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Strengthening Collective Efficacy through Meaningful Collaboration

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Abstract

The purpose of this action research project was to determine if there is a correlation between the implementation of structures and processes for meaningful collaboration and the level of collective efficacy in a professional learning community. A combination of the level of trust among the team and the dedication and prioritization of time were critically considered over a period of nearly two months. Data was collected through quantitative surveys and qualitative observations. Analysis of the data collected suggests the fourth grade team's collective efficacy was strengthened as structures and processes for meaningful collaboration were implemented.

Strengthening Collective Efficacy through Meaningful Collaboration

Many of the practices found within collective teacher efficacy revolve around meaningful collaboration and collaborative inquiry. The teacher researcher planned to focus on creating, improving, and implementing structures and process that fostered engagement in meaningful collaboration and allowed opportunities for collaborative inquiry. This research was proposed to affect the work and effectiveness of the fourth grade professional learning community (PLC).

Upon learning collective efficacy is the number one factor of influence on student achievement, the teacher researcher was eager to learn more. Questions of why, how, and what surrounding the implementation of collective efficacy became the forefront of the research process. A focus on collective efficacy, partnered with collaboration, within a grade-level PLC would allow the fourth grade team to make a greater impact on the team's collective action and knowledge, as well as student achievement. Currently, the fourth grade team is scheduled to collaborate twice a week, once on Monday afternoon for approximately an hour, and for another forty-five minutes on Thursday mornings. The bulk of this time is currently spent understanding and developing essential learning standards and working through the details of professional responsibilities as classroom teachers. Little time is spent planning, identifying learning goals, success criteria, and analyzing student work. The focus of this research is to implement structures and processes to foster meaningful collaboration in order to strengthen the team's collective efficacy.

The fourth grade team's success data have struggled over the last couple of years, and it is believed it is related to a lack of intention and purpose with planning and finding shared meaning on effective practices. Collaboratively, there are over ten years of fourth grade classroom experience on the grade-level team. Combined intellect, when shared and trusted, is a

powerful tool. Team goals should be rooted in the mindset of using the group to improve the group. With the addition of a new team member, it was decided the fourth grade team would be intentional with collaboration. The driving question behind this research project is: How will creating structures and processes for meaningful collaboration strengthen efficacy in a grade-level professional learning community?

Literature Review

To understand collective teacher efficacy it is valuable acknowledge self-efficacy. Self-efficacy was made known by psychologist Albert Bandura forty years ago. Bandura (1977) defines self-efficacy as "the conviction that one can successfully execute the behavior required to produce outcomes" (p. 193). It is one's belief that by making a commitment and working hard, you can achieve desired results. Self-efficacy is comparable to Carol Dweck's (2006) theory of growth mindset. In the realm of education, teacher efficacy is a teacher's individual belief in their competence to implement the fundamental actions to impact student learning and achievement (Prothero, 2008). A teacher's self-efficacy beliefs vary with context. For example, a teacher's efficacy levels may be high in regards to teaching math, but are lacking in regards to writing instruction.

Over the last ten years, research has shifted its attention towards collective efficacy. Collective efficacy refers to "the judgements of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (Goddard, Hoy & Woolfolk Hoy, 2004, p. 4). This belief is the only the beginning of fostering collective efficacy. Bloomberg and Pitchford (2017) recognize collective efficacy is also "the result of collaborating *effectively* over time, through thick and thin, collaboration that results in the groups collective *belief* in their power to effect positive change" (p. 13). Collective efficacy

is more than positive thinking. It is more than common planning time. It is a mindset shift that fosters collective action. It is using the group to improve not only student performance, but to improve the group itself.

In 2009, John Hattie published *Visible Learning* and shared with the world his research on the various influencers on student achievement. At the time, Hattie ranked one hundred and thirty-eight influences. Since then, Hattie has updated his list of influences to nearly two hundred factors (2016). These influences each hold an effect size. An effect size of .40 is considered an average year's effect on student achievement. At the top of this list, with an effect size of 1.57, is collective teacher efficacy. Collective efficacy has greater influence than factors such as response to intervention (1.07), classroom behaviors (.63), and even socioeconomic status (.54) (Hattie, 2016).

