for the interventions to have an impact on each of the teams.

Lastly, AR team interviews were conducted to measure the impact that action research had on its team members. Each member of the AR team was interviewed separately, which created a safe and private atmosphere. The interviews were executed at the conclusion of the action research cycle, in February 2017. As with the prior interviews, these were transcribed and coded. Once transcribed, the interviews were analyzed for emerging themes. Through the information gleaned in these interviews, it was possible to measure the effectiveness of the AR team and determine if the model impacted the learning of AR team members. Additionally, AR team member interviews provided more insight as to the effectiveness of the of interventions implemented within the department.

Data Analysis Procedures

As previously stated, a mixed methods approach, qualitative and quantitative, was appropriate for this research. The surveys completed by the teachers provided quantitative data, and the responses were analyzed in two different ways. First, the data was examined holistically

for the entire department, which painted a broad picture as to the state of collaboration department-wide. The second analysis broke down results for each course team specifically and reflected the collaborative status of each individual team. For each survey item, a mean score was calculated for both administrations, in August and again in February. Mean scores were simple to calculate, but accurately provided the information needed for this study. The results from the initial survey were later compared to the final survey in order to determine the effects of the study and of the interventions planned by the AR team. Again, these comparisons examined department-wide changes, as well as the impact on each individual course team.

The qualitative data analyzed in this study was generated through teacher interviews, course team meeting observations and AR team member interviews. All interviews were recorded and transcribed to allow for coding and analysis. The In Vivo coding method was used throughout the study. As Miles, Huberman, and Saldaña (2014) discuss, the In Vivo method is particularly fitting for inexperienced researchers who are looking to code. When coding, the researcher analyzed the data for emerging themes within each interview, as well as among all of the interviews conducted with teachers. The identified themes then served as data for the study and were used to address each of the research questions previously stated.

Ensuring Trustworthiness

The validity of any research project is critical. If a study cannot be considered valid, the research might as well be discarded. To ensure the trustworthiness of this study, research triangulation was used to provide multiple sources of data. Triangulation is a method of “seeing or hearing multiple instances of it from different sources by using different methods” (Miles et al., 2014). Every source of data in a study provided more validity to the research. Each research question was associated with more than one data collection method to ensure that the study was

valid (see Table 2). When possible, the quantitative data collected informed the qualitative data collected, and vice versa.

Table 2

Triangulation of Research Methods

Research Question	Quantitative	Qualitative
1. Which perceived barriers are most responsible for impeding course team collaboration at the secondary school level?	<ul style="list-style-type: none"> • Collaboration surveys 	<ul style="list-style-type: none"> • Teacher interviews • AR team meetings • Member checking
2. What effect, if any, will the establishment of Professional Learning Communities among course teams have on teacher collaboration?	<ul style="list-style-type: none"> • Collaboration surveys 	<ul style="list-style-type: none"> • Teacher interviews • Teacher observations • Course team observations • AR team member interviews • Member checking
3. What does an AR team learn when they collaboratively work to enhance course team collaboration?		<ul style="list-style-type: none"> • AR meeting transcripts • AR team member interviews • Member checking

The researcher used member checking to ensure the validity of all interviews. Member checking can be described as “allowing participants to read the transcription of their interviews to ensure that these have been accurately recorded and are therefore credible” (Houghton, Casey, Shaw, & Murphy, 2013). Each interviewee had the opportunity to confirm that his or her thoughts were accurately represented in the transcriptions. In addition, any direct quotes that

were used from the interviews were also shared with the participant to once again guarantee accuracy in the research process. Member checks were essential due to the significant amount of qualitative data collected throughout this study.

Timeline for the Study

The action research portion of this study spanned eight months, including AR team meetings, interventions, surveys and interviews. The study began in early August 2016, when the AR team first met to discuss the project in general terms. Shortly thereafter, the team began developing a list of possible interventions that could be implemented within the framework of the study. After the AR team had the opportunity to meet in early August, the remaining teachers in the Social Studies department at Eastside High School were asked to participate in the study. The study was introduced, and all teachers were provided informed consent documents to opt in to the study. Once an informed consent form was received from each teacher invited, they were asked to complete the initial Course Team Collaboration Survey and the department-wide research began. The action research project and its three cycles continued until February 13, 2016, at which point the final interviews were conducted. For a detailed breakdown of the timeline of this study, please refer to the Action Research Timeline (Table 3).

Table 3

Action Research Timeline

<u>Action Research Timeline</u>	
August 2, 2016	Initial AR Team Meeting
August 10, 2016	AR Team Meeting #2
Mid-August	Teacher Interviews Collaboration Surveys
September 13, 2016	AR Team Meeting #3
October 11, 2016	AR Team Meeting #4 Course Team Observations
November 15, 2016	AR Team Meeting #5 Course Team Observations
December 13, 2016	AR Team Meeting #6 Course Team Observations
January 24, 2016	Final AR Team Meeting
Early February	Final Survey Final Interviews AR Team Interviews

Action Research Cycles

Over the course of this project, three cycles of action research were completed by the AR team. Each cycle included the four phases previously mentioned: 1) diagnosing, 2) planning, 3) taking action and 4) evaluating action. At times, there was some overlap between the phases or multiple phases were completed in one day. For example, it was common for both the diagnosing and the planning phases to be carried out in one AR team meeting. The meeting would be divided up to ensure that each of the phases was addressed. This allowed for proper interventions to be planned by the team. Once the four phases had the opportunity to run their course, a new cycle began. This pattern continued until the study was complete in February 2017.

First Action Research Cycle

The first action research cycle (see Figure 5) began with the initial AR team meeting on August 2, 2016. This is when the study first began, and teachers were introduced to the research to be carried out at Eastside High School. During this cycle, the AR team met three times, on August 2, August 10 and September 13 of 2016. The team discussed potential barriers to effective collaboration at both the August 2 and August 10 meetings. The results from the first collaboration surveys were analyzed at the August 10 meeting as well. Initial interventions were planned at the August 10 meeting, and the course team leads carried out the interventions from that point until the September 13 meeting. At the September 13 meeting, the team evaluated the action taken by the course team leads from August 10 to that date. Once the diagnosis phase was complete, the team moved into cycle two of the Action Research process.

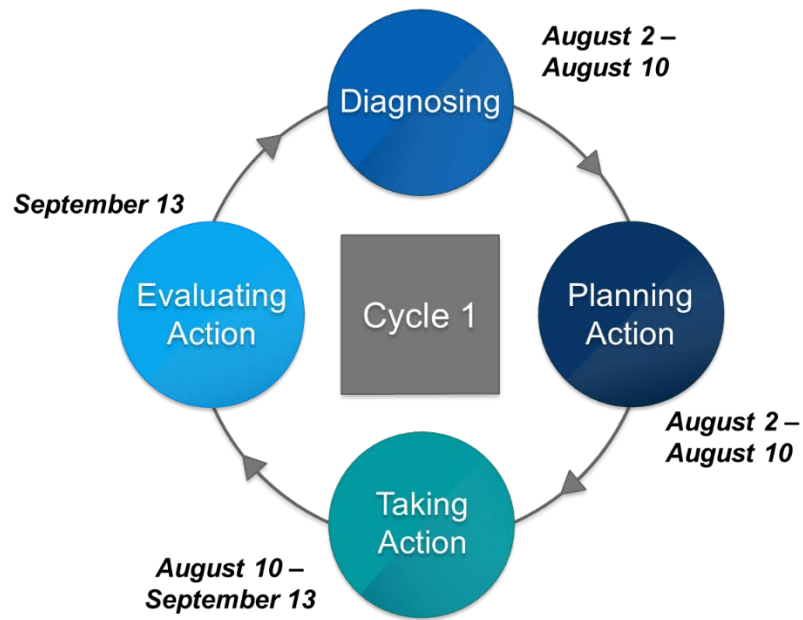


Figure 5. Action Research Cycle 1. Adapted from Coghlan & Brannick (2014).

Second Action Research Cycle

The second action research cycle (see Figure 6) began at the September 13, 2016 AR team meeting. At the September meeting, the group revisited the problem, took the information they learned from the first AR cycle, and applied it to the interventions moving forward. The team then planned new interventions and refined some of the previously attempted interventions to ensure maximum impact on collaboration. All interventions were revisited at the October 11, 2016 AR team meeting. The group discussed the progress of each course team and determined if there were any specific techniques that were more successful than others in working with the course teams. Each course team lead continued the “taking action” phase until the next AR team meeting. At the November 15, 2016 AR team meeting, the group evaluated the action carried out during the second AR cycle. Each member of the team reported on the progress of their team

and the entire group evaluated the success of the interventions. This meeting concluded the second cycle of action research for this study.

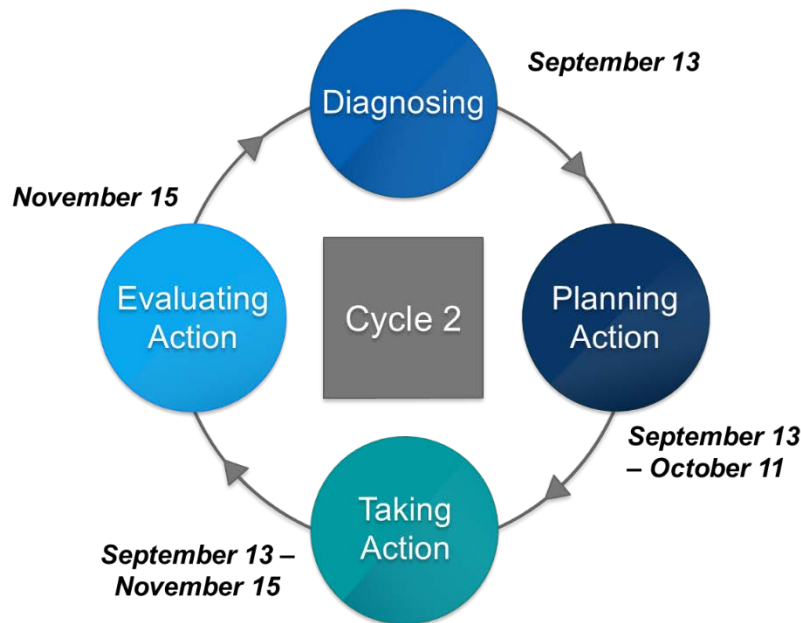


Figure 6. Action Research Cycle 2. Adapted from Coghlan & Brannick (2014).

Third Action Research Cycle

The final cycle (see Figure 7) began with the November 15, 2016 AR Team meeting. During this meeting, the team “diagnosed” the problem and used what they learned from the first two AR cycles to plan interventions for the final cycle of the study. The “planning” began at the November 15, 2015 meeting and continued through the December 13, 2016 meeting. Once the interventions were determined and planned at the November AR team meeting, the “taking action” phase immediately began. At the December 13, 2016 meeting, progress was discussed and the team determined if any additional interventions were needed. Implementation of the plans continued until the January 26, 2017 meeting, at which time the “taking action” phase was

complete. Given that this was the third and final cycle of action research for this project, the final collaboration surveys and interviews were scheduled. The data collection used to “evaluate action” ran through February 13, 2016, at which time all interviews and surveys were complete. Once the final step was taken, the last of the AR cycles for this research project was complete and the study concluded.

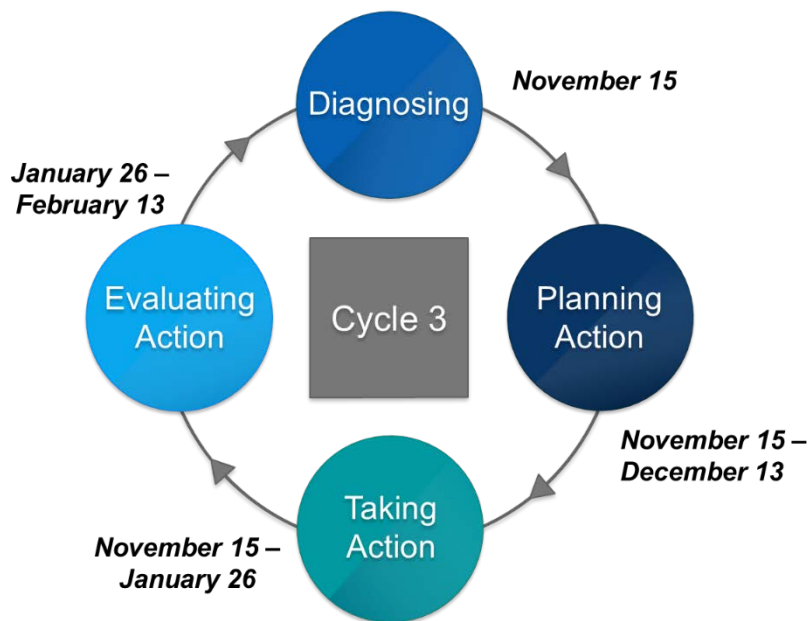


Figure 7. Action Research Cycle 3. Adapted from Coghlan & Brannick (2014).

Limitations of the Study

There were some limitations to this study that need to be acknowledged. One of the major limitations to this study was time. Given that the study took place in less than one school year, the sample size could be considered small. In order to best determine the long-term impact of this study, the research would need to be carried out over several years, more accurately tracking changes over time. The short timeline was necessary in this case, as this study was a partial fulfillment of a degree in a doctoral program. Given the circumstances, taking years to

engage in the action research process was not an option. Nevertheless, there would be significant benefit to continuing this study, or conducting a similar project at another school.

Another limitation of this study is that efforts had already been made to improve the work that takes place within course teams by the school's leadership prior to the start of this study. The school's leadership team planned and executed their own interventions prior to and during the research study. The actions taken on the part of the administration might have affected this study. It is possible that it limited the ability to effectively measure the impact of the interventions. Undoubtedly, this AR study still made an impact, but the results may have been slightly colored by the focus already placed on improving course teams immediately prior to, and during, this research project.

Even after acknowledging some of the limitations to this study, it is important to note that the information gained through this project can provide new knowledge. A granular approach to creating course teams using the PLC framework is important, especially in the high school setting. This study still provides significant information that needs to be taken into consideration, although additional research would certainly benefit the research community.

Subjectivity Statement

My familiarity with the topic of course team collaboration dates to my first days as a teacher. With that said, my understanding of course teams in practice was derived from my experience as a teacher at Eastside High School. While teaching, I worked in the same department in which this study was conducted. It is important to note that my scope was relatively narrow when I began this project, and I had yet to truly experience how course teams at other schools operated. For that reason, I relied on the research regarding Professional Learning Communities and let that help guide this project. Regardless of my limited experience

with the topic firsthand, engaging in the literature and working with an AR team to conduct this study helped to ensure that the work was valid and beneficial to the world of research.

At the time of this study's initial implementation, I was no longer working at Eastside. I had accepted a position as an administrator at another school in the district. This shift in my career helped contribute to the authenticity of this research, as there was no association with the school where the study was being carried out. Moreover, I no longer served as the supervisor to the teachers who were involved in the study. The teachers did not have to worry that the research was being carried out by their supervisor and I did not experience internal pressures at Eastside High School while conducting this study. These factors contribute to the validity of this AR project and allowed me to overcome any possible biases that I may have possessed at the onset of the research.

CHAPTER 4

CASE STUDY

The principal of Eastside High School shared his insight on the areas of the school that needed improvement. He used data, his personal knowledge of the school and information provided by his leadership team to inform his decision. At that time, he listed three major concerns: 1) a lack of course team collaboration, 2) the gap in perceptions, held by both students and teachers, between College Prep and Advanced Placement courses and 3) aligning local assessments to the level of rigor seen in both district and state assessments. With teacher collaboration listed as a major area of concern, it was decided that course teams would be the focus of this research project. From there, the study was designed and executed through the work of the action research team. Their story is documented in this chapter.

In-Depth Context

The development of course teams at Eastside High School began before I had the opportunity to begin my teaching career in 2011. From conversations with other teachers and administrators in the building, it is evident that quite a bit of evolution has occurred over the years, including the expectations of course teams and their relative success. By the time I arrived and joined the Social Studies Department, course team meetings were an expectation, although they did not always take place. Each team had a designated team leader, or course team lead, and this individual was responsible for providing direction for the group and ensuring that the team worked together to provide a high level of instruction for their students. Another responsibility was to keep the team on track for meeting paperwork deadlines and for dispensing

certain updates, intended to filter down to the teachers through these channels. By the point I arrived in 2011, monthly meetings were held for the course team leads to provide information updates and professional learning opportunities to the teacher leaders. Nevertheless, even with such structures in place, teachers and administrators saw room for improvement.

As stated previously, the teams would continue to evolve over the years. Course team leader training continued to provide invaluable opportunities for growth, and some improvement was noticed. Teachers also noted this improvement as this project began. In an early AR team meeting, Susan Williams, the World History course team lead, stated that she “could not believe the progress course teams have made” since she began. It is important to note that the design and implementation of this research project placed a great deal of emphasis on improving collaboration among teachers. The school’s principal regarded the shortcomings of course teams as a vital area in need of improvement, even with what many had regarded as strides in comparison to years past.