According to the work of Bandura (1977) and Goddard et al. (2004), there are four sources of efficacy that build both self-efficacy and collective efficacy school-wide. They include mastery experiences, vicarious experiences, social persuasion, and affective states. Mastery experiences are the most powerful source of collective efficacy. When a team experiences success, and associates success with the collective action of the team, collective efficacy increases and the team moves forward with the expectation that it can be repeated (Donohoo, 2017). Vicarious experiences, also known as models of success are the second most powerful source of collective efficacy (Bloomberg & Pitchford, 2017). When teachers have the opportunity to observe effective practice in other classrooms or schools, they are able to convert that experience into their own ability to create effective practice. The third source of collective efficacy is social persuasion, or feedback. Efficacy is strengthened when teachers are given quality feedback by a credible source. The final source of efficacy is a teacher's affective state.

Teachers must feel safe in order to build trust. When a team has built trust together, more ideas are shared, mistakes are embraced as learning opportunities, and a safe environment for all is created. These four sources must be cultivated and planned intentionally in a school environment. Through this process, a thriving learning culture is created for both teachers and students.

Donohoo (2017) unpacks a theory of action for fostering collective efficacy and shares six enabling conditions for collective efficacy. "The theory is fostering collective teacher efficacy to realize increased student achievement, and it involves creating opportunities for meaningful collaboration, empowering teachers, establishing goals and high expectations, and helping educators interpret results and provide feedback" (Donohoo, 2017, p. 35). The six enabling conditions are advanced teacher influence, goal consensus, teacher's knowledge about one another's work, cohesive staff, responsiveness of leadership, and effective systems of intervention (Donohoo, 2017). Through these six conditions, and attending to the theory of action, there is a greater chance of fostering collective efficacy.

Donohoo (2017) suggests, "rather than leaving it up to chance, it is timely and important to consider how collective efficacy beliefs may be fostered" (p. 27). With such a high effect size on student achievement, collective efficacy should be a top priority and the center of efforts made by schools. Fostering collective efficacy is determined by the perceptions of the staff and the shift in beliefs in their ability to impact student results (Tschannen-Moran & Barr, 2004). In order to foster collective efficacy and provide opportunities for teachers to experience the four sources of efficacy, a team must develop and implement well-designed processes and structures. These structures and processes must be developed with a sense of urgency.

Though there is no failsafe step-by-step process teams can take towards increasing collective efficacy, a strong place to start is creating opportunities for teachers to engage in meaningful collaboration. Meaningful collaboration is "the activity of learning together to generate new ideas, solve problems, and collectively improve practice" (Bloomberg & Pitchford, 2017, p. 23). These opportunities are created by the development of structures and processes in order "for educators to come together to solve problems of practice collaboratively" (Donohoo, 2017, p. 37). An absolute necessity for meaningful collaboration is time and space for teachers to meet regularly. In 2012, Susan Johnson conducted a study on teacher collaboration and found that when teachers collaborated three or more times a week, collective efficacy was noticeably impacted (as cited in Donohoo, 2017). Establishing protocols, or norms, during collaboration help teams manage focus and organization. Protocols identify the purpose of the team and aid communication and foster trust so all voices can be heard and learning goals can be achieved.

Another side of collaboration is found through an inquiry process. Processes such as lesson study or peer observation allow teachers to acquire knowledge about their teammate's abilities. Donohoo (2017) suggests "if knowledge about one another's work develops via learning together and a learning stance is assumed, then teachers could co-construct knowledge about effective teaching practices" (p. 32). This shared learning about effective practices has the potential to increase collective efficacy and shrink the variance between grade-level teams.

Bloomberg & Pitchford (2017) summarize the power of collective efficacy in a simple statement, "we is smarter than me" (p. 24). Fostering collective efficacy requires a sense of urgency and is partnered with the strong intention to create opportunities for teachers to engage in meaningful collaboration and collaborative inquiry. These moments together strengthen the collective efficacy of a learning team, and ultimately influence the achievement of students.

Methods

Participants

This action research project was conducted within a fourth grade professional learning community (PLC) in southeast Iowa. The core of the PLC is comprised of four fourth grade teachers, three females and one male. Teachers A and B have a Master's in Education degree. Teachers C and D hold a Bachelor of Education degree and are currently pursuing their Master's in Education degree. The years of teaching and PLC experience range from three years to ten years. Teacher A has three years of teaching experience, two years in a second grade classroom and one year in a fourth grade classroom. Teacher B has three years of teaching experience, one year in a middle school classroom and two years in a fourth grade classroom. Teacher C has seven years of teaching experience, two years in a second grade classroom, two years in a third grade classroom, and three years in a fourth grade classroom. Teacher D has ten years of teaching experience, three years in a preschool classroom and seven years in a fourth grade classroom.

Data Collection

The focus of the action research project was to determine if implemented structures and processes would increase collective efficacy among the fourth grade teachers within their professional learning community. A variety of data collection methods were practiced to address the question of how creating structures and processes will strengthen collective efficacy. Quantitative and qualitative data were both collected to determine the effectiveness of the implementation of structures and processes into a fourth grade PLC. The quantitative data were collected using a survey approach. The qualitative data was provided by observations. The purpose of a mixed-method approach was to inform the researcher of the collective efficacy

climate of the PLC and to determine what changes, in regards to collaboration, were needed to be made in order to strengthen the team's collective efficacy.

The quantitative portion of the action research project was determined through surveys used to analyze the perceived collective efficacy, trust, and collaborative nature of the professional learning community. Two different surveys were given to teachers. All survey data was gathered through the use of an online Google Form. Bloomberg and Pitchford (2017) suggest using a survey to gain information about a team's level of trust. The *Team Trust Survey* was developed to determine how well the team applies behaviors that build trust. This Likert-scale survey was given at the start of the action research project and the conclusion. The *Team Trust Survey* measures trust behaviors observed on scale ranging from *Almost Always* to *Almost Never* (See Appendix A and B).

An additional conclusive survey, developed by Donohoo (2017), was given to teachers. The survey, titled *Characteristics of Collaborative Leadership Inquiry Continuum*, concentrates on five areas of focus for an effective professional learning community. The five surveyed areas are- Collaborative, Reflective, Learning Stance, Process is Driven by Practice, and Actions Informed by Evidence. The continuum survey measured characteristics observed through a Likert-scale of *Beginning*, *Developing*, *Applying*, and *Innovating* (See Appendix E). Following each survey given, the researcher accessed and analyzed the results. Areas scoring lower on the Likert-scale were informally discussed during intended PLC time and ideas on a structure or protocol for improvement were implemented based on the consensus of the group.

The qualitative portion of the action research project required the researcher to make observations, record information, and use an observational rating scale to understand the efficacy of all varieties of PLC time. The three varieties of PLC time were protected, intended, and

planned. Each meeting time of the fourth grade PLC was recorded in a Google Document (See

Appendix D). Following the development of team norms, the researcher measured the efficacy

of each PLC meeting based on a rating scale of 1-*Not applicable*, 2- *Partial*, 3- *Developing*, 4-

Operational to determine if the norms were being followed and respected. The rating scale was

also used to determine if the implementation of a structure or process or a reflective discussion

was needed to assist team members in engaging in meaningful collaboration.

The entire data collection process took place over a two-month span from September

2017 to October 2017. The first survey was given the week of September 11, 2017 and then

given again the week of October 23, 2017. Following the initial survey results, PLC norms were

established and were used by the researcher as a protocol to determine the efficacy of the PLC.

The additional conclusive survey was given the week of October 23, 2017.

Data Analysis

A significant amount of researcher bias was included during the data collection and

analysis period of the research. The school improvement plan goals of the elementary building

and the support from the school administrator support the belief that establishing structures and

processes for meaningful collaboration can and do benefit collective teacher efficacy. The

researcher's positive attitude towards increasing collective teacher efficacy, the support from the

building principal and fourth grade PLC team, and the hypothesis that creating structures and

processes for meaningful collaboration does improve collective efficacy played a significant role

in the actions steps taken and conversations and reflections that occurred during the research

study.