Role Within the Organization

When I began my doctoral program and when this research project was in the developmental stages, I served as a United States History teacher and as a Social Studies Department Chair at Eastside High School. I also held the position of interim Athletics Director for the 2015-2016 school year. My position as department chair allowed me to have access to all the course teams within the Social Studies department, of which several could benefit from a focus on collaboration. The course team leads and I worked closely together for two years prior to this AR project. When I assumed the additional role of Athletic Director, I moved into a more building-level leadership position that granted me greater access to information in general. Even though it was specifically with the athletic department, my new position allowed me to create

stronger relationships with the principal and entire administrative team, which resulted in additional support and access as my research project was being developed.

I was very well situated to begin my research in the fall of the 2016-2017 school year, but then I was offered a job as an Assistant Principal at another school in the district. This offer slightly complicated my situation, because I no longer had direct contact with the AR team and no longer enjoyed direct oversight of the course teams. Furthermore, I was now an outsider who had begun my research as an insider within the organization. My strong relationships with teachers in the department allowed for this study to continue, but there were difficulties associated with no longer being in the building. For one, I had to leave my new job on multiple occasions to observe course team meetings, interview teachers and hold AR team meetings. In my previous capacity, engaging in course team meetings was one of my responsibilities and many of the interviews could have taken place during the school day, without either party leaving or missing work responsibilities. With the support of the principals of both schools, the research continued and the study moved forward.

One positive aspect to my leaving the school where the study was carried out was that teachers no longer had to worry about my role as their supervisor. I no longer participated in their annual evaluation and held no direct authority over them. This shift allowed some of the teachers to feel more comfortable in their conversations with me and alleviated any concerns some had regarding possible repercussions for their comments or actions associated with this study. Teachers were able to speak openly and candidly throughout the study, which allowed for a more accurate research project.

The Action Research Team

The action research team consisted of six total members, including myself. The other five members were all teachers within the Social Studies Department at Eastside High School. Each one held a leadership position within the department: four of them were course team leads and one was the department chair. These individuals were selected because their roles as teacher leaders afforded them the opportunity to help lead other teachers in the department and to facilitate the work with their course teams. Teachers were approached individually to ensure that there was no peer pressure to participate, and all accepted the invitation without reservation. The action research team was able to immediately engage in the work at the August 2, 2016 meeting.

John Bulmer

John Bulmer served as the Social Studies Department Chair for the duration of this study. Mr. Bulmer and I shared the department chair position from 2014-2016. We both had a passion for moving the department forward and agreed that one way to accomplish this feat was through the continued improvement of course teams. John had 14 years of teaching experience and was a strong instructional leader for the department. Prior to beginning his work at Eastside High, he served as the department chair at his previous school within the same district. Mr. Bulmer has participated in numerous professional development opportunities, including Teachers as Leaders, Aspiring Leaders Program and Teacher Support Specialist. Mr. Bulmer brought valuable experience and leadership to the AR team.

Alan Jones

Alan Jones has spent his entire nine-year teaching career at Eastside High School working with the Social Studies department. For a number of years, he served as a football coach and has recently voiced an interest in moving into school administration. For this reason,

Mr. Jones went to graduate school and earned his Educational Specialist in Educational Leadership. Over the years, he has participated in a number of professional learning teams and professional development including, but not limited to: Course Team Lead Training, Assessment Leadership Team, AKS Review Team and Gifted Endorsement. He has held the title of Geography Course Team Lead for the last three years and has worked diligently to move the team in the right direction. One major area of focus over the last several years has been literacy, as the Geography teachers continue to work with their students on reading and writing, specifically in regard to answering rigorous free response questions. Mr. Jones has proven that he is committed to the course team and the development of the group over the last several years. For that reason, he was a perfect fit for this research study.

Susan Williams

Susan Williams has been in education for 14 years, including eight years in the district and at Eastside High School. Dr. Williams has served as a teacher leader in a number of capacities at Eastside. She has spent time in district-level training to become a mentor serving the new teachers at Eastside. Recently, Dr. Williams completed her doctoral program and earned her Ed.D in Teaching and Learning. Although she serves as the Course Team Lead for World History teachers, Dr. Williams is new to the Social Studies Department, having spent her time previously as a teacher in the Language Arts Department. Dr. Williams is a natural leader and the AR team benefited from her presence.

Scott James

Scott James began his career in the business sector, but moved into education after just a few short years of work. He has been teaching for three years now, all of which has been within the Social Studies Department at Eastside High School. In just his second year as a teacher, Mr.

James was asked to serve as the course team lead for the US History teachers, which he was immediately willing and happy to do. He now teaches a combination of Honors/Gifted US History and AP US History throughout the school day. Mr. James provided a unique perspective to the team, as he is the youngest and least experienced member of the AR team.

Adam Brown

Adam Brown is the most experienced member of the AR team, having taught for 25 years. He has also been the course team lead for the Political Systems and Economics teachers for five years. In addition to his years of experience, Mr. Brown has been through years of professional development designed to build the capacity of course team leads. He also has a great deal of experience in teaching the courses. Mr. Brown has worked at Eastside High School for 10 years and has experienced a significant change since he began working there. Course teams were developed at Eastside after he started and Mr. Brown provided insight into the evolving role of course teams since their inception.

Group Dynamics

Most of the AR team knew each other well as we began this project, simply because we have worked in the same department together for years. The lone exception is Dr. Williams, who was moved over to the Social Studies Department for this school year. Even so, she has been at Eastside for many years and was not a total stranger to the group. A variety of personalities make up the AR team and the group dynamics were difficult, especially at the start. There were some somewhat tense moments in the early meetings, in which members did not agree on some of the planned interventions or on how to execute them. However, it is important to know that each member of the AR team, with the exception of the Department Chair, Mr. Bulmer, worked with his or her own course team. This allowed each AR team member to

implement the interventions in accordance with the group expectations, but in the manner they saw best fit for their own team of teachers. This individual flexibility eased some of the tension. The group worked well together and benefited from each other's perspectives. Their time and efforts allowed the study to run smoothly.

Initial AR Team Meeting (August 2, 2016)

The initial AR team meeting took place during the teacher planning week, which was the week prior to the students' return for the school year. The initial meeting was intended to present the problem, research questions, and some basic research on the topic to ensure the team was properly prepared as interventions were developed and executed. It also allowed for the "diagnosing" phase of the action research process to be carried out. The team discussed some of the problems and increased their awareness of the study's focus. All of the AR team members were present for the meeting and appeared to be very interested in the research topic at hand. The meeting began with a brief verbal overview and consent from each of the members to join the team. From that point, the group transitioned into a more in-depth presentation designed to provide deeper insight into the research project. The following topics were discussed:

- The problem: A lack of collaboration among teachers within course teams
- Literature supporting the value of collaboration
- Community of practice and transformative learning theories
- Action research as it pertains to this study

As part of the presentation, the teachers were also asked to engage with some literature regarding PLCs. A text-rendering protocol was used to facilitate the conversation on the various characteristics that are found in successful PLCs. Through the discussion, the team also

highlighted some of the potential roadblocks to collaboration within the course teams. On the topic of roadblocks to collaboration, Scott James stated:

The number one thing that gets in the way of collaboration is time. We have so many coaches and club sponsors that anything outside of the school day becomes difficult. We are supposed to have common planning, but that never seems to work out.

The rest of the group agreed that time to meet was precious and that it is difficult to get the whole team together on a regular basis. Of the possible impediments to collaboration discussed at the meeting, this was by far the most commonly cited among the AR team. Throughout the meeting, the team members all participated and provided unique perspectives on how the information applied to their specific course teams at Eastside High School. Overall, this conversation was rich and provided a sturdy foundation for the study.

AR Team Meeting #2 (August 10, 2016)

At the subsequent AR team meeting, on August 10, 2016, the team began by discussing the results from the Course Team Collaboration Surveys (see Table 4). The recent results were compared to the results from the survey given in May 2015, which was not a part of this study, but helped to provide some context. All domains were rated on a scale of 0-4, with 0 representing zero team engagement in that standard and four representing a total commitment to the domain on the part of the group. When looking at the data, the group noticed significant improvement in most of the areas from the previous survey in May 2015 to the August 2016 survey.

Table 4

Course Team Collaboration Survey Results

	Establish Norms	Culture of Collaboration	Use of Data	Goal Setting	Identify Essential Learning	Common Assessments	Look at Student Work	Interventions
Spring 2015	2.8	2.91	2.38	2.05	2.83	2.72	2.39	2.78
Fall 2016	3	3.21	2.71	2.79	3.17	3.21	2.54	2.96

Furthermore, the group decided that there were still some areas that could grow across the whole department. Although “goal setting” was one of the areas in which the course teams improved most, the mean score was still only a 2.79. The team members agreed that goal setting was an area that needed to be addressed, which became the basis for one of the planned interventions on the part of the AR team. The conversation surrounding goal setting is just one example, as the group discussed a number of the domains included in the course team survey. The discussion regarding the results of the survey became the foundation for many of the interventions the team would later plan.

The AR team then dove into the “planning” phase of the first cycle of the AR study process. Although possible interventions had been mentioned at the previous course team meeting, a consensus on how to focus the study did not yet exist. The team discussed possible intervention strategies that could be implemented moving forward. The three primary areas of focus during the conversations were:

1. SMART Goals
2. Collaborative Lesson Planning
3. Distributed Leadership

SMART goals are objectives that are considered specific, measurable, attainable, realistic and timely in nature. Each course team was expected to sit down with their group and decide on

team SMART goals for the year. In the meeting, John Bulmer mentioned that he had worked with SMART goals before and that he felt that they were appropriate for what the team was trying to accomplish. The course teams came up with SMART goals as part of the intervention and were asked to revisit these goals frequently to measure their progress.

Collaborative lesson planning was a controversial topic among the group members. There was debate as to the proper format for this lesson-sharing venture. There was some talk of engaging teachers in a simple lesson share activity, in which each teacher would take turns presenting a lesson that they created to the rest of the course team. Dr. Williams took a stance and stated:

Honestly, I don't think lesson sharing is going to be as effective. We need to plan lessons together as a group, not simply share what we've always done. Let's pick an upcoming unit and bring our lessons and our ideas, to develop new lessons together.

After some careful consideration, the group decided that the goal for each course team would be to collaboratively plan one lesson each month. The AR Team felt that there was more value in working as a team to develop a lesson than there was in one person sharing their thoughts with the whole group. The group decided that the lesson could be designed in the form of a unit project, a multi-day lesson or a single-day lesson that the whole course team would execute.

The last intervention planned at this busy meeting was to distribute leadership among the course team. Going into the school year, the administration had an initiative to spread some of the tasks across the department to more evenly distribute the leadership among many teachers. In the meeting, John Bulmer mentioned that there were already some roles being assigned across the department and that it might be a good idea to do the same at the course team level. The AR team agreed that distributing the leadership might help generate some ownership among the

other members of the course team. One of the possible roles mentioned was that someone take minutes for each meeting, which in turn could be submitted to Mr. Bulmer, since he was the Department Chair. The team liked this idea and all members agreed to distribute the leadership among their teams at the next meeting, although some had already begun to do so. The August 10, 2016 AR team meeting was a busy one, but much was accomplished, including deciding upon three initial interventions to be executed immediately.

AR Team Meeting #3 (September 13, 2016)

The third AR team meeting brought the first action research cycle of this project to a close and opened the second cycle. The meeting began with a detailed recap from each of the AR team members on the implementation of the proposed interventions discussed at the previous AR team meeting. Each member gave a detailed report on the status of his or her team. Alan Jones kicked off by reporting for the Geography course team:

We have established our goals for the year and one of them is to focus on redesigning our assessments. The whole team is on board and we are making progress. We still need to work on collaborative planning, but I feel we are off to a good start.

Dr. Williams then gave an update on the World History team, which was detailed and included the following:

We are a high-functioning, high-performing team that is not resistant to collaboration. With that said, we still have some room for progress, but our team is working hard.

For the US History team, Mr. James noted that some specific roles and responsibilities had been decided on since the last meeting. He also stated:

Our team has established our SMART goals for the year. They are listed at the top of every agenda and we review them at the start of every meeting. I'm sure some of them get tired of it, but I'm committed to it.

Finally, Mr. Brown provided the Economics/Political Systems update. The team was also committed to redesigning assessments for both of the courses. Regarding collaborative lesson planning, Mr. Brown had the following to share:

We have not yet attempted the collaborative lesson planning. Our teachers are used to teaching in isolation, this year has been better... a more collaborative environment, but we still have room for improvement. I'm working on it for the next meeting.

After each of the teams had the chance to share their updates, we closed the “evaluating action” phase and moved into the start of our second cycle by “diagnosing” and “planning action.”

The first diagnosis was that members needed to look at data in course teams. Mr. James brought to the group’s attention that “analyzing data” was a focus for Eastside for the school year and that it was in line with this study. All members of the team agreed and spent some time discussing possible data for each team to look at in the coming weeks. Because of this discussion, a new intervention, data analysis, was planned. Prior to the meeting, I was introduced to a simple but effective data analysis protocol, which I agreed to share with the group. I sent the protocol to each team member via email following the meeting. After agreeing to incorporate data analysis into the course team meetings, the group discussed the previously decided upon interventions and felt they were appropriate for the second action research cycle. The meeting then adjourned and each AR team member was off to continue implementation of the planned interventions with his or her course team.

AR Team Meeting #4 (October 11, 2016)

The October 11, 2016 AR team meeting occurred in the middle of the second cycle of action research for the study. Due to this timing, the meeting consisted primarily of status checks for each group, which allowed the course team leads to evaluate the effectiveness of the planned interventions. Each group was asked to provide an update on each of the four planned interventions and how each had impacted their course team.

Mr. Jones again mentioned the assessment redesign occurring with his teachers in Geography. He made it clear that this was the “best the course team has ever been.” Mr. Jones was very happy with the progress of his team to date. Dr. Williams commented on her World History team’s progress with analyzing data:

We had an informal conversation about our District Assessment scores. We only had the opportunity to look at the averages as a group. We also plan to look at writing soon. We want to find examples on both ends.

Mr. James continued to describe the great work going on with his US History course team.

Our collaborative lesson planning went well last month. Everyone was engaged and paying attention. I think everyone has bought into the collaborative lesson planning as a norm.

Mr. Brown mentioned that the Economics and Political Systems teachers were dealing with the course change over at this time of the year. Because Eastside is on a 4x4 block schedule, the Economics and Political Systems courses are only nine weeks long. Mr. Brown mentioned that this was a stressful time for his teachers as they focused on preparing their students for their final exams while also getting ready to teach a new course. Aside from the added stress of switching courses, Mr. Brown’s group appeared to be moving along just fine.

Interestingly, even though each course team reported making progress with their interventions, the conversation switched back to some of the impediments that teachers face when trying to practice collaboration. Mr. Brown and Mr. Jones mentioned that a lack of time and heavy demands on teachers were making it difficult to collaborate at the desired levels. Dr. Williams agreed and mentioned that one of her team members was currently “swamped” organizing remediation for an upcoming district assessment. A passing score was required for all students to graduate, and many of the students had taken the test multiple times already. Mr. Bulmer added that it was a busy time of the semester at Eastside High, but that as the Department Chair, he was “happy with the progress being made by the course teams.” Once the conversation regarding the current stresses and demands at Eastside concluded, the group agreed to continue on with the interventions until the next scheduled meeting.

AR Team Meeting #5 (November 15, 2016)

The second cycle of the action research process came to a close with the November 15, 2016 AR team meeting. The first item on the agenda was “evaluating action,” as each course team lead was once again given the opportunity to update the group on the progress of the study. Getting away from the norm, the Department Chair, Mr. Bulmer was the first to share and started the meeting with a strong statement:

I do think that course teams are improving, in virtually all areas, in comparison to past years. US is still probably our strongest, but World History and Geography have really stepped up their game. World History, mainly in the area of communication and collaboration between all levels. Geography, mainly in the area of collaborative planning and distributed leadership.

Geography again shared some of the team's successes with test redesign. All teachers on the course team were completing the redesign process, and the tests were given to students of all levels. Regarding the general performance of his team, Mr. Jones stated:

This is the best it's ever been. There is less, doing it just to do it, and more true collaboration. We are looking at data, examining assessments and so on... I feel like our meeting time is more productive than it has ever been.

Dr. Williams shared some insight on the progress, or lack of progress, the World History team was making in regard to collaborative lesson planning:

We are not creating anything together, other than the exams, and we are not on the same page as to the focus of each unit. While AP does provide the key concepts, and those, indeed, are common across the team, there is an enormous amount of variance in approach.

Given that collaborative lesson planning was one of the interventions the team agreed upon, this was difficult to hear, but there were valid reasons for the team's struggles. The AP World History teachers were teaching a new curriculum for which they were constantly attempting to plan. Additionally, because the curriculum was new and no quality assessments were readily available for the group, test design took an inordinate amount of time. Even with the difficulties the team was having planning lessons together, it was quite evident that the team was collaborating in other ways.

Mr. Brown provided additional updates for the Economics and Political Systems course team. He stated that the team was feeling "more comfortable" and that they were beginning to "gel." In addition to the areas of success he noted, he felt there was still some room for growth, specifically in regard to the collaborative lesson planning. The SMART Goals and division of

leadership was working well, but the collaborative effort designing lessons still needed to improve.