Despite the strong level of researcher bias in the research project, certain measures were

implemented to provide quantitative and unbiased data. The combination of quantitative and

qualitative data collection provided meaningful awareness and insight into the value of

establishing structures and processes for meaningful collaboration to increase collective efficacy.

  Quantitative data analysis. The quantitative data collected through three surveys

provided insight into the fourth grade team's level of trust towards one another and commitment

to meaningful collaboration. In the two *Team Trust Survey*(s) (Bloomberg & Pitchford, 2017)

employed during the data collection period, team members could respond to questions by

choosing *Almost Never*, *Occasionally*, *Some of the time*, *Frequently*, or *Almost Always* (see

Appendix A and B). By choosing *Frequently* or *Almost Always* it was determined by the

researcher that the team member thinks positively of the question. Each response had a

designated point total associated with it, as follows: *Almost Never*-1, *Occasionally*-2, *Some of the

time*-3, *Frequently*-4, *Almost always*-5. These points were totaled up and compared to the

scoring guide found after the *Team Trust Survey* (Figure 1).   The higher the score, the greater a

team member is conscious of practices of trust-building behavior and shows a greater likelihood

the team has established an environment of effective collaboration. Individual team member

scores were analyzed as well as the team's overall score (Table 1).

10 to 15	Almost never. Create a goal to improve . There is serious room for improvement!
16 to 25	Occasionally, which damages trust within the team. Create a goal to improve.
26 to 35	Some of the time, which does not build sustainable trust. Create a goal to improve.
36 to 45	Frequently and are most likely have effective working relationships. Name what is working and replicate.
45 to 50	Almost always and are probably viewed as a highly effective team. Keep up the good work! How can you teach others to develop trust on their team?

Figure 1. Team Trust Survey Scoring Guide

Table 1

Team Trust Survey Pre-Survey Results

Team Member	Survey Score
#1	35
#2	41
#3	47
#4	46
Team Average:	42.25

The initial *Team Trust Survey* results revealed the fourth grade team's overall average score of 42.25 (Table 1). According to the scoring guide, this number indicated the team practices trust-building behaviors "Frequently and are most likely have effective working relationships" (Bloomberg & Pitchford, 2017, p. 180). This score indicated the team has practices and behaviors in place that procure trust and collaboration and needs to continue developing these practices and behaviors to become a highly effective team (See Appendix A).

A noticeable piece of data collected from the initial *Team Trust Survey* revealed 50% of team members believe, as a team, "we speak our minds and tell the truth, even when others disagree" *Some of the time*. This score could be true for several reasons. Team members may still not feel comfortable in a newly-formed PLC setting. Perhaps personal relationships were not deeply established among team members. Alternatively, maybe the team had not had experiences to develop trust among members.

Other noticeable pieces of data collected from the initial *Team Trust Survey* revealed all team members believe, as a team, "we act with mutually serving intentions without hidden agendas" *Frequently* or *Almost Always*. Seventy-five percent of team members selected *Frequently*. This data is overall positive, yet leaves room for consideration as to why the team does not *Almost Always* "act with mutually serving intentions". Team members may have felt a dissent in the team's collaboration efforts. Perhaps trust played a factor in the frequency of possible hidden agendas. The data also revealed 75% of team members felt positively towards the frequency of having "confidence in our abilities to keep up with the changing demands of our profession". One team member felt this confidence *Some of the time*. This score may indicate the team had some sense of collective efficacy, but perhaps there is a lack of self-efficacy or shared belief in the abilities of the team.

The most significant data analysis from the initial *Team Trust Survey* revealed team members already had a sense of collective efficacy amongst one another. Relational trust is essential to building effective professional learning communities. Two questions with the most significant insightful data came from "Do we keep agreements or negotiations if we can?" and "Do we share classroom strategies weekly/biweekly that are essential to increasing learning?" All team members surveyed responded that the team *Frequently* or *Almost Always* participates in

these actions. This overall positive response indicates the team had established trusting

relationships and felt comfortable sharing strategies among one another (See Appendix A).
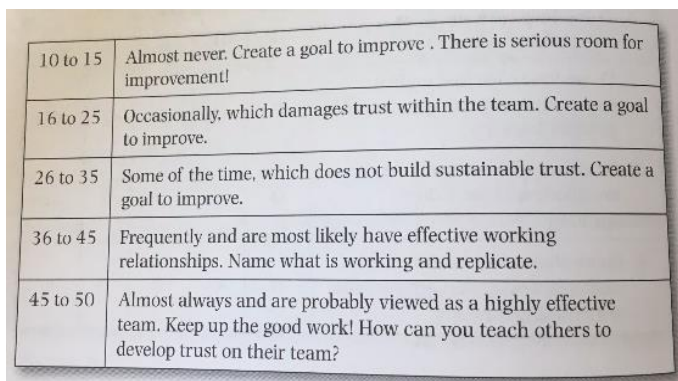
The second survey administered was similar to the initial and final survey of the study.

The main objective of the *Characteristics of Collaborative Leadership Inquiry Continuum*

survey was to identify the level of meaningful collaboration the fourth grade team is currently at

after the conclusion of the study. Each statement relates to conditions that enable collective

efficacy. The statements assessed five characteristics of meaningful collaboration among team

members. These characteristics revealed the effectiveness of the structures and processes

implemented to strengthen collective efficacy (See Appendix C).

A noticeable piece of data collected from the *Characteristics of Collaborative Leadership*

Inquiry Continuum revealed 100% of team members recognize the team is *Innovating* their

practices in regards to "When meeting as a learning team, our work together is owned by every

member of the team." This data suggests there is a mutual understanding that each team member

acknowledges the effort of the team. The third statement on the continuum identifies the fourth

grade team is still applying practices of dispersing authority over decision-making. This data

suggests not all team members believe there is equal authority concerning making team

decisions.

Perhaps the most significant data collected from the *Characteristics of Collaborative*

Leadership Inquiry Continuum came in response to statements under characteristics B.

Reflective, D. Process is Driven by Practice, and E. Actions Informed by Evidence. The data

collected from these statements revealed these characteristics are still being developed by the

fourth grade learning team. All three of these characteristics are connected through the practice

of reflection. The data suggests that the team has not established processes to engage in

meaningful reflection of the collaboration process or collective efficacy, but participate in

informal conversations surrounding these topics (See Appendix C).

        The third survey administered was identical to the first. The purpose of the second *Team*

Trust Survey was to see if any of the structures or processes established to strengthen meaningful

collaboration had an impact on team members' collective efficacy (see Appendix B). The

surveys were given two months apart, and upon comparing the results of the same survey, the

data suggests the structures and processes established did strengthen meaningful collaboration

among team members. One of the key components to generating meaningful collaboration in a

grade level PLC is providing opportunities for teams to build trust through discussion and to

experience mastery moments. The initial response from the first *Team Trust Survey* revealed a

score of 42.25 on the scoring guide (Figure 2). In the second *Team Trust Survey* the results

revealed a score of 45.5 (Table 2). According to the scoring guide, this number indicated the

team strengthened the practices and trust-building behaviors to "Almost always and are probably

viewed as a highly effective team" (Bloomberg & Pitchford, 2017, p. 180). This score indicated

the team has benefited from practices and behaviors set in place to procure trust and

collaboration (See Appendix B).

10 to 15	Almost never. Create a goal to improve . There is serious room for improvement!
16 to 25	Occasionally, which damages trust within the team. Create a goal to improve.
26 to 35	Some of the time, which does not build sustainable trust. Create a goal to improve.
36 to 45	Frequently and are most likely have effective working relationships. Name what is working and replicate.
45 to 50	Almost always and are probably viewed as a highly effective team. Keep up the good work! How can you teach others to develop trust on their team?