After each AR team member had the opportunity to recap, the group closed out the second action research cycle and began the third. The team immediately began discussing the problems the teams were facing and determining whether the current interventions were appropriate. The same issues continued to surface regarding impeding collaboration, time and demands of the job. The actual demands varied from one course lead to the next. One mentioned the number of meetings he was required to attend, another the difficulties of finding time to grade writing samples from their students. Yet another found difficulty in designing lessons that adequately addressed the needs of all of her students in a way that did not leave any students behind. Once the issues were discussed at length, the team worked toward planning the action for the final cycle of the study. After discussion, the team decided the four interventions were still appropriate, but that implementation might vary from one group to the next.

Each group was in a different spot collaboratively, and the team decided that lesson sharing might be more appropriate for some groups, while too low of a bar for others. The ultimate goal was still to have each course team collaboratively lesson plan at least once a month, but the team realized that some groups were struggling even to share lessons as a group. The same situation existed for analyzing data. Some groups were more advanced than others, and it was determined that each team needed to analyze data in a way that was appropriate for his or her team. With the conclusion of the meeting, the “taking action” phase of the third, and final, cycle began.

AR Team Meeting #6 (December 13, 2016)

The December 13, 2016 action research team meeting allowed each team to provide another update on the progress of each course team and their collaborative efforts. The meeting fell in the middle of the third and final cycle of the action research project. Each team was in the middle of carrying out the agreed-upon interventions in a manner that best fit his or her team.

Mr. Jones discussed the success of the semester-long initiative to redesign assessments as a Geography course team. He also mentioned that his team was already preparing for a semester of lesson sharing ahead. With that said, the semester was coming to a close and Mr. Jones made it clear that his team was concentrating on making it to the finish line for the semester.

Dr. Williams addressed the group with her World History update and informed the team that her group had mapped out the topics for all their upcoming meetings, but that they were dealing with the “end of the semester freight train.” With that said, the World History course team members agreed to “sacred Wednesdays,” which were reserved for meeting regardless of what else was going on in the building. Dr. Williams mentioned that the meetings were “getting better,” but that she was still working on clearing all of her Wednesdays to meet the group’s “sacred” expectation. All in all, the World History team was continuing to make progress.

After making some references to the lack of time toward the end of the semester, Mr. James provided his update for US History. He mentioned that the lesson sharing was going well and that the whole course team had bought into the notion. Then he provided the following in regard to data analysis for the group:

We looked at the data, but it didn't go as well as I wanted. We were really crunched for time and I knew if we didn't do it now, it wouldn't get done. I wanted to make a whole meeting of it, but it just wasn't possible.

As the discussion continued, the team determined that the US History team had rarely looked at data previously, and that any examination of data could be considered a small success. The mere fact that the team was making an effort represented progress over previous years.

Mr. Brown mentioned that the Economics and Political Systems team was moving in the right direction and that they had reached a point at which many of his teachers were now “refining their craft.” In years past, Mr. Brown had felt his teachers were always trying to learn the curriculum because they were either new to teaching or new to the content. He felt his team was starting to find some consistency, and as a result the team was starting to make strides in the right direction.

Mr. Bulmer closed out the course team update portion of the meeting. When given the opportunity to comment on the direction of the entire department, he reiterated a point made in prior meetings by stating:

Overall, looking at all course teams... last year to this year, we are much better off this year. The general trend is that there is significantly less time spent on managerial tasks, and a lot more time is spent on action-oriented stuff.

Even as the course team leads reported that the implementation of the planned actions was not going perfectly, Mr. Bulmer took the time to remind the group that things were much better than they had ever been. Although teams might not have reached the collaborative levels they aspired to, they were in better shape than they were at the start of the school year.

As a final order of business, the group asked to have the January meeting pushed back a couple of weeks to allow for effective implementation of the planned interventions. The original meeting was scheduled for the week that teachers and students returned from winter break, but

that would not allow much time for course teams to engage in their work. Therefore, the team agreed to move the final AR team meeting to January 26, 2017.

AR Team Meeting # 7 (January 26, 2017)

On January 26, 2017, the action research project at Eastside High School came to an end. Dr. Williams was unable to attend the meeting, but all other members were present and accounted for. The primary focus of the meeting was to evaluate the impact of the study that began in August 2016. Each team member present was asked to go into more detail as to the status of his or her course team, and each AR team member was expected to give an opinion as to the progress of the team since the inception of this action research project.

Mr. Jones stated that this was the “best semester ever” for the Geography course team. The team worked collaboratively to completely redesign their assessments and successfully use technology to examine data from local assessments. The team goals were designed collaboratively and were having an impact on instruction. The one area that did not really take off as the team had hoped was the collaborative lesson planning. When asked about collaborative planning, Mr. Jones responded:

We are still planning to get around to that. We just haven't had time to get to it yet, but, this is definitely our best semester ever. We are actually working as a team.

Since Dr. Williams was unable to attend, extra time was allotted at her AR team member interview. This allowed for her to give an in-depth final update on the progress of the World History course team.

Mr. James provided the team with his synopsis of the US History course team. First, he mentioned that the team did face some hardships along the way, referencing not only the extreme demands that teachers face, but also that the US History team lost a member at the break. One of

the teachers left for a period of time and was replaced by a young, recent graduate who had no official teaching experience. With that said, it was reported that the team hit on each of the planned interventions. The SMART goals were a part of every agenda and were constantly revisited by the team. In regard to collaborative lesson planning, the team engaged in at least one collaborative lesson planning activity each month. The team reviewed data on several occasions, but Mr. James wanted to find more relevant data for his team to dissect. He felt the data analysis portions of his meetings could be more impactful with more detailed information. Lastly, there were clearly defined roles within the team and everyone was on board when asked to contribute in one way or another. After breaking down the progress of his team, Mr. James summed it all up:

We've had a good year, but we are still looking to improve. I know we all have a lot on our plate, but we'll keep working until we get to where we need to be. I look forward to building on the momentum we've created.

Mr. Brown provided the team with his account of the study's impact on the Economics and Political Systems course team. He pointed out that the SMART goals had changed somewhat from the first semester to the second, in an effort to meet the needs of the teachers and students. The goals now included data analysis, which had been requested by the teachers. Mr. Brown shared the following with the group:

We are good with assigned tasks, but teachers are not bringing ideas to the table... We did not make it to the collaborative lesson planning, but everyone is on board with data analysis. We've had some good conversations.

Overall, Mr. Brown had a positive outlook on the study and its impact on his Economics and Political Systems team. With that said, he recognized some areas in which the team can continue to grow.

Closing out the updates, Mr. Bulmer provided some general comments from his observations of the course teams. He specifically mentioned that the leadership has been dispersed through the course teams. Furthermore, Mr. Bulmer made sure to mention that the teams had successfully leveraged technology and were accessing their Google Drive to share information. As a result, he felt communication among the teachers had improved. The general tone and message was consistent with the comments Mr. Bulmer had made in previous AR team meetings. He closed out his comments by stating:

There has been some benefit to all course teams through the action research process. We have experienced a cultural shift with our course teams.

Following the recap from each course team lead, the group discussed the group efforts made over the course of the study. The comments were generally positive, although the group referenced the amount of work it took to lead a course team engaged in such an intensive study. Overall, the course leads believed their teams had improved and would continue to make gains throughout the remainder of the year. I also made sure to personally thank each AR team member individually for his or her time and contributions to the team. Without the dedication of the action research team, this project would never have gotten off the ground. The last order of business was to schedule the AR team member interviews to conclude the study. After a few minutes of consulting calendars, the group decided upon interview dates and times and the meeting, as well as the action research team, officially came to an end.

Planned Interventions

As described earlier, action research projects occur in four phases: 1) diagnosing, 2) planning action, 3) taking action, and 4) evaluating action. A major component of action research is the “action.” In this study, the “action” is considered an intervention. The AR team decided to create collaborative course teams at Eastside High School, and therefore each intervention was developed in an effort to accomplish that goal. The “actions” were expected to be carried out in the course teams within the Social Studies Department. The AR team members were responsible for ensuring that interventions implemented were in line with the direction decided upon by the AR team. Across the three action research cycles, four interventions were planned (see list below).

1. SMART Goals
2. Collaborative Lesson Planning
3. Distributed Leadership
4. Analyzing Data

Each of the interventions were discussed at AR team meetings and were agreed upon by the group. The interventions were based on the literature shared with the AR team. Moreover, the group used the data available through surveys, interviews and course team shares to select the appropriate action. Ultimately, the group felt that the four interventions agreed upon represented the best chance to positively influence the course teams to become more collaborative. For a more in-depth look at the interventions implemented throughout this study, refer to the intervention plan (Table 4).

Table 4

Intervention Plan

Intervention	AR Team Activities	Purposed Outcomes	Timeline	How this intervention was evaluated?
Course Team Goal Setting	The first intervention decided upon was course team goal setting. Many of the course teams had mentioned goals prior to the initial AR team meeting, but there was not a great level of emphasis or follow-through. The team decided that these goals needed to be very clearly stated and that they should be addressed periodically or as needed.	As a result of the course team goal setting, each course team should have a greater focus and should benefit from having clear objectives. This should help unify each team and ensure that all members of the group are on the same page.	Goal setting began immediately after the initial AR team meeting was conducted. Although new goals can be created over the course of the school year, it is most important that the team revisits the goals periodically or as needed. The goals should be engrained in the purpose of each course team and should be apparent at each course team meeting.	The goal-setting intervention was measured in the teacher surveys/interviews that were conducted at the end of the study. The goals were also discussed at AR team meetings and were reviewed. While attending course team meetings, course team goals were noticed as well.
Collaborative Lesson Planning	The AR team discussed possible interventions to implement with their course teams and quickly decided on collaborative lesson planning. In the initial AR team meeting, the group read about the components of successful PLCs and then decided on ways to	Ultimately, the goal is to have teachers creating lessons in teams. As noted by the AR team, there has been some lesson sharing, in which teachers shared lessons that worked well with their students, but little	The AR team decided that no less than once a month, course teams should be collaboratively designing lessons. The first collaborative lesson planning was scheduled to begin in the September course team	The impact of this intervention was evaluated in a number of ways. First, the impact on the teachers' practice was noticed in both the surveys and teacher interviews. Secondly, the AR team discussed progress in each of the

	<p>move their course teams in that direction. The AR team landed on one collaboratively planned lesson or unit a month, simply because this was a new concept to their teachers and they wanted to properly execute a small number, rather than haphazardly plan units/lessons together every day or week.</p>	<p>collaborative planning. Lesson sharing should begin to shift to collaborative planning as this intervention is rolled out and continued over time. Also, teachers should be more reflective of their own practice and the practice of their colleagues as each lesson is planned and reviewed, once executed.</p>	<p>meetings. The intervention continued throughout the entirety of this study (February 2017).</p>	<p>AR team meetings, which were documented. Third, this practice was seen in course team observations conducted by myself over the course of the study.</p>
<p>Shared Course Team Responsibilities</p>	<p>The AR team discussed some of the important components of successful PLCs in the initial AR team meeting, one of which was shared responsibility of student success. The group decided that each AR team member should have a role, formal or otherwise, within the course team. Each AR team member was to try and create responsibility for their course team members in one way or another.</p>	<p>As a result of the shared responsibilities within course teams, there should be a greater sense of collective responsibility for each course team. The teachers should buy in to the course team concept and be more open to working together to achieve the goals and stated mission of the group.</p>	<p>The division of leadership and shared responsibility of teachers within each course team was continuous throughout the study. There were some roles that were immediately assigned (e.g., secretary or minutes taker), but many of the shared responsibilities were assigned as situations arose. This intervention was fluid throughout the course of the study and beyond.</p>	<p>The existence of shared responsibilities within the course teams was evident in the teacher surveys, as well as the teacher interviews. Also, they were noticed when course team meeting observations were conducted. Lastly, some of the more formal roles were detected on course team meeting agendas.</p>

<p>Course Team Data Analysis</p>	<p>In discussion with the AR team, it was revealed that very few teams were engaging their teachers in data analysis, which was identified as a key component to successful collaborative teams in the initial AR team meeting. The team had conversations regarding data analysis and possible ways in which to analyze data. A data analysis protocol was shared with the group and each AR team member pledged to engage their team in data analysis over the course of the study.</p>	<p>As a result of the use of the data analysis protocol that was shared with the AR team, each course team should engage in analyzing results on local and state assessments in order to better understand the learning of their students and, ultimately, the successfulness of their teachers.</p>	<p>It was decided in the September AR team meeting that an additional intervention, data analysis, should be added. The team committed to analyzing data at least once a month for the duration of the study (February 2017). The data analysis was allowed take place at any point during the month at a regularly schedule AR team meeting.</p>	<p>The intervention of data analysis was measured in a number of ways. First, the impact of the data analysis intervention was seen in both the surveys and teacher interviews. Secondly, the AR team discussed progress in each of the AR team meetings which was documented. Third, this practice was seen in course team observations conducted by myself over the course of the study.</p>
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CHAPTER 5

FINDINGS

The purpose of this action research study was to determine the perceived impediments to collaboration among course teams and to measure the impact on collaboration using the professional learning community model. Through action research, the study sought to answer the following research questions:

1. Which perceived barriers are most responsible for impeding course team collaboration at the secondary school level?
2. What effect, if any, will the establishment of Professional Learning Communities among course teams have on teacher collaboration?
3. What does an Action Research team learn when they work collaboratively to enhance course team collaboration?

This chapter will address each of the research questions by reporting the themes determined through the analysis of the data. Course team meetings, teacher interviews, AR team member interviews and collaboration survey results all helped to inform the findings in this study. Refer to the Research Findings table (Table 5) for the themes derived from this action research project.

Table 5

Research Findings

Research Question	Findings
<p>1. Which perceived barriers are most responsible for impeding course team collaboration at the secondary school level?</p>	<p>Theme 1: Teachers perceived a lack of available time as an impediment to effective collaboration.</p> <p>Theme 2: Teacher resistance to collaboration and change was viewed as an impediment to course team collaboration.</p> <p>Theme 3: The need for effective leadership from the course team lead was perceived to be a barrier to course team collaboration.</p>
<p>2. What effect, if any, will the establishment of Professional Learning Communities among course teams have on teacher collaboration?</p>	<p>Theme 1: Establishing course teams as PLCs can improve the efficiency of collaboration.</p> <p>Theme 2: Acting as a PLC can enhance the collaborative sense of purpose for academic course teams.</p> <p>Theme 3: Establishing course teams as PLCs can improve teacher collaboration.</p>
<p>3. What does an action research team learn when they work collaboratively to enhance course team collaboration?</p>	<p>Theme 1: Action research is collaborative and the course team found it to be valuable.</p> <p>Theme 2: Course specificity can be beneficial when working in course teams.</p> <p>Theme 3: Protection of course team planning time can enhance collaboration.</p>

Research Question 1: Perceived Barriers to Course Team Collaboration

To address the first research question, teacher interviews were conducted at the onset of the research project and again at the conclusion, and AR team meetings were recorded throughout the study. The teacher interviews provided a solid foundation for answering the first research question. Then, in AR team meetings, members of the AR team had discussions pertaining to any barriers they encountered as they attempted to collaborate with their colleagues. Finally, at the conclusion of the study, additional teacher interviews were conducted and, once again, a question about perceived barriers to collaboration was asked. Three themes were identified regarding perceived barriers to teacher collaboration in course teams:

1. Teachers perceived a lack of available time as an impediment to effective collaboration.
2. Teacher resistance to collaboration and change was viewed as an impediment to course team collaboration.
3. The need for effective leadership from the course team lead was perceived to be a barrier to course team collaboration.

Theme 1: Teachers Perceived a Lack of Available Time as an Impediment to Effective Collaboration

During teacher interviews, in AR team meetings and in course team meetings, one common barrier to course team collaboration was discussed far more than any other: time. Teachers constantly reported that they did not have the time to engage in effective collaborative practices with their colleagues. In many cases, the perceived lack of time was due to other tasks that needed to be completed, although the specific tasks mentioned varied from one teacher to the next.

When interviewed at the start of the year, a teacher described what he considered to be a major barrier to course team collaboration:

One of the biggest barriers is time. Teachers are always crunched for time. There is so much time needed for grading and things like that. If there are a lot of meetings, that makes it hard to get things done. It becomes very hard to focus on instruction as a group.

The teacher made it clear in the interview that the demands for time on a teacher were already overwhelming, especially as a coach. The burden of finding time to collaborate with teachers caused additional stress.

At the initial AR team meeting, when the team was discussing possible barriers to collaboration, Mr. James also referenced a lack of time:

The number one thing that gets in the way of collaboration is time. We have so many coaches and club sponsors that anything outside of the school day becomes difficult. We are supposed to have common planning, but that never seems to work out.

Others shared Mr. James's thoughts. The group appeared to be in consensus that time was the number one barrier to collaboration in course teams.

On several occasions, AR team members mentioned that time was impacting their ability to effectively engage in collaborative practice. One example came from the Geography course team, when Mr. Jones was asked about implementation of an intervention. He responded:

We are still planning to get around to that. We just haven't had time...