Figure 2. Team Trust Survey Scoring Guide

Table 2

Team Trust Survey Post-Survey Results

Team Member	**Survey Score**
#1	42
#2	46
#3	48
#4	46
Team Average:	45.5

There are several noticeable changes in the data from the initial survey to the second survey. The first was revealed in the question, "Do we keep agreements or renegotiate if we can't?" The initial data showed 50% of team members believed the team *Almost Always* follows this statement. The second survey revealed that 100% of team members believe the team *Almost Always* keeps agreements or renegotiates. Other questions also showed an increase in the number of team members who believed levels of trust were *Frequently* or *Almost Always* observed. Seventy-five percent of team members chose Frequently for the question "Do we act with mutually serving intentions without hidden agendas" in the initial survey, while on the second survey 75% of team members chose *Almost Always*. Fifty percent of team members chose *Almost Always* to describe how often the team shares classroom strategies essential to increasing learning on the initial survey, whereas on the second survey, 75% of teachers chose *Almost Always* to describe the frequency of classroom strategy sharing. In fact, nearly all of the questions on the initial *Team Trust Survey* saw an increase in *Frequently* or *Almost Always* answers from the team members in the second survey. The only question that remained with a

response of *Some of the time* was "Do we speak our minds and tell the truth, even when others disagree?" (See Appendix C).

Although there are many factors that may have had an impact on the increasing percentages of team members who observe the team almost always or frequently practicing behaviors of trust and collaboration, or applying or innovating the characteristics of a collaborative PLC, it is plausible to conclude the implemented structures and processes were an identifiable factor. The quantitative data suggest that *something* factored into the increase of team trust and collective efficacy, the validating qualitative data suggests prioritizing dedicated time for collaboration and adhering to norms were some of those factors.

Qualitative data analysis. Qualitative data was observed weekly throughout the action research study. Qualitative data was primarily observed, however informal conversations with team members also provided insightful data into how implemented structures and processes strengthened the team's collective efficacy.

What was most evident to see with the observable data was how effectively the team's established norms impacted collaboration. Norms were discussed and established at the beginning of September (See Appendix D). This process provided opportunities for the team to determine if their professional learning community was effective in regards to meaningful collaboration. The researcher observed the team at work and after the conclusion of each team meeting, whether protected, intended, or planned time, would rate the effectiveness of the norms on the team's collaboration. The observations provided valuable data about whether or not norms were partially implemented into team collaboration time, were being developed through behaviors and processes of the team, or were fully operational and evident. By the end of the

action research study, it was observed that the team had consistently shown evidence that norms were operational (See Appendix E).

The combination of qualitative and quantitative data, and their analysis, provided measurable and noticeable changes in the fourth grade team's professional learning community. When viewed in its entirety, the data revealed that while there may be a variety of factors that can influence the strength of a team's collective efficacy, implementing structures and processes to enable meaningful collaboration play a significant role.

Discussion

Summary of Major Findings

In the course of this study, the findings concluded that based on the team's level of trust towards one another, the amount of dedicated time team members meaningfully collaborated with one another under the guidelines of established norms, and their exposure to effective instructional strategies and skills, their collective efficacy increased. Both the quantitative and qualitative data suggest the implemented structures and processes had a positive effect on the team's collective efficacy. It is suggested that in an effort to increase a team's collective efficacy, structures and processes must be in place for teachers to engage in meaningful collaboration.

Limitations of Study

The limitations in the research included assuring the necessity of time for meaningful collaboration during the instructional day. The schedule of the four teachers involved in this study did not allow a common time to collaborate. An after school collaboration time had to be established and committed to by all members. There were several days where the PLC was unable to meet due to district-level obligations or building-level discussions or trainings. The

personal schedule of the team members also provided limitations in the research. The

consistency and duration of the time the team needed to meet and engage in meaningful

collaboration may have affected the results of this study.