This is just one short example of a reoccurring theme at the AR team meetings. The members of the team constantly worked to implement interventions, but routinely reported that they felt short of full implementation due to time constraints.

During a visit to a World History course team meeting, comments were made regarding the difficulty of finding time to complete other tasks required of teachers. One course team members specifically stated:

That does bring about challenges, especially with time, given everything else we have going on... We know we have a huge issue with finding and writing test questions, which takes an enormous amount of time. Then putting them into format and all of these things that go along with that... we get busy and the last thing I want to do is call people into meetings.

Comments such as this one further illuminate the teachers' opinions on the perceived absence of time. The teacher goes so far as to state that she wants to avoid calling a meeting because she understands that everyone else has so much going on.

The barrier of time was noted in several different arenas and was referenced in teacher interviews when teachers were specifically asked about potential barriers. Time was also mentioned, organically, as a barrier in AR team meetings. On multiple occasions, AR team members mentioned that they were unable to get to one of the purposed interventions due to a lack of time. Lastly, the issue of time came up organically at course team meetings. Teachers were simply engaging in discussion surrounding their practice and brought up the issue of insufficient time to collaborate. A variety of teachers from varying course teams also mentioned time as an impediment. Insufficient time was a barrier that transcended all courses and impacted teachers of all types at Eastside.

Theme 2: Teacher Resistance to Collaboration and Change was Viewed as an Impediment to Course Team Collaboration

Course teams at Eastside High comprised teachers with various levels of teaching experience, teaching styles and personalities. At times, team members do not see eye-to-eye when making decisions that impact instruction. Specifically, some teachers want to teach their own class in their own way. Several teachers noted this preference for teacher isolation. In teacher interviews, the tendency to avoid teamwork by some was mentioned as a barrier to collaboration.

During an August interview, one teacher discussed her experience with a previous course team. While on the team, she dealt with two teachers who resisted collaboration at every turn.

The teacher reported:

Some teachers just don't want to work together. They've been doing this for a long time and they just want to teach the same way they always have... they just do not see the value of collaboration.

Although some previous issues with course team members were mentioned, the teacher reported that her current team is much more effective. Her recent experiences made her happy that she was able to be a part of an effective team.

Ms. Stone noted that her team is very nice and that all the teachers get along well, but that there could be an improvement in the collaborative practice of the team. She stated:

The team is comprised of nice people, but how do we make them care about the work of course teams? Also, the age is very different between members. Some of us are new and other have been doing this for a very long time.

As the interview continued, Ms. Stone noted that some of the teachers on her team did not want to collaborate because they had very different teaching styles. She attributed some of the difference in style to the wide range of ages and contended that her pedagogical training was different than that of some of her older colleagues.

In an August interview, another teacher noted that one of his colleagues was not interested in collaboration for a variety of reasons. The teacher shared:

One of our team members goes to every meeting, but just doesn't care much about collaboration. At least not in the sense that he's going to change what he's doing. He's a good teacher and he knows it. He's also been doing this a very long time.

The teacher mentioned that the other teacher involved was a very nice man and that he would participate in team discussions, but that the course team meetings were not impacting his practice of teaching.

Throughout the interviews, teachers mentioned several times that some teachers just do not care to collaborate, although in each instance, the teacher went on to say that the relationships were collegial. For some, there simply was no interest in high levels of collaboration. In two instances, teachers made specific references to age and experience as possible reasons why other teachers did not want to collaborate. The two teachers referenced had been in the profession for a long time, and it appeared that they were satisfied with their ability to teach. Some teachers were simply more resistant to collaborating and to changing their practice of teaching.

Theme 3: The Need for Effective Leadership from the Course Team Lead was Perceived to be a Barrier to Course Team Collaboration

Each course team at Eastside High School had a designated course team lead, a point person for the group who facilitated the meetings and decided the direction of the group. Under this organizational structure, the course lead plays a major role in overseeing the success of course teams. These course leads have many responsibilities, including setting up meeting times, creating an agenda for all meetings, running the meetings, passing along pertinent information, etc. For this reason, many of the teachers from Eastside felt that the leadership ability of the teacher leader had a tremendous impact on the ability of course teams to effectively collaborate.

Two teachers noted this at the beginning of the study. The first summarized her thoughts as follows:

I've worked on very strong and weak course teams in the past. The biggest difference to me was the course lead's ability to move the team forward. Our current course team lead is a very strong leader, and therefore we have a strong team as well.

The teacher has worked at Eastside for a number of years and on a number of teams. Her perspective is quite valuable, as she has had the opportunity to experience several different course team leads over the years.

During the initial interviews, another teacher reported that sometimes the course team meetings seem to be forced and lack purpose. As previously stated, one of the primary functions of the course team lead is to facilitate in determining the direction of the team. The teacher specifically said:

Many times, it feels like we are meeting just for the sake of meeting. I wonder sometimes, why are we doing this? When the leader is unorganized, what can we expect? It helps to have someone who is on top of things... has a plan.

When the team does not know the purpose of the meeting, collaboration suffers. A lack of strong leadership can derail a meeting and prevent any positive work from being accomplished.

In one of the February interviews, a teacher stated that one of the most important leadership skills that was mentioned by teachers was organization. The teacher stated:

There hasn't been much organization with our course team. Meetings are called at the last second and often feel thrown together. Then we get there and look at each other, and wonder why the meeting was even called. It can be frustrating.

Even though this teacher feels that the members of the course team do collaborate, things could improve with improved leadership. To this point, the teacher commented:

We often collaborate organically, just through casual conversation. When we do meet, good things happen on accident, but I think we could be much better as a team. We cannot continue to bank on random conversations about instruction. There should be more structure in place.

The concepts mentioned here helped to affirm the statement by a separate teacher at the onset of this study about the need for organization.

One teacher mentioned the impact of positive leadership in an interview at the end of the study. The teacher associated much of the team's success with the course team lead, specifically stating:

It makes a world of difference at the meetings. Our meetings are very structured... there are always set things that we are going to talk about... it's the same thing as your classroom, the more organized it is, the more effective it is going to be.

The teacher made a point of stating that the current course team is extremely effective and that the group works very well together. Much of this success was attributed to the meetings and the leadership of the course team lead in structuring the meetings.

The issue of leadership was also brought up at the end of the year during the interview with the Department Chair, Mr. Bulmer. As department chair, he has the opportunity to observe several of the course team meetings in the Social Studies Department. When asked, "What is the number one variable that leads to discrepancies in the collaborative nature of course teams?" Mr. Bulmer responded:

Leadership makes the difference. The groups that are functioning at the highest levels have the strongest leaders.

Mr. Bulmer's observations helped affirm the thoughts behind the other teachers' comments. Mr. Bulmer felt that the teams were all collaborating and rated the performance of the department at 7 out of 10 in terms of collaboration. Although he rated the department positively as a whole, he also felt that certain teams were collaborating at higher levels than others.

Teachers specifically mentioned leadership several times, at both the initial interviews and again at the end of the study interviews, which highlights how obvious the perceived importance of leadership is to the teachers working on the course teams. Specifically, teachers mentioned organizational skills multiple times. When the course leads used agendas and communicated clearly, teachers felt as though their meetings were productive. The impact of the course team lead is significant and teachers recognized that fact in this study.

Research Question 2: The Effect of Establishing a PLC on Course Team Collaboration

The conceptual framework for this study was founded, in part, on the communities of practice theory, which directly supports the establishment of PLCs. In order to determine the effect of establishing course teams as professional learning communities, a number of data collection methods were used. First, teachers were given collaboration surveys at the start and the conclusion of the study. The survey questions corresponded with eight indicators of collaboration, which allowed comparison between the mean scores from the August survey and the results from the February survey. Teacher interviews and course team meeting observations were also used to gauge the impact on course teams. Using teacher interviews in addition to the survey results generated validity for the findings, which were organized into themes, of which three were identified when analyzing the impact of establishing PLCs in course teams:

1. Establishing course teams as PLCs can improve the efficiency of collaboration.
2. Acting as a PLC can enhance the collaborative sense of purpose for academic course teams.
3. Establishing course teams as PLCs can improve teacher collaboration.

Theme 1: Establishing Course Teams as PLCs can Improve the Efficiency of Collaboration

The results from the teacher collaboration survey showed that the formation of course teams as Professional Learning Communities led to improved establishment of norms. The survey reflected more improvement in the areas of “establishing norms” and “goal setting” than in any other. Establishing norms is a key component of collaborative teams that is essential when seeking effectiveness and efficiency. When the data was broken down even further, by

course team, it revealed that all course teams involved in this study benefited in regard to establishing norms (see Figure 8).

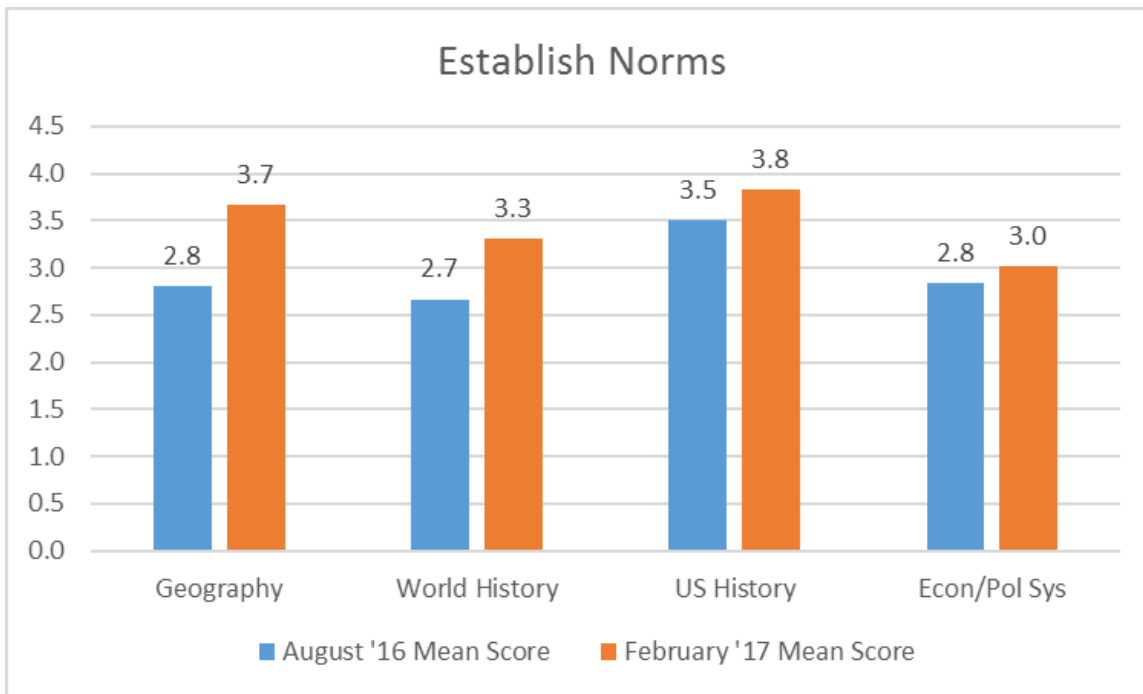


Figure 8. Course Team Collaboration Survey results, Feb 2017 – Establish Norms.

The Geography course team made the biggest strides of any team in establishing norms. The mean score increased from 2.8 to 3.7, a gain of 0.9 on the overall mean. These gains were supported by a member of the course team, who stated:

Our course team is very effective in our meetings. We know what is expected of each one of us and we work together to ensure our meetings are meaningful. No one in the group wants to waste time in our meetings.

Mr. Jones, the teacher leader for the course team, also supported the data at an AR team meeting when he spoke to the group:

This is the best it's ever been. There is less, doing it just to do it, and more true collaboration. We are looking at data, examining assessments and so on... I feel like our meeting time is more productive than it has ever been.

The US History course team scored the highest in “establishing norms” of any of the teams included in the survey. Their mean score was the highest after the initial survey, at 3.5, and improved by 0.3 to remain the highest-ranking course team in establishing norms as a group. The US History team received an almost perfect score in the “establishing norms” category. The PLC framework allowed the US History team to grow and develop into a more effective and efficient team. Mr. Bulmer, the Department Chair, reiterated his thoughts on the US History course team and their efficiency in his AR team member interview.

US History often [has] meetings during lunch, which is only about 25 minutes, but they are still able to accomplish more than any of our other teams. I've sat in on several of their meetings... they have found a way to work together in a way that maximizes our time.

All of the teams saw increases in the establishment of norms in their course teams. These norms allowed each team to be more efficient and effective in the use of their meeting time. The establishment of the PLC model evidenced a positive effect on course teams. The course teams at Eastside made significant improvement in creating teams that were more effective and efficient.

Theme 2: Acting as a PLC can Enhance the Collaborative Sense of Purpose for Academic Course Teams

When planning interventions for this study, the AR team explicitly addressed goal setting. The lead for each course team was expected to facilitate a team goal-setting exercise at

one of the initial course team meetings for the year. Establishing goals for the team is considered a component of a PLC and allows the group to enjoy a clearer sense of direction. Examining the collaboration survey revealed that “goal setting” improved for three of the four course teams, while goal setting for the Economics/Political Systems team remained unchanged (see Figure 9).

At the start of the study, the Geography course team received the lowest survey results of any of the course teams in the area of “goal setting.” By the conclusion of the study, the Geography team had made improvements, from a 2.2 to 3.7 mean score, and was tied with US History for the highest score. The improvement in goal setting helped transform the Geography team. In an AR team meeting, Mr. Jones, the course team lead for Geography, noted that his team had embraced the goal-setting aspect:

We have established our goals for the year and one of them is to focus on redesigning our assessments. The whole team is on board and we are making progress. We still need to work on collaborative planning, but I feel we are off to a good start.

In her February interview, another geography teacher corroborated Mr. Jones’s comments on goal setting. The teacher stated:

I’m new to the team this year, but I’m impressed with the commitment to our goals. We agreed upon our goals at the start of the school year and we are committed to achieving them.

The success of the Geography team in accomplishing their assessment goal can be seen in the “common formative assessments” results on the collaborative survey. The Geography team scored a 3.8 out of 4.0 on the assessments component of the survey. By setting goals, the Geography course team was able to focus on the task at hand and work collaboratively to accomplish their goal.

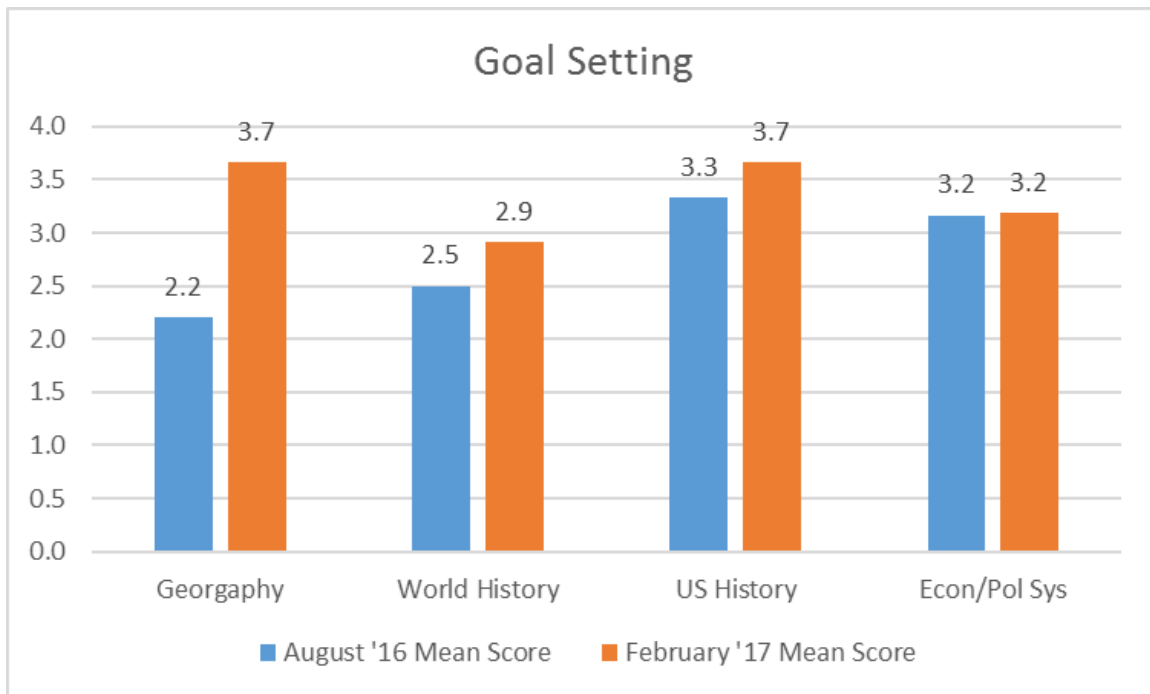


Figure 9. Course Team Collaboration Survey results, Feb 2017 – Goal Setting.

The only group that did not see an improvement in goal setting was the Economics/Political Systems course team. Although there was no improvement, the team did report some success, with a mean score of 3.2 out of 4 on “goal setting” in the collaboration survey. In fact, Mr. Brown, the course team lead, for Economic/Political Systems, was asked about his goal setting for his team and reported:

I would give us an 8 out of 10. There was not much improvement, but we were already doing pretty good. For years, we have created course our own team goals. We could still improve, but we are definitely doing it.

As the teacher interviews and the survey results reflected, the members of the course teams felt that they better understood why they were meeting. The purpose of their work together was clearly laid out through the team’s SMART goals. The establishment of these goals

generated a sense of collaborative purpose for the group. Teachers were able to identify why they were expected to work with one another. Additionally, the course team members wanted to achieve these goals together, which demonstrated a collaborative purpose.

Theme 3: Establishing Course Teams as PLCs can Improve Teacher Collaboration

The survey that was used for this study was adapted from “Becoming a Learning School” (Killion et al., 2009). The survey comprises essential areas of collaboration. The results from the department-wide survey (see Figure 10) indicate an improvement in collaboration across the department. The course teams involved in this study adopted major principles of Professional Learning Communities, as identified in the review of the literature. As a result, major improvements were seen across the board in the course team surveys that were completed at the end of the study. The results of the survey were supported by the testimony of the teachers in the interviews conducted in February.

Mr. Jones reported the following at an AR team meeting in the middle of the study:

This is the best the course team has ever been. We are working together more than we ever have. We meet regularly and we are collaborating more than ever before. The team is on board with doing this stuff on a regular basis.

His statement would foreshadow the coming results of the collaboration survey given to the department.

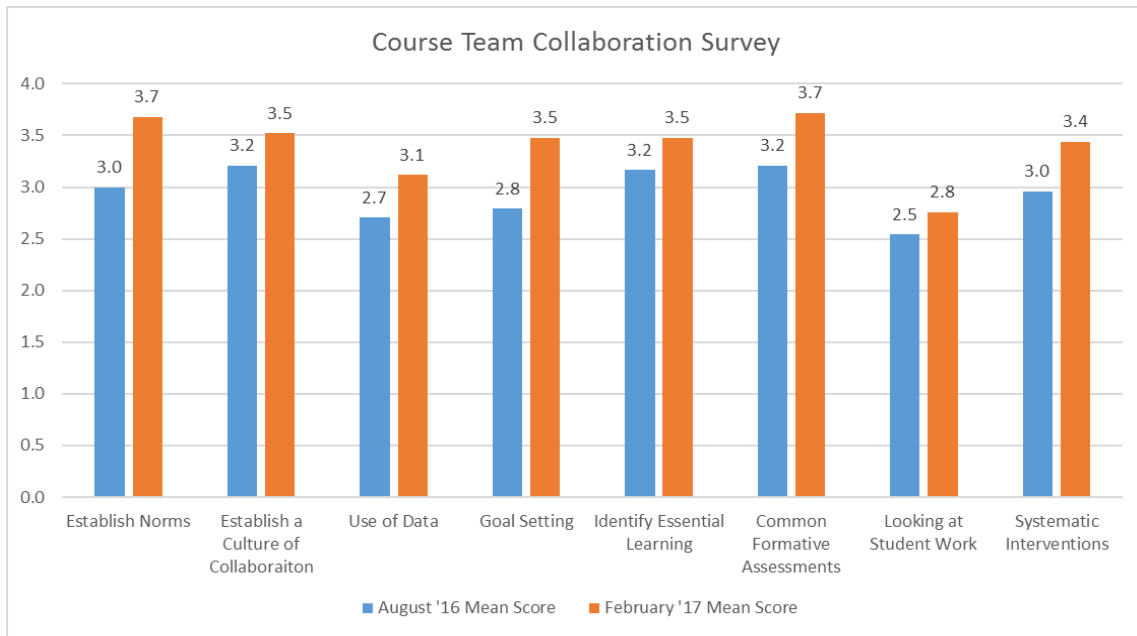


Figure 10. Course Team Collaboration Survey results, Feb 2017.

The Geography course team made strides in every category of collaboration (see Figure 11). Of the eight total categories included in the survey, only five scored higher than a 3 in the initial survey. In the final survey, the Geography team scored higher than a 3 in all eight categories. Six of the collaborative components received a 3.7 or higher. The impact of the PLC model on the Geography course team was astounding. All around, the team’s level of collaboration improved significantly.

At the end of the study, Mr. Jones was able to give more insight regarding the Geography course team. When asked if there was a difference from the start of the year to the end of the study, Mr. Jones responded:

Yes, there is a huge difference. This is by far the most meetings we have ever had in Geography. Our meetings have been very productive and the entire course team is benefitting as a result. We are far better off than we have ever been in Geography.

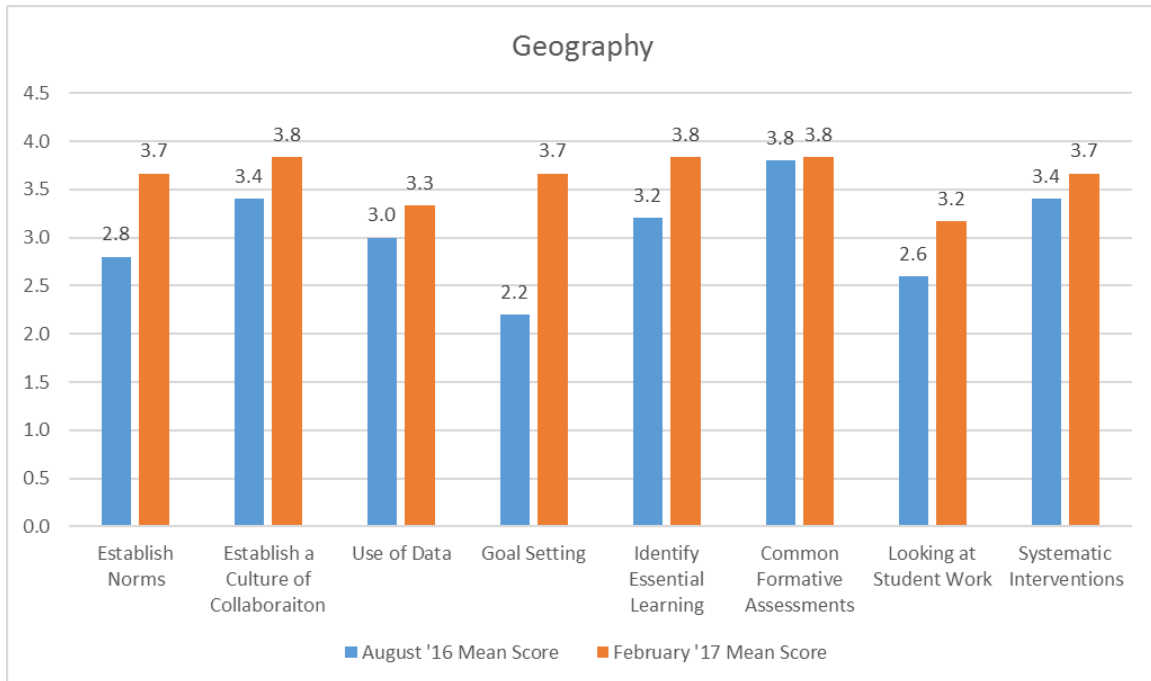


Figure 11. Course Team Collaboration Survey results, Feb 2017 – Geography.

Another member of the Geography course team reiterated Mr. Jones’s stance, stating:

We have a wonderful team. I’m very lucky to work with a team that gets along and gets the job done. I’ve been on teams in the past that did not function as well as the Geography team that I am now a part of.

The World History course team also enjoyed improvements, even if not at the same levels of Geography or US History. The survey results indicated that World History improved in all areas, except for “looking at student work” (see Figure 12). Teachers were also given the opportunity to share their thoughts on the status of the World History course team. The interviews reflected improvement, but also more room for growth.

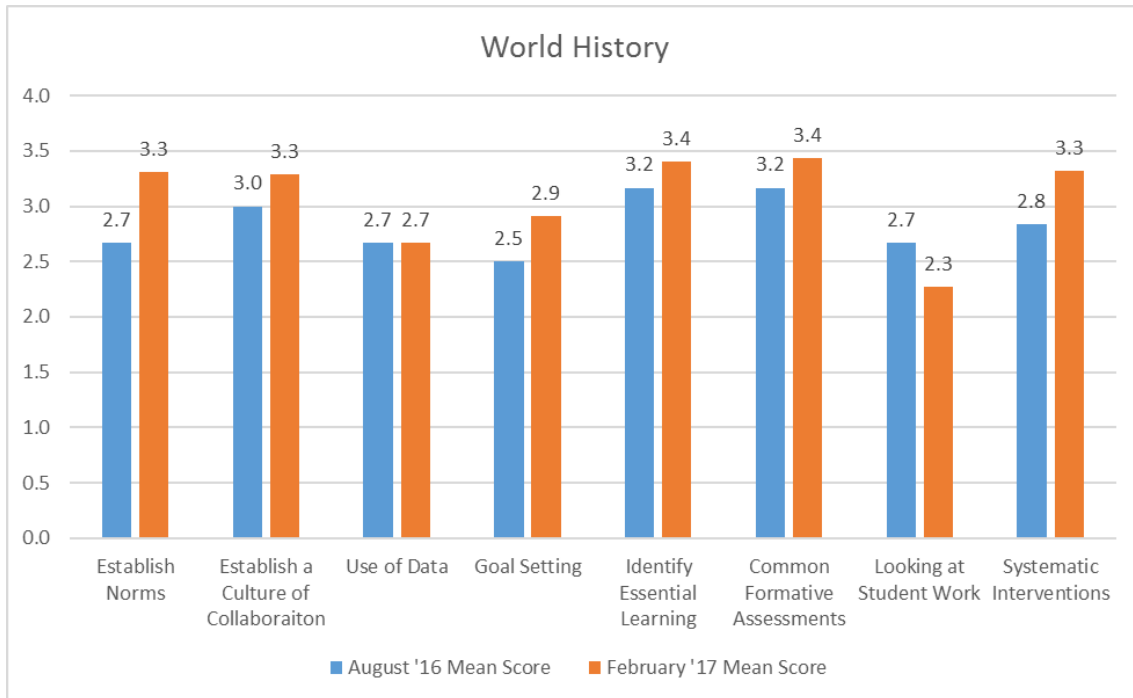


Figure 12. Course Team Collaboration Survey results, Feb 2017 – World History.

When given the opportunity to share her opinion at the end of the study, the World History course team lead, Dr. Williams, stated:

The group is much more collaborative than they were at the beginning of the year. They are more willing to work together and contribute to the team. Each member of the team is willing to contribute in a way that leverages his or her strengths.

Dr. Williams did note that there were still some areas that could continue to improve, but reiterated that the team as a whole was moving in the right direction. Dr. Williams attributed the lack of more success to a variety of factors. First, she herself was new to the department, new as a course team lead and new to the subject area. Secondly, the Advanced Placement (AP) World History curriculum underwent a redesign that dominated the attention of the group. Lastly, there

was a clear distinction between the course levels that created a divide between the College Prep (CP) and Advanced Placement teachers.

Another World History course team member provided her take in a February teacher interview:

The AP and CP courses are just so different. I think the AP teachers have made some progress, but I do not think the CP teachers have collaborated as often. It is very difficult to get the whole team together and have a meeting when we have different curriculums.

Overall, the World History course team improved their level of collaboration, but still had some issues to address. The interventions designed using the PLC model had a positive net effect on the level of collaboration within the World History team.

The US History course team was in a unique position at the start of this study. In the initial survey, the results indicated that the team was already high-functioning. The team scored a mean score of 3.2 or higher in four categories. Regardless, the course team still reported collaborative improvements in the final survey given in February (see Figure 13). All eight of the areas of collaboration improved over the course of the study. The US History team began and ended the study as the strongest course team in the Social Studies Department, which is also supported by Mr. Bulmer, the department chair.

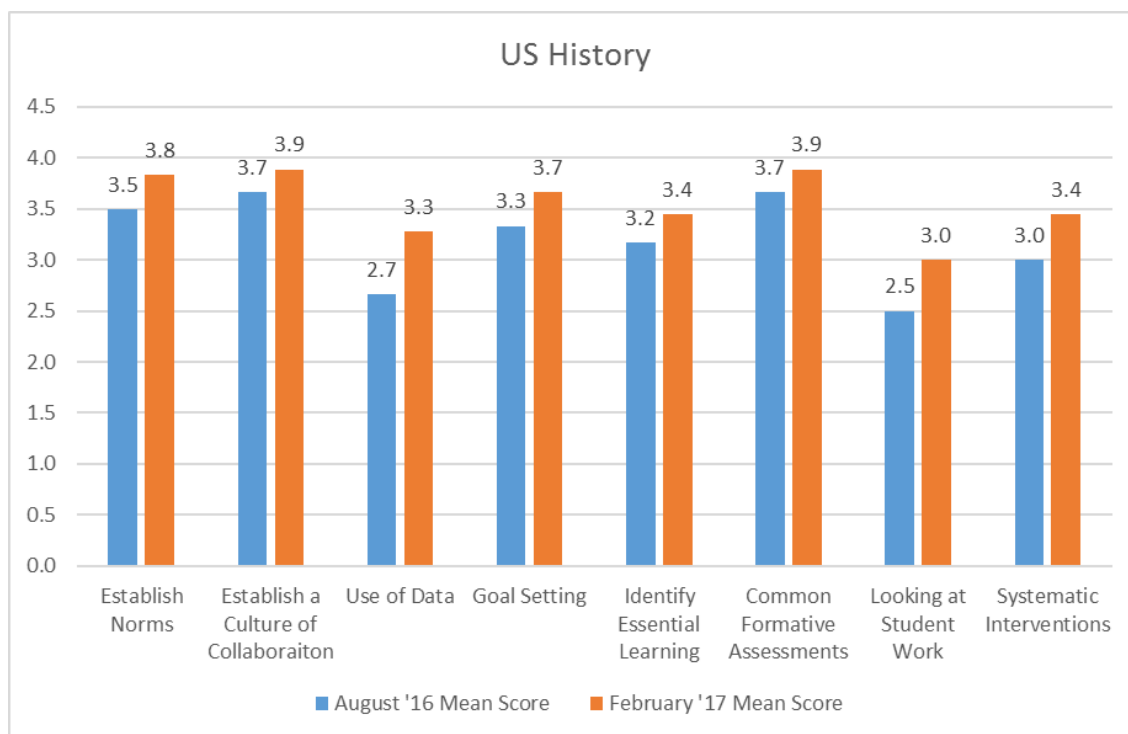


Figure 13. Course Team Collaboration Survey results, Feb 2017 – US History.

Even though the team did not have as much room to grow as the other course teams, the US History team found a way to improve in all aspects of collaboration. The team even scored a 3.9 out of 4 in two different categories, “establish a culture of collaboration” and “common formative assessments.” The gains that were made over the course of this research study were supported by the comments made by members in the Social Studies Department at Eastside. Mr. James spoke to the improvements that he noticed over the course of the study:

The US History team is comprised of a strong group of teachers. Over the past couple of years, we’ve been able to learn from one another and it has helped us grow as a team.

For me, personally, I’m glad that I ended up on this team. I’ve become a much better

teacher because of those around me... This is the strongest the team has been since I started here.

In a February interview, another teacher on the US History course team was asked if there was any improvement in the level of collaboration from August to February, and she responded:

Yeah, using the strategies and we've done more collaborative things, like looking at data in meetings. So, I think we do collaborate well... I think we really help each other out, sharing lessons, making sure we are on the same page, staying on pace and things like that.

When Mr. Bulmer was interviewed in February, he specifically mentioned the success of the US History course team: "The best is US, everything they do, they do well." Between the survey results, the teacher testimony and Mr. Bulmer's thoughts, it is clear that the US History team improved over the course of the study. The team was able to build upon a strong foundation and continue to improve its collaborative practices during the study.

The final course team to examine is the Economics/Political Systems group. As with the other three teams, there was overall improvement in the collaborative practice of the course team (see Figure 14). However, the results were similar to World History, in that there was improvement, but it was incremental. Overall, the Economics/Political Systems course team had the lowest final survey results of any of the teams included in the study. AR team member and teacher interviews mentioned the improvements, but there were also comments to the needed growth of the team.