Further Study

Implications for future research suggest more time for team reflection over collective

efficacy, best practices, and mastery moments be considered. More research needs to be

conducted on other beneficial processes that can be implemented to strengthen collective

efficacy. Implementing processes such as reflection protocols or collaborative inquiry could be

particularly effective. Analyzing the impact of implementing structures and processes for

meaningful collaboration longer than eight weeks may be more beneficial for this team. In

addition to the continued grade-level study, the researcher would extend the study of the impact

of meaningful collaboration on collective efficacy to the building staff's collective efficacy. A

final study would be to examine the impact the grade-level team's collective efficacy had on

their students.

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Conclusion

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Implementing structures and processes for meaningful collaboration to strengthen

collective efficacy is a thoughtful process. When a team of teachers desire to increase the

effectiveness of their team, which will ultimately impact student achievement, the level of trust

among the team and the dedication and prioritization of time must be critically considered. The

findings compiled from the gathered data suggest that developing and implementing structures

and processes for meaningful collaboration can have a positive impact on a team's collective

efficacy. Both the quantitative data and the qualitative data suggest meaningful collaboration is

essential to teacher collective efficacy.

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Appendix A

Team Trust Survey Pre-Survey Questions and Results

Do we keep agreements or renegotiate if we can't?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

50%
50%

Do we have clear and explicit expectations regarding measurable goals for learning?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

50%
50%

Do we act with mutually serving intentions without hidden agendas?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

25%
75%

Do we share classroom strategies weekly/biweekly that are essential to increasing learning?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

50%
50%

Do we speak our minds and tell the truth, even when others disagree?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

50%
50%

Do we openly admit and take responsibility for the mistakes we have made?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

25%
25%
50%

Do we avoid gossiping or participating in unfair criticism about other people?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

25%
25%
50%

Do we have confidence in our abilities to keep up with the changing demands of our profession?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

25%
25%
50%

Do we acknowledge the skills and abilities of others?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

25%
50%
25%

Do we help each other learn new skills?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

25%
50%
25%

Appendix B

Team Trust Survey Post-Survey Questions and Results

Do we keep agreements or renegotiate if we can't?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

100%

Do we have clear and explicit expectations regarding measurable goals for learning?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

50%
50%

Do we act with mutually serving intentions without hidden agendas?
4 responses

- Almost never
- Occasionally
- Some of the time
- Frequently
- Almost always

75%
25%

Do we share classroom strategies weekly/biweekly that are essential to increasing learning?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

75%
25%

Do we speak our minds and tell the truth, even when others disagree?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

75%
25%

Do we openly admit and take responsibility for the mistakes we have made?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

50%
50%

Do we avoid gossiping or participating in unfair criticism about other people?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

25%
75%

Do we have confidence in our abilities to keep up with the changing demands of our profession?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

50%
50%

Do we acknowledge the skills and abilities of others?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

50%

50%

Do we help each other learn new skills?
4 responses

- Almost Never
- Occasionally
- Some of the time
- Frequently
- Almost Always

75%

25%

Appendix C

Post-Study Characteristics of Collaborative Leadership Inquiry [PLC] Continuum
Questions and Results

A. Collaborative

1. Norms that enable effective collaboration are in place.
4 responses

- Beginning
- Developing
- Applying
- Innovating

25%
75%

2. When meeting as a learning team, our work together is owned by every member of the team.
4 responses

- Beginning
- Developing
- Applying
- Innovating

100%

3. Decision-making authority is dispersed among individuals.
4 responses

- Beginning
- Developing
- Applying
- Innovating

25%
75%

4. Diversity of opinion is promoted and evident in our shared work.
4 responses

- Beginning
- Developing
- Applying
- Innovating

25%
50%
25%

B. Reflective

5. Routines that encourage and enable all to consider and reflect on their teaching practices are in place.
4 responses

- Beginning
- Developing
- Applying
- Innovating

100%

6. Educators consistently use evidence to self-assess and reflect
4 responses

- Beginning
- Developing
- Applying
- Innovating

25%
50%
25%

7. Team members experiment with small moves and reflect on how they are working.
4 responses

- Beginning
- Developing
- Applying
- Innovating

50%
50%

8. Actions and interactions are more intentional based on reflection.
4 responses

- Beginning
- Developing
- Applying
- Innovating

50%
50%

C. Learning Stance

9. Team members not only promote but also fully participate in each stage of the PLC process

4 responses

- Beginning
- Developing
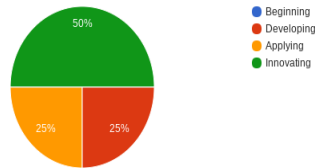- Applying
- Innovating

25%
75%
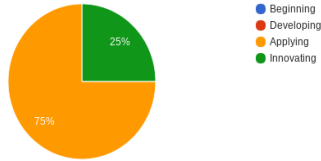
10. PLC time together is focused on students' learning and/or best practice.

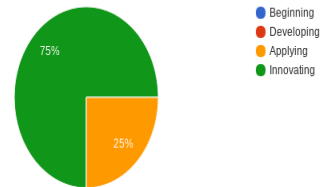4 responses

- Beginning
- Developing
- Applying
- Innovating

25%
75%
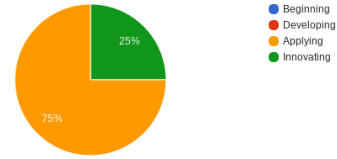
11. Team members are open to new ideas and actively seek new information from relevant sources to help inform next steps.

4 responses

- Beginning
- Developing
- Applying
- Innovating

50%
25%
25%

12. Team members find value in the PLC process

4 responses

- Beginning
- Developing
- Applying
- Innovating

75%
25%

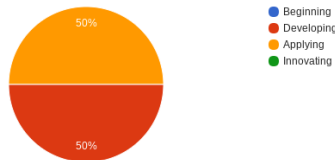## D. Process is Driven by Practice

13. Our work involves examining our own and each other's practice.

4 responses

- Beginning
- Developing
- Applying
- Innovating

50%
50%

14. We use practice to discover strategies that work.

4 responses

- Beginning
- Developing
- Applying
- Innovating

50%
25%
25%
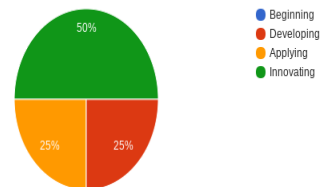
15. We draw on outside ideas in relation to how they related to our own situation.

4 responses

- Beginning
- Developing
- Applying
- Innovating

25%
50%
25%
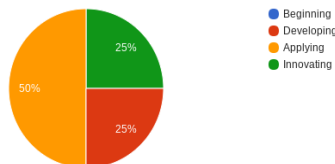
16. Work is connected to and impacting the work of wider school improvement efforts.

4 responses

- Beginning
- Developing
- Applying
- Innovating

75%
25%

E. Actions Informed by Evidence

17. Analysis of relevant and current data is deemed important and is an ongoing priority for the team.
4 responses

- Beginning
- Developing
- Applying
- Innovating

50%
25% 25%

18. The team considers actions (in light of evidence) and determines approaches that are successful and those that need to be changed.
4 responses

- Beginning
- Developing
- Applying
- Innovating

50%
50%

19. The team considers multiple sources of evidence to gain a well-rounded picture of their collaboration.
4 responses

- Beginning
- Developing
- Applying
- Innovating

25% 25%
50%

20. Current evidence is collaboratively examined and provides a basis for considering next steps for the team's PLC.
4 responses

- Beginning
- Developing
- Applying
- Innovating

25%
50% 25%

Appendix D

4th Grade PLC Norms
Determined and Established 9/7/17

Norms:
We will...

- come prepared with a realistic, student-centered agenda.
- be open-minded, positive, and take risks by contributing and accepting advice to determine next steps.
- participate by listening empty, asking questions, and by sharing work and ideas about best practices.
- collaboratively discuss ideas and decide what's best for students.
- strive for mastery by discussing and analyzing common work, the curriculum and resources.

Appendix E

Intentional Collaboration Data

Norms Rating Scale
1- Not Applicable, 2- Partial, 3- Developing, 4-Operational

Date	Purpose	Protected