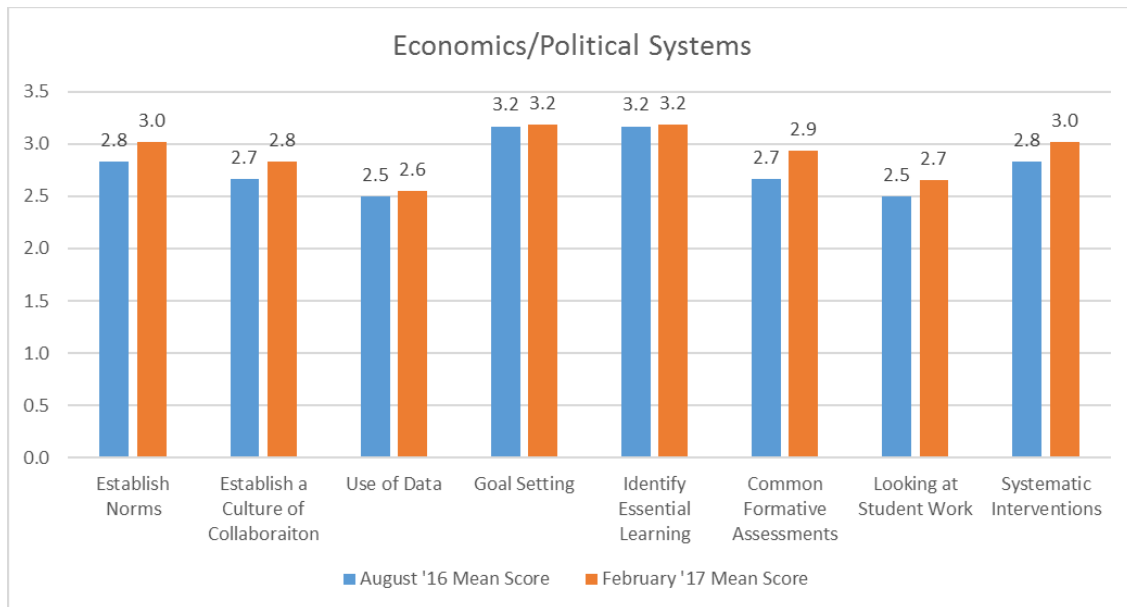


Figure 14. Course Team Collaboration Survey results, Feb 2017 – Economics/Political Systems.

Six of the eight categories showed improvements in the elements of collaboration, with the other two remaining constant. The greatest growth in mean scores was 0.2, which was the case for four of the eight categories in the survey. The two highest areas in the survey scored a 3.2 on the final survey, which were the same in the initial survey. Four of the eight categories reached a mean score of 3 or higher on the final survey. As stated previously, interviews would corroborate the survey results.

Mr. Brown, the course team lead for Economics/Political Systems, shared his thoughts in his AR team member interview at the end of the study:

Yes, our team has improved since August. Creating shared responsibilities for the team members has worked well, but the unit by unit planning has been put on the back burner. Most teachers are on the team already have materials and it is easy for them to just keep using them.

Mr. Brown went on to mention that division within the course team, Economics and Political Systems, made it difficult to collaborate at the highest levels. He stated:

The two courses are completely different and have their own curriculum. Teachers don't want to sit in a meeting when the information being discussed does not pertain to them in any way, and why would they? It just makes the collaborative planning difficult to execute. I understand why we do it, but I wonder if we would benefit from breaking the teams up.

An Economics/Political Systems course team member shared some similar thoughts in his final interview:

Yes, our stated purpose of the course team meetings has changed, with more of an emphasis on collaboration through data analysis, but our major focus is still on disseminating information. It still feels like we sometimes meet, just to meet.

In addition, the teacher stated that including Economics and Political Systems in the same group “makes collaboration difficult.” He also went on to share that the team does “more than in the past” in regard to collaboration. The teacher’s observations are in line with the survey and the thoughts shared by the course team lead, Mr. Brown. The team has improved slightly and still has plenty of room for growth.

There are a variety of possible explanations for the minimal gain made by the Economic/Political Systems team. The most commonly mentioned was that the course team is composed of teachers from two different courses, both Economics and Political Systems. The two are within the social studies department and are required courses taught to senior students. Due to the 4x4 block schedule, most students take both courses in the same semester, nine weeks each. For that reasons, the approach has also been to keep the teachers together on a course

team, but there are difficulties when you consider that the courses are completely different and independent of each other. This has made the Economics/Political Systems course team the most difficult in regard to collaboration. Although the improvements were small, it is important to note that the survey and interview results do indicate improvement for the course team, which was the stated purpose of this study.

Incorporating elements of professional learning communities had a profound impact on the collaborative nature of course teams. Every component of collaboration included in the course team survey saw an increase in mean scores from the August administration to the February administration of the survey. The successes of collaboration were noticed in course team meeting observations and were detailed by teachers when interviewed. Although some areas in need of improvement were identified, the overall success of the PLC model was evident in this study. Even in the areas teachers stated that there was room for improvement, the Social Studies Department as a whole saw progress.

Research Question 3: What an Action Research Team Learns When Working to Improve Course Team Collaboration

The action research approach was used for this study aimed at improving collaboration among teachers in course teams. Interestingly, the efforts of the AR team members required the collaboration of the group in order to develop and properly implement interventions designed to improve collaboration. This final research question was intended to determine what was learned as a group through the action research approach in regard to improving course team collaboration. Three themes were identified:

1. Action research is collaborative and the course team found it to be valuable.
2. Course specificity can be beneficial when working in course teams.

3. Protection of course team planning time can enhance collaboration.

The first of the findings pertained to the action research process and how the team perceived the impact of engaging in such a manner. The remaining two themes identified were derived from final AR team discussions and the AR team member interviews conducted at the end of the study. These two themes identify what the AR team members learned about improving collaboration in course teams through action research.

Theme 1: Action Research is Collaborative and the Course Team Found it to Be Valuable

Action research was used in this study, and for all of the AR team members, the experience was a new one. The AR team consisted of four course team leads and the Social Studies Department Chair. In the post-study interviews, every member of the action research team felt as though the action research approach was beneficial to their growth as a course team leader or a department leader. This was also evident in the AR team meetings themselves, as the team engaged in some rich discussion regarding improving course team collaboration. Everyone shared ideas and the team learned a great deal.

An AR team member who had been a course team lead for only one year before beginning this study provided some insight. In a post-study interview, the course team lead commented:

It was great to hear what the other course teams were doing. We have check-ins with our department chair, but we don't ever get the chance to sit down with all the course team leads. I got some great ideas from some of the other members.

Along the same lines, another AR team member commented:

The discussions were tremendously helpful. It was a safe environment for us to have these discussions. It was important to see the different teams and hear about their successes and challenges. We never get the chance to meet with the other course team leads within the department.

The teacher also mentioned that it was good to hear that some of the other course teams were having some of the same problems. The AR team meetings provided an opportunity for those teachers to get together and brainstorm ways to deal with the obstacles.

Further evidence of the collaborative nature of the AR team meetings can be found in a conversation that took place in one of the meetings themselves. At one of the early AR team meetings, when the group was discussing possible interventions, there was some healthy debate on the direction of collaborative planning or lesson sharing. Two teachers debated the merits and practicality of each. One of the AR team members stated:

Honestly, I don't think lesson sharing is going to be as effective. We need to plan lessons together as a group, not simply share what we've always done. Let's pick an upcoming unit and bring our lessons and our ideas, to develop new lessons together.

Another team member, who was not initially involved in the debate, chimed in that he, too, believed that collaboratively planning lessons would be more valuable than lesson sharing. The group ended up agreeing and coming to a consensus, but without the AR team, the debate would never have occurred. This was evidence of the team's ability to learn and grow together, even when initially two sides may not have agreed.

In a post-action research interview, one of the AR team members summed up the action research process well:

There was definitely value to the AR team meetings. They did not seem like just another meeting. The approach worked well and I think we all had the opportunity to learn from each other. I think it would be a good idea for us to continue to meet, even though the study has run its course.

There was a strong consensus among the group that the action research approach allowed for collaboration on the part of the course team leads. On several occasions, the team members referenced how nice it was to hear what the other groups were doing. The course team leads were able to share some of their own thoughts while adopting the good ideas of others. From the interviews and AR team meetings, it was evident that the action research process benefitted its team members and provided a collaborative community for dealing with the focus of course team collaboration.

Theme 2: Course Specificity Can Be Beneficial when Working in Course Teams

The course teams at Eastside High are established based simply on the course being taught, not the level. At Eastside, many of the courses have three different levels, Advanced Placement (AP), honors/gifted (Pre-AP) and college prep (CP). The honors/gifted and college prep courses share the same standards and may vary some in instructional strategies, but generally are similar. However, the AP courses utilize an entirely different set of standards and, in most cases, use a different pacing calendar. The AR team learned that more specificity when creating course teams is needed to impact the level of collaboration among teachers.

The AR team as a whole acknowledged that the varying levels of each course levels make it difficult to collaborate in course teams. Not only is the curriculum different from one level to another, CP to AP, but the students are different, too. An appropriate approach in an AP class might not be appropriate at all in a CP class.

A teacher from the World History course team mentioned this difficulty before the study even began:

It's almost like we have two teams within World History. The AP group does their own thing and then the CP and Pre-AP group does their own thing. Having taught the two courses, they are entirely different. Getting the whole team together is just difficult and can be a waste of time, depending on the topic.

The same teacher had some similar comments at the end of the study when she was asked if there was a difference from August to February:

The course team lead this year teaches AP World, so the focus has shifted from CP and Pre-AP to AP. It's like the CP and Pre-AP teachers have to organize their own meetings this year, which is very different from last year.

She found it difficult for all the teachers of World History, CP, Pre-AP and AP, to all meet together to collaborate, given the differences in the levels. The teacher even mentioned that it might make sense for each group to meet separately.

Although US History experienced the least difficulty with this problem, it was still noticed by teachers within the course team. One of the teachers shared:

The biggest problem I saw was that AP, Pre-AP and CP were all on the same course team and the curriculum is different, it's not the same. Sometimes something that will work great with AP students, will not fly in the CP classroom. Also, with pacing of AP versus Pre-AP and CP, what we would talk about with the Pre-AP level would not apply to the AP teacher until much later in the year.

The teacher thought that the US History team was strong, but that it faced the difficulty of meeting the needs of all teachers at the course team meetings. She felt there were times that

some of the teachers were disengaged because the material being discussed was not relevant to them.

Mr. James, the US History course team lead, also noted the issues between the “AP and Pre-AP/CP split.”

The information sharing between the levels is not a problem, but planning is an issue.

We are rarely on the same topic in history and the way we teach it in Pre-AP or CP may not be appropriate for the AP group.

In some cases, the teachers placed on a course team truly teach different courses altogether. The 12th grade social studies teachers were all placed on the same team, Economics/Political Systems, even though many of them taught only one of the courses. Mr. Brown sympathized with those teachers:

Teachers don't want to sit in a meeting when the information being discussed does not pertain to them in any way, and why would they? It just makes the collaborative planning difficult to execute. I understand why we do it, but I wonder if we would benefit from breaking the teams up.

The AR team members found it hard to effectively lead course team meetings when much of the information did not apply to some members of the course team. Given some of the drastic differences in the courses across levels, the AP teachers do not appear to be as engaged when discussing Pre-AP or CP material, and the opposite is true when discussing AP content. There appeared to be a consensus that AP teachers need to meet separately, at times, in order to ensure that they are engaged in the meeting and are actively collaborating. The same can be said for the Economics and Political Systems teachers. The AR team did feel that all of the team members

could meet together when the information being discussed or presented applied to the entire team. This approach would help maintain a level of collegiality among the team members.

Theme 3: Protection of Course Team Planning Time can Enhance Collaboration

Eastside High School has provided common planning time for course teams for years. Teachers of the same course have shared planning time in an effort to increase the levels of collaboration among teachers. As stated earlier in this study, time can prove to be a significant barrier to collaboration between teachers. In response, the leaders at Eastside decided to provide time within school hours for teachers to meet. Even with the embedded planning time, the AR team found that the demands on teachers made it difficult to accomplish all the course team goals they desired.

The members of the AR team found that full implementation of purposed interventions was difficult due to other required meetings and the demands of the job. In meeting after meeting, the AR team members provided examples of the limits on their time and the impact that such limitations had on the collaboration of the group. In an early AR team meeting, one of the members stated:

We are working hard. With that said, it is difficult when you have multiple meetings scheduled during the week. Then, of course you still have grading and lesson planning to do. I hate asking for more time, when it feels like there isn't enough as it is.

In response, one of the other team members supported the statement by responding to the comment:

I too find it hard to ask our course team to meet, when there are other meetings scheduled throughout the week. Our teachers need time to get their job done... There are just so many demands on our teachers' time.

The AR team members agreed with the two statements. They did acknowledge that other meetings are necessary at times, but that it is very difficult when many of the teachers already have after school commitments.

During a meeting later in the study, another team member also cited a lack of time as an impediment to collaborative efforts. In this case, the team member mentioned that the other course team members were unable to participate.

We were supposed to have our regularly scheduled course team meeting, but there was a spring registration meeting scheduled for the same day. When the teachers informed me of the conflict in the schedule, we had to cancel our meeting. We had a lot talk to about too.

In the AR team member interviews, the interviewees discussed the level of implementation of the interventions that were planned through action research. During the interview, team members usually justified the rating that they assigned to their group. One of the AR team members stated:

We did not do well implementing collaborative planning. We were in survival mode. This year we have dealt with the course redesign, created test banks for our assessments and all the other duties of being a teacher. There has not been enough time to focus on collaborative lesson planning.

The AR team reported that it is not just the meetings that make it difficult, but the expectations of being an effective teacher. The team felt that the pressure to get the job done on a daily basis made it difficult for the team to go above and beyond. For each course team, the demands varied, but all teams felt the stress of trying to remain effective instructionally.

Even when Eastside High School attempted to ensure that time was carved out for course team meetings, the teachers felt that collaboration was difficult to execute. The AR team mentioned the number of meetings scheduled and the demands of the job as reasons that they felt time was difficult to find. As a result, the AR team members felt that the course teams were not as strong as they could be with more time to work with their colleagues. Each course team member agreed that there were changes that could be made to ensure that teachers had more time to plan and meet in course teams.

Summary of Findings

This study was designed to determine the perceived impediments to teacher collaboration, to improve collaboration among course teams through implementation of the PLC model and to measure the learning of the AR team through the action research process. Three research questions guided the study, each of which had several findings.

There were three major findings to the first research question, intended to identify the barriers to effective teacher collaboration in course teams. Time, teacher resistance to collaboration and a lack of teacher leadership were acknowledged as major barriers to collaboration in course teams. Teacher interviews and AR team meetings were used to determine these major impediments to course team collaboration. Although Eastside has created common planning time for each course team, the demands on teachers continue to interfere with collaboration. Teachers commented that there were many meetings that interfered with planning time and made it difficult to collaborate in course team meetings. There were also references to the normal expectations of teachers in regard to grading and providing feedback to students. With each meeting that was scheduled, teachers felt as though they had less time to focus on the traditional aspects of teaching. Team members also mentioned that some teachers were resistant

to change and collaboration. Many of the teachers within the Social Studies Department at Eastside have taught for a long time and do not value collaboration in the same way as others. Teachers reported that these attitudes can make it difficult to focus on collaboration in course team meetings. Lastly, it was determined that teacher leadership was a perceived barrier to collaboration among teachers in course teams. Several teachers mentioned that the stronger the course team lead, the more teacher collaboration took place. Specifically, teachers mentioned that the course team lead needed to be organized in order to effectively make use of course team meeting time. These three perceived barriers were identified in response to the first research question.

In addressing the second research question, regarding the impact of PLC implementation on course teams, survey data was compared to teacher interview responses and course team meeting observations. Three themes were identified using this method. The first was that the PLC model improved the efficiency of collaboration in course team meetings. Across the department there was an increase in “establishing norms” and teachers noticed the difference. Several teachers reported that the meetings were more focused and efficient this year. Along those lines, teachers also mentioned that the course teams had more of a purpose as a result of the interventions planned. It was reported that there was less “meeting just to meet.” The survey results supported teacher observations, as “goal setting” significantly improved across the entire department. Within each group, setting goals was a strength of the course team. Lastly, it was determined that establishing course teams as PLCs positively impacted the overall level of collaboration for course teams. The survey results documented a significant improvement overall and showed particularly large growth for certain teams. Only one course team experienced regression in any category, of which there were eight for each of the four course

teams. The collaborative culture improved department-wide and collaborative activities were occurring with more frequency at the course team level.

The third and final research question, regarding what the AR team learned from the action research process, resulted in three findings. The first finding specifically addressed the action research process. It was determined that action research was an appropriate, collaborative approach to addressing the problem regarding course teams. AR team members agreed that the action research process provided a comfortable environment in which the course leads could discuss their successes and shortcomings. Hearing from the other team leaders was invaluable to the members of the AR team. Many of the teachers involved in the AR team wanted to continue the practice of meeting to discuss course team development. The second finding of the AR team was that course specificity can be beneficial when dividing up course teams. Members of the AR team felt that collaboration improved when the teachers involved were all teaching the exact same, or a very similar, course. Some groups ran into issues across levels, CP to AP, or even within grade levels, for example, 12th grade when students take both Economics and Political Systems. Keeping teachers of the most similar courses together is key to promoting collaboration. Also, it was decided that course team planning time must be protected. In many cases, course team meetings were effected by other events within the school. Teachers are also facing the many other demands, outside of collaboration, that must be handled. The stress and pressure on teachers to meet each demand can be heightened when planning time is encroached upon.

CHAPTER 6

ANALYSIS, CONCLUSIONS AND IMPLICATIONS

The conclusions and implications of this study are discussed in this chapter. The study aimed to address the issue of teacher collaboration in course teams at the secondary school level. The research questions that guided this study are as follows: (1) Which perceived barriers are most responsible for impeding course team collaboration at the secondary school level? (2) What effect, if any, will the establishment of Professional Learning Communities among course teams have on teacher collaboration? and (3) What does an Action Research team learn when they collaboratively work to enhance course team collaboration? In addition to conclusions and implications, considerations for future research and a reflection from the researcher are included in the chapter.

Summary of Findings

Teacher collaboration is the goal of many schools in today's era. Teachers are asked to work together to develop lessons and plans that meet the needs of all students in an effective and engaging manner. However, teachers often work in isolation, which prevents collaboration from taking place. Three key barriers were perceived by teachers and documented in this study: 1) a lack of time, 2) teacher resistance to collaboration and 3) the need for effective leadership from the course team lead. These barriers interfere with the ability of the course team to effectively operate and to provide an environment in which collaboration can take place.

Professional learning community (PLC) models have been suggested as an appropriate way of addressing school issues for years. For this study, the same concepts of PLCs, which are

routinely applied to schools and sometimes applied to departments, were applied to the course teams. Coding and analysis of survey results and transcripts of teacher interviews revealed the following findings: 1) establishing course teams as PLCs can improve collaborative efficiency, 2) acting as a PLC can enhance the collaborative sense of purpose for academic course teams and 3) teacher collaboration can improve when course teams act as a PLC. The study found that, in this specific case, the PLC model was effective in improving aspects of the course team, including the overall collaborative nature of the team.

The action research team worked together to improve the collaborative levels of course teams at Eastside High School. Included in the research was reflection into the action research process and what the AR team learned through action research. Through examination of AR team meeting transcripts and post-study AR team member interviews, three findings were determined: 1) action research is collaborative and the course team found it to be valuable, 2) course specificity can be beneficial when working in course teams and 3) protection of course team planning can enhance collaboration. All team members viewed the action research process as beneficial. Also, the group had the opportunity to gain knowledge about course teams and how to improve collaboration among teachers through action research.

Conclusions

The conclusions of this study were reached through answering the research questions presented. In addressing the research questions, findings were determined and examined, which allowed for conclusions to be drawn. These conclusions are detailed throughout the chapter.

Conclusion 1: Collaborative Time Must Be Protected for Course Teams at the Secondary School Level

As part of the action research study, the AR team investigated the perceived barriers to collaboration within course teams. The research determined that teachers perceived time to be the greatest impediment to course team collaboration. Researchers have documented the importance of creating time for PLCs and collaboration (Lujan & Day, 2009). In the case of Eastside High School, course teams are provided a common planning period with their colleagues. The intent was to create a space for collaboration to take place, but many of the teachers found that time constraints still existed. Even with the common planning time, teachers feel the time crunch. One of the teachers explained:

One of the biggest barriers is time. Teachers are always crunched for time. There is so much time needed for grading and things like that. If there are a lot of meetings, that makes it hard to get things done. It becomes very hard to focus on instruction as a group.

It is important that schools are mindful of teachers' time. There are many responsibilities as a teacher, such as planning, grading, coaching, sponsoring a club, to name a few. All of these responsibilities weigh on educators, and if schools are not careful, they can stretch their teachers too thin. A member of the AR team shared a specific example of time constraints for his course team:

We were supposed to have our regularly scheduled course team meeting, but there was a spring registration meeting scheduled for the same day. When the teachers informed me of the conflict in the schedule, we had to cancel our meeting. We had a lot to talk about too.

The leadership at Eastside High School clearly understood the importance of common planning time for the teachers; however, the teachers still perceived that there was not enough time in the day to accomplish all that was asked of them. This perception prevented team members from openly collaborating at desired levels. Collaborative time needs to be protected at all costs and the faculty needs to be aware of these efforts. If the school and administration value collaborative time, teacher teamwork will occur at high levels.

Conclusion 2: Identifying a Strong Teacher Leader for Each Course Team is Essential

Leadership and its impact on schools have been researched thoroughly to date. As a result, many acknowledge the importance of having strong school leadership. In this action research study, the same was found to be true for course teams at Eastside High School.

Teachers called upon their experiences to provide insight into the importance of leadership at the course team lead position. One teacher recalled previous teacher leaders and noted:

I've worked on very strong and weak course teams in the past. The biggest difference to me was the course lead's ability to move the team forward. Our current course team lead is a very strong leader, and therefore we have a strong team as well.

Teachers respond to leadership and in course teams, the impact can be significant, as the teachers shared. Another teacher noticed the positive impact of leadership. The course team lead demonstrated strong organizational skills, which impacted the course team and caught the teacher's attention. In an interview the teacher stated:

It makes a world of difference at the meetings. Our meetings are very structured... there are always set things that we are going to talk about... it's the same thing as your classroom, the more organized it is, the more effective it is going to be

This action research study found that a major barrier to collaboration among course teams was an ineffective leader. Teachers found that those leaders who successfully led strong course teams were often organized, communicated well and had a clear understanding of what he or she wanted to accomplish with the group. Little time was wasted in meetings and an agenda outlined the topics to be discussed. Follow-up emails were sent to remind the group of what was expected of each individual member. Moreover, there was a clear understanding of the purpose of each meeting and the course lead connected the activities in the meeting to the stated goals created by the team. Teachers felt that the course leads who successfully exhibited those skills led strong course teams.

At the high school level there are a number of leadership positions that need to be filled, and the course team lead position is closest to the ground. The course team is where teachers plan for instruction and the leader is essential in facilitating successful collaboration among teachers. There are a number of potential course teams in a high school, and finding the proper leader for each might prove to be difficult, but leadership is nevertheless vital to collaboration using the course team model.

Conclusion 3: The PLC Framework is Appropriate for Improving Collaboration in Course Teams at the Secondary School Level

Through action research, teachers determined that the PLC model was appropriate for improving collaboration among course teams. Both quantitative and qualitative data from the study support this finding. The course leads facilitated the implementation of several interventions based on the PLC model. First, the course leads had their teams create SMART goals for the group. Secondly, the course lead identified specific roles for the members of the course team and distributed the leadership among the group. Thirdly, the course leads

implemented a collaborative lesson-planning component in their course team meetings, although this occurred at various levels from one course team to the next. Lastly, the course team leads engaged their team members in data analysis using local, district and state assessment data.

As a result, the course teams included in this study at Eastside saw significant improvements in the collaborative practice of teachers. Although improvement took place at varying levels, all teams showed overall collaborative gains. In support of this conclusion, one of the AR team members stated:

The group is much more collaborative than they were at the beginning of the year. They are more willing to work together and contribute to the team. Each member of the team is willing to contribute in a way that leverages his or her strengths.

The sentiments expressed in this quote were shared by many of those involved in the study. The PLC model was successful in impacting all course teams involved at Eastside. The quantitative data generated through collaborative surveys reflected strong gains as well. Each of the eight categories' measures in the survey showed improvement within the department. In fact, each of the eight categories scored a mean score of 3.0 or higher on the final study. The Social Studies Department, and all of its course teams, greatly improved its collaborative practices through the implementation of PLCs.

Schools have routinely adopted the PLC model in an attempt to improve collaboration school-wide. The school is viewed as the organization and is intended to become a PLC of its own. This study shows that the same PLC approach can be used at the micro level, in course teams. Ideally, a course team could be considered a PLC, within a department classified as a PLC, within a school that operates as a PLC. Schools that embrace collaborative practice among their teachers could expect the same principles to be adopted by course teams.

Conclusion 4: The Action Research Method Allows for a Collaborative Study that can Benefit Schools when Addressing Pressing Issues in the Building

When interviewed at the conclusion of the study, the members of the AR team all agreed that the action research approach was appropriate for addressing the issue of teacher collaboration in course teams. Each member of the team made comments that were in favor of the process and some went so far as to suggest that it continue moving forward. The team reported that the act of teachers working together to solve a problem was beneficial because many perspectives were provided. One of the AR members shared the following in a post-action research interview:

There was definitely value to the AR team meetings. They did not seem like just another meeting. The approach worked well and I think we all had the opportunity to learn from each other. I think it would be a good idea for us to continue to meet, even though the study has run its course.

Although this study focused on teacher collaboration in course teams, the problem that is being addressed by the AR team is moot. It is the act of working collaboratively to solve a problem that gives action research its power. Another AR team member commented on the successfulness of the action research approach:

The discussions were tremendously helpful. It was a safe environment for us to have these discussions. It was important to see the different teams and hear about their successes and challenges. We never get the chance to meet with the other course team leads within the department.

As schools continue to face challenges within the building, the results from this study suggest that action research is an appropriate model to consider for addressing school

improvement issues. Teacher teams can be created to identify the problem, develop a plan, execute the plan and evaluate the effectiveness of the plan. This process will allow the team to learn as a group and will provide the structures needed to solve many of the problems in schools today. Action research should be considered as one effective way to address issues.

Recommendations

Based upon the conclusions of this study, a number of recommendations have been suggested for schools and school districts. The recommendations from this action research are far-reaching. They go well beyond the Social Studies Department and the walls of Eastside High School. The knowledge gained from this study can be applied to schools across the district and around the world. The following section provides specific recommendations based on the information gleaned in this study and how it can be applied in other educational contexts.

Recommendation 1: Create “Sacred” Planning Time for Course Teams

As shown through this research study, time is a critical component to successful collaboration. One recommendation is to create sacred planning time for course teams. Sacred planning time would entail a specific day, or times within the day, that course teams are expected to meet. All teachers should understand the expectation of collaboration on these days, or during sacred time. Furthermore, sacred course team planning time should be created on teacher work-days to ensure teacher collaboration has space to occur. Sacred planning time can help to ensure that time exists for teacher collaboration to take place, regardless of the other demands on teachers’ time within the school.

There are several potential impacts of creating sacred time. First, it sends a clear message to the faculty and staff that teacher collaborative time is desired and that there is an emphasis on teacher teamwork. The study determined that one of the perceived barriers to

collaboration was a lack of teacher willingness to collaborate. Creating sacred time communicates a clear commitment to collaboration to all faculty and staff. When schools create course teams, they intend to create a space for teacher collaboration, and creating sacred days for planning reinforces the message to teachers.

Secondly, creating sacred time ensures that all school employees are aware that no meetings can be scheduled during sacred time. As a result, teacher planning time is protected and teachers are provided the opportunity to work together with their colleagues. There are many moving parts to a school and, if staff are not careful, conflicts can arise and impede collaboration between teachers. Ensuring that all members of the staff are aware of planning time and protecting it allows teachers to focus on working with their colleagues in course teams.

Lastly, sacred planning time creates a uniform schedule for course team collaboration, which allows school leadership members to be involved. Once sacred planning time is implemented, the meeting time for each course team is known by all. This allows the leadership at the school to personally engage in the meetings. Sacred time provides an organized way to schedule course team meetings, which can result in elevated participation from school leadership members.

Recommendation 2: Provide Teacher Release Days for Course Team Planning

Teachers have many duties and responsibilities that can encroach on their collaborative time. In order to provide more time for collaboration, schools can consider scheduling course team release days. Specific days can be determined throughout the year to allow course teams to work together for large blocks of time. However, course team release days should be staggered to ensure that ample substitute teachers are available. In the high school setting, collaborative time is often limited to only one period, but release days allow for teams to meet for a greater

duration of time. With more time to work as a team, teachers can tackle more time-consuming tasks, such as data analysis or looking at student work, and can plan their instruction further in advance. There is a great deal of work to be carried out by course teams, and providing additional time to collaborate can be beneficial to the success of course teams.

School districts can assist in providing funding for teacher release days. When teachers are not in the classroom, a substitute is required, which costs money. Some schools might find the cost of funding release days prohibitive. Large high schools have a number of course teams and may have over a hundred teachers who require a sub for a release day, even if staggered throughout the year. If funding a release day is an issue, many schools will choose not to provide the additional opportunity for collaboration. The district can help ensure teachers have the proper amount of planning time by providing funding for substitute teachers. Even partial funding would be welcomed and could help provide a significant impact on the ability of teachers to find the time necessary to collaborate.

Recommendation 3: Carefully Select Course Team Leads who Demonstrate Leadership Potential

The impact of the leader of the course team was perceived to be vital to the success of each group. Schools should carefully consider which teachers are selected to take on the teacher leadership role of course team lead. If the teacher in charge of the group is not an effective leader, it should be expected that the team will struggle to grow. The difficulty of selecting a successful leader for each course team is understandable, as most secondary schools will have 20 or more course teams. This means that a number of teachers must be selected from a limited pool to serve as a course team lead. The teacher selected to facilitate the collaboration for the group does not need to be a proven leader, but rather a teacher who can be groomed into a

teacher leader role. The person should be positive, organized, have an understanding of the curriculum and should be able to motivate colleagues to participate in collaboration. A teacher who possesses even some leadership traits can successfully lead a course team to high levels of collaboration, which will benefit both the teachers, and the students. In order to ensure that the course team continues to grow and work collaboratively together, a capable teacher leader must be identified.

Recommendation 4: Provide Leadership Development Opportunities for Course Team Leads

Once the teacher leader has been selected for each course team, it is recommended that professional development opportunities are provided for the course leads. The course lead is a unique role within a secondary school, and it has been shown that the teachers recognize the importance of leadership in this position. Professional development can help improve the leadership capacity and create a better understanding of the expectations of course teams. The curriculum can be tailored to meet the needs of the teachers selected. Some might need more general leadership development, such as communication skills, and some might need more specific ideas pertaining to the course team model, such as implementing common assessments. Regardless, the key is providing the necessary training for the teachers responsible for facilitating the collaboration of teachers in course teams.

The district can assist in developing teacher leaders by providing district-wide professional development opportunities for teachers and leaders. Similar to the professional development offered for teachers at the local school level, districts can invite potential teacher leaders to go through training of their own. This training could be provided for future teacher leaders, or teachers who have already taken on a leadership role. Additional support can be

provided to local school leadership. Principals and assistant principals can be included in professional development that reinforces the importance of developing teacher leaders and provides a framework for doing so. The knowledge gained from the district-wide professional development could then be brought back to the local school. This top-down approach could lead to increased consistency in leadership development in schools across the district.

Recommendation 5: Train Course Teams on the PLC Model

It has been determined that the professional learning communities model for schools is appropriate for course team development. There are several components of the PLC model that can be applied to course teams. Creating a collaborative culture, setting goals, establishing norms, generating common assessments, analyzing data, looking at student work and establishing common teaching practices are just a few. It is important that course leads, and the teachers within course teams, understand what each component is and what proper implementation should look like. Schools can provide professional learning opportunities in staff meetings or hold separate meetings all together. A possible approach could be to address one component of the PLC model in each staff meeting of the year and provide additional support specifically to the course leads charged to facilitate the process with their team. Another possible way to train the staff could be through team presentations. The administration could identify teams who are excelling in each area and have them present their approach to the rest of the faculty. The way in which the information is presented is not as important as ensuring that the teachers have a clear understanding of the PLC model and what course teams should look like. Course team collaboration can improve when the principles of professional learning communities are properly applied.

Recommendation 6: Provide District-wide Learning Opportunities on Course Team Development and the PLC Model

Course team development can be beneficial for all schools within a district. It is in the interest of the school district for all leadership to be properly trained on course team development and the professional learning communities model for schools. For this reason, the leadership teams at the local schools can be invited to participate in professional development sessions on the two topics. The PLC model could apply not only to course teams, but to departments within the school, or even the school as a whole. The professional development could take place in a number of ways, including providing learning opportunities conducted from outside sources. An alternative could be to allow the schools that have been successful in creating course teams that act as PLCs the opportunity to share their work. The training provided through the district-wide professional development would then be applied at the local school level in an effort to impact the course team development at the local school level. There can be a benefit to the PLC approach, as well as building the course team capacity of local leadership. Therefore, it is recommended that school districts as a whole invest in professional development targeting PLCs and course team development.

Recommendation 7: Create Action Research Teams to Research and Address Issues with the School or District

Action research has been shown to be appropriate for researching problems and providing possible solutions. The impact of the interventions proposed is then considered and additional interventions are planned. This approach is continuous and allows for a fluid process of addressing problems in schools, across the district or even around the world. At the local school level, action research teams can be developed to address specific problems within the school.

These problems may exist elsewhere, but primarily pertain to the specific school, for example, creating a master schedule that allows for the implementation of a student success program generated by the school. The specific program created by the school presents a problem unique to the school at hand. All stakeholders can be included on the team to ensure that all groups have a voice in the process. The team can work collaboratively to address the problem and implement possible solutions, while tracking the impact of each.

Action research teams at the district level can then attempt to resolve problems that are specific to the district, such as creating a plan to deal with a tight budget that will ensure the safe and timely transportation of all students to school. Action research teams at the district level can include local school representatives and district personnel to address the issue. The research being conducted would pertain specifically to the school district, although it might be applicable to other districts. Action research teams can help to address issues of all kinds within a school district. The knowledge gained from the action research team could help benefit all schools within the district.

National or global action research teams can address issues that present themselves in many contexts, such as disproportionate suspension rates among minority students. Teams created at this level can take on issues that arise in all areas of the country or the world. Research can be conducted in schools and districts all over, and the team could include members of various regions and job titles. It could be beneficial to include members on the team that will provide unique insight as to the identified problem and potential remedies to address the issue. Action research can provide a fluid, democratic model for resolving issues in education at all levels.

Future Research

Future research on course teams at the secondary level is needed. As stated in the limitations of this study, this research was limited to one school. The PLC model could be applied to course teams at numerous schools to further validate the findings of this study. Furthermore, various teaching departments could be included in the studies to ensure all teacher types are represented. This study focused on one department, Social Studies. It would be beneficial to continue to cast a wide net when researching course teams and PLCs. To date, PLCs have been researched heavily, but more work in the area of small teams acting as PLCs would be beneficial to the research community.

Furthermore, future research could investigate the impact of the leader on course team development. Although leadership was defined as an impediment to collaboration in this study, the aim of the research was not targeted at the course team lead. From teacher comments made throughout this study, research on the impact of the leader might prove to be quite beneficial to schools with the course team model. Leadership has been discussed in numerous studies with regard to school achievement and success, but more research on course team leadership might prove beneficial. A study of that nature would also add to the rich research available addressing leadership in school, with a specific focus on teacher leadership at the course team level.

Self-reflection of the Researcher

This action research project was my first opportunity to formally conduct insider action research. Everything was a first for me, which made for an interesting action research process. There were many questions, and if I could do it all over again there are some definite tweaks I would make to create a smoother study. I learned a great deal about the action research process and the research topic. The action research process was a great vessel for change in a school.

Each member of the AR team was given the opportunity to contribute to the group and there was constant reflection on the part of all the members. Action research would be an appropriate model, even if no study is being conducted. The setup itself is successful in bringing people together to engage in a common problem and to find a possible solution.

In regard to teacher collaboration in course teams, the findings were greatly impactful to the research team and to me. The course teams made significant improvements during this study and the impact will be felt long beyond the conclusion of this action research project. The AR team was thankful for the time we dedicated to this important issue at Eastside. Personally, the knowledge I have gained, which is described throughout this chapter, will stick with me throughout my career. I now work at a different high school and we are working to develop strong course teams. The information I have learned through this process will prove to be invaluable. Beyond my current situation, teacher collaboration will continue to be an important component of a successful school and the knowledge gained in this study will always be beneficial.

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APPENDIX A

Empirical Findings Table							
Author(s), Date	Title	Purpose	Method(s)	Sample	Result(s)	Conclusion(s)	Implication(s)
Lee, Valerie E.; Smith, Julia B.; 1996.	Collective responsibility for learning and its effects on gains in achievement for early secondary school students	How teacher's work affects student achievement, with a specific focus on the impact of collective responsibility for student learning, staff cooperation, and control over classroom and school work conditions.	The study collected data from the national Educational Longitudinal Study (NELS). Middle school students and their academic achievements were tracked through their sophomore year and their success was compared to the conditions of the school	11,692 students were used as a sample within 820 high schools. A total of 9,904 teachers were included as well.	There was a large difference between the communal culture of schools that achieved high levels of success and those whose success was much lower. Schools with high levels of collective responsibility for learning are those	Schools, departments, and content teams must focus on developing a collective responsibility for the learning of all students. This goes hand in hand with another component studied, cooperation. Teachers and teams must buy into the value of collaboration.	The study suggests that fostering collective responsibility will improve student achievement regardless of the social characteristics of the school.

			as a work place.		where students learn more in all subjects.		
Levine, Thomas H.; Marcus, Alan S.; 2007	Closing the achievement gap through teacher collaboration : facilitating multiple trajectories of teacher learning	To find ways in which to close the achievement gap through teacher collaboration. The study seeks to discover the learning that takes place among teachers in groups.	Over the course of two years, two teacher teams, from differing schools, were observed. Field notes, classroom observations, and interviews were used to research the groups.	Two teacher teams, totaling six teachers, were investigated over the course of two years.	Teacher privacy and noninterference often interfere with collaboration. Also, teachers often refrained from critiquing the practice of their colleagues, which interferes with teacher collaboration.	Teachers need to be provided with time, training, and structure. There must be a shared vision of the group, otherwise little will be accomplished.	Supports the need for time and support to build teacher capacity. Also, further research defending the importance of shared mission and vision of the team.
Levine, Thomas H.; Marcus, Alan S.; 2010.	How to structure and focus teachers' collaborative activities facilitate and constrain teacher learning	The research was intended to study different forms of collaboration and the opportunities for professional learning that ensued as a result. The	Qualitative analysis of field notes of collaborative meetings over the course of a year. Taped meetings and transcriptions were also used.	The study took place at Bethune-Chavez Academy. The research team consisted of six individuals, but all	Collaboration that focuses on complimentary means and ends is more effective. Direction is provided for the group. Teachers	Teachers benefit from transparency and a sharp focus on a goal for the group. Also, it is best to allow teachers to build specific capacities before engaging in	Goal setting is once again key, as well as an open and inviting environment among teacher teams.

		study also looked to see how teachers share information.	Teachers were interviewed as well and lastly there were classroom observations conducted.	teachers at the school consented to the study.	benefitted from focusing on one collaborative effort at a time.	further collaboration that may detract from prior efforts.	
Little, Judith Warren; 1982	Norms of collegiality and experimentation: workplace conditions of school success	To discover the most common characteristics of workplace conditions at successful schools.	Structured interviews of school teachers and administrators. Interviews were supplemented with observations of the teachers and their teams.	105 teachers were interviewed and 14 administrators.	Successful schools met more frequently and valued the time spent together much more than those at lower performing schools. The teachers at the more successful schools were more likely to reciprocate than those at the struggling schools. Teachers refused to share without knowing they would get	Schools with a more collegial environment were more apt to change and continue to improve. Expectations for shared work and expectations for analysis, evaluation, and experimentation	Regular meeting time must be allocated for teams to meet. The facilitator must work to ensure that there is a focus on teacher and learning in the meetings. The efforts of the groups should be collaborative in nature.

					something in return.		
Lomos, Catalina; Hofman, Roelande H.; Bosker, Roel J.; 2011	The relationship between departments as professional communities and student achievement in secondary schools	To investigate the relationship of mathematics departments perceived as professional communities and student achievement in Dutch secondary schools.	The study used the Third International Mathematics and Science Study (TIMSS). The study included teacher, student, and school questionnaires, which were used to determine which departments qualified as professional communities, which was then compared to overall student achievement.	2706 students, 117 secondary schools, and 117 mathematics departments were included in this study.	42% of teachers reported that they never or very rarely prepared materials together and only 10% of teachers reported visiting each other's classrooms 2 to 3 times per month, and 87% reported that they never visited their team members' classrooms.	When compared with the student achievement, there was a direct correlation between teachers who worked in professional communities and student achievement.	This study provides more evidence to the value of teacher collaboration within schools, departments, and content teams. Teachers must understand the possible ramifications of working in isolation and failing to collaborate.
Lujan, Nan; Day, Barbara; 2009	Overcoming the roadblocks to effective	To discover roadblocks to Professional Learning Communities	Qualitative study, including teacher observations	36 teachers participated in the study that took place over a	The following roadblocks were discovered through the	With focus on some of the possible roadblocks to creating PLCs,	Time constraints must be considered. When possible,

	collaboration .	and to offer suggestions based on the research.	and interviews. Researchers also attended collaborative meetings. All research took place over a three-month time period.	three-month time period.	study: time restraints, isolation among teachers, divergent views among teachers, resolving conflicts, but the two found that collaborative culture can improve.	leaders can work to overcome the issues or even possibly address the issues before they arise.	embed common planning time within the day. There is much work to be done and teachers are more likely to cooperate if their time is protected.
Ohlsson, Jon; 2013	Team learning: collective reflection processes in teacher teams	To further the research of learning processes of teacher teams, focusing on teamwork, atmosphere, and collective reflection.	Data was collected through interviews and also through observations, both of which were analyzed qualitatively.	Three teacher teams, all from different schools, two secondary and one elementary.	The school that regularly engaged in collective reflection proved to have greater collective understanding . The schools that did not demonstrated less professional growth.	Collective reflection of the group leads to greater overall collective competence.	A goal of PLCs should be to engage in regular collective reflection that allows the team to have deeper conversation and more positive learning experiences.

Owen, Susanne; 2014	Teacher professional learning communities: Going beyond contrived collegiality toward challenging debate and collegial learning and professional growth	To examine PLCs in schools and determine which aspects of PLCs are most necessary.	The research involved using school documents, interviews, and focus groups.	58 teachers from 3 innovative schools were included in the study. Specifically, those studied were on teams considered to be PLCs.	All of the teams engaged in actions that would be consistent with the presence of PLCs. However, teams were engaged in differing aspects at differing levels.	Time, funding, and clear expectations are critical to the success of PLCs in school. Students are ultimately the beneficiaries of effective teacher collaboration.	Collaborative planning must be considered sacred. Consider having teams create their own mission or vision to ensure that all members are on the same page.
Ronfeldt, Matthew; Farmer, Susanna Owens; McQueen, Kiel; Grissom, Jason A.; 2015	Teacher collaboration in instructional teams and student achievement	To determine the kinds of collaboration that take place within Miami-Dade County schools and then look at the connection between collaboration of instructional teams and its impact on student achievement.	The study used teacher surveys and administrative data to determine which schools were practicing in collaborative action and which schools were not.	9,000 teachers over 336 schools were included in the study. The study took place over a two-year time frame.	The levels of achievement in both reading and math were positively correlated to the teams who actively collaborated to improve instruction.	Content teams who engage in authentic collaborative practice will improve their student achievement as well as the overall quality of instruction of its members.	Schools should work to foster collaboration in their course teams.

<p>Schiff, Daniel; Herzog, Liza; Farley-Ripple, Elizabeth; Iannuccilli, Lauren Thum; 2015</p>	<p>Teacher networks in Philadelphia: landscape, engagement, and value</p>	<p>To better understand teacher networks and their landscape and how teachers choose to engage in these networks. This research included networks outside of the school.</p>	<p>Mixed methods approach that analyzed teacher networks and their characteristics through quantitative and qualitative analysis.</p>	<p>183 teachers were included in this study. The teachers came from elementary, middle and high schools, with the majority of those participating working at the secondary school level.</p>	<p>Formal and informal teacher networks exist both inside and outside of schools. Both types of networks impact the teaching that takes place. “Networks had a clear role in improving teacher knowledge and expertise related to pedagogy, classroom management, and curriculum development.”</p>	<p>Teacher networks are important to the development of all teachers. Teachers often were more likely to participate if they were given autonomy in choosing what network they choose and the purpose of said network.</p>	<p>Validates the need for PLCs in schools. Also supports the position that teachers should create goals and have shared values within the community.</p>
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APPENDIX B

UNIVERSITY OF GEORGIA CONSENT FORM

Fostering Effective Collaboration among Course Teams at the Secondary School Level

Researcher's Statement

We are asking you to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. This form is designed to give you the information about the study so you can decide whether to be in the study or not. Please take the time to read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information. When all your questions have been answered, you can decide if you want to be in the study or not. This process is called "informed consent." A copy of this form will be given to you.

Principal Investigator: Dr. Karen Bryan
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Co-Principal Investigator: Matthew Stratemeyer
Department of Lifelong Education, Administration, and Policy
(404) 376-2844
strat@uga.edu

Purpose of the Study

The purpose of this study is to identify the perceived impediments to establishing effective course teams within a secondary school. Once identified the action research team will attempt to successfully deal with these issues to improve the effectiveness of collaboration that is taking place within course teams. As a member of the Social Studies Department, you have been identified as a possible participant in the study.

Study Procedures

If you agree to participate, you will be asked to ...

- Members of the action research (AR) team will participate in monthly meetings for up to two hours.
- Participants who are not members of the AR team will participate in a minimum of two surveys (no more than 20 minutes each) and may be asked to participate in an individual interview (no more than one hour).
- The study will last for one school year (August 2016 to March 2017)
- The use of audio recordings may be used, but recordings will be destroyed after successful defense of the research study.

Risks and discomforts

We do not anticipate any risks from participating in this research.

Benefits

As a result of your participation in this study, you may experience improved collaborative work with your course team, resulting in improved instructional practice. The potential benefits extend to the organization as a whole, as improved collaboration among teachers is the expected result of this study. This study will also add to the collection of research on Professional Learning Communities and teacher collaboration, with a specific focus on course teams at the secondary school level.

Incentives for participation

There are no incentives provided for participation in this study.

Audio/Video Recording

If/when interviewed, audio recording may be used for the purpose of the research. Recordings will be securely stored and will only be accessed by the researchers. All recordings will be destroyed after completion of the study.

Please provide initials below if you agree to have this interview audio recorded or not. You may still participate in this study even if you are not willing to have the interview recorded.

_____ I do not want to have this interview recorded.

_____ I am willing to have this interview recorded.

Privacy/Confidentiality

Privacy and confidentiality is of the utmost importance in this research. All surveys/questionnaires will not collect your name or any personally identifying information and will be anonymous. Any information that can identify you (such as in recorded interviews) will be kept confidential. Pseudonyms will be used to mask your identity as a participant in this research. All identifiable data will only be accessible by the researchers of this study and will be destroyed after the successful defense of this research.

Taking part is voluntary

Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled.

If you decide to withdraw from the study, the information that was collected up to the point of your withdrawal will be kept as part of the study and may continue to be analyzed, unless you make a written request to remove, return, or destroy the information.

If you have questions

The main researcher conducting this study is Matt Stratemeyer, a doctoral student at the University of Georgia. Please ask any questions you have now. If you have questions later, you may contact Matt Stratemeyer via email at strat@uga.edu or by phone at (404) 376-2844. If

you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) Chairperson at 706.542.3199 or irb@uga.edu.

Research Subject’s Consent to Participate in Research:

To voluntarily agree to take part in this study, you must sign on the line below. Your signature below indicates that you have read or had read to you this entire consent form, and have had all of your questions answered.

_____	_____	
Name of Researcher	Signature	Date
_____	_____	
Name of Participant	Signature	Date

Please sign both copies, keep one and return one to the researcher.

APPENDIX C

COURSE TEAM COLLABORATION SURVEY

Course team _____

Choose which best describes your situation:

___ This self- assessment of our course team is based on its performance in SY2015-16. The course team participants are the same this year.

___ This self- assessment of our course team is based on its performance in SY2015-16. The course team participants are different this year.

Please indicate the level of implementation for your Course Team using the following scale:

0 – Pre-initiating 1 – Initiating 2 – Implementation 3 – Developing 4 – Sustaining

STAGE OF IMPLEMENTATION	KEY IDEAS/ PROCESSES	TEAM STATUS
1. Establish norms	My course team has established agreed upon norms for how the team will operate. These norms address:	
2. Establish a Culture of Collaboration	Meeting and working as a course team is embedded in our daily work with shared accountability for outcomes.	
3. Use Data to Analyze Student and Teacher Practice and Performance (Baseline, Progress Monitoring, Summative)	Data is collected and analyzed and used for challenging both teacher and student performance. Learning needs for both teachers and students are identified and addressed.	
4. Goal Setting (SMART)	Our course team establishes SMART goals (Specific, Measurable, Attainable, Relevant, and Timely) with a plan for action and carefully monitors progress towards goal attainment.	

5. Identify Essential Learning	Essential learning is identified for the needs of the students in our course based on the national, Georgia, and GCPS standards for learning. The essentials identify what students should know and be able to do at the end of a unit of study.	
6. Common Formative Assessments	Common formative assessments are co-created within our course team and data is used to identify student interventions, effective instructional strategies, and curriculum adjustments.	
7. Looking at Student Work	Our course team analyzes student work for quality and consistency of student performance and evaluation practices.	
8. Systematic Interventions	Interventions are based on the specific needs of our course team and of students. Support is monitored and sustainable. Interventions include flexibility within the daily schedule.	

Adapted from "Becoming a Learning School" Collaborative Learning Teams

APPENDIX D

Participant Interview Protocol (August)

1. How would you describe the purpose of your course team meetings? Why?
2. Do you see the course team meetings as beneficial to improving your practice of teaching? Why or why not?
3. How often do you look at student work or analyze student data in your meetings?
4. How often do you discuss instructional practice in your course team meetings?
5. What do you perceive to be the barriers to collaboration among teachers in course teams?
6. Do you have any suggestions as to how teachers could improve collaboration in their course teams?

APPENDIX E

Participant Interview Protocol (February)

1. How would you describe the purpose of your course team meetings?
2. Do you see the course team meetings as beneficial to improving your practice of teaching? Why or why not?
3. Have your course team meetings changed since last year? If so, how?
4. Have there been any changes to the level of collaboration among teachers over the course of this year? If so, how?
5. What impact, if any, has there been on your teaching and the teaching of your colleagues due to course team meetings this year?

APPENDIX F

AR Team Interview Protocol

1. On a scale of 1 to 10, how well do you think your team engaged in the interventions developed by the AR team?
 - a. Collaborative Lesson Planning
 - b. Analyzing Data
 - c. Shared Leadership
 - d. Goal Setting
2. Did you notice any change from the start of this school year to now in regard to the collaborative nature of your course team?
3. What worked well and where are your team's areas in need of improvement?
4. What are your thoughts on the action research process that we engaged in for the purpose of this study?
5. How do you feel the study was impacted by the action research approach?
6. Did you find value in the working with your colleagues to address the issues involved in this study? Why or why not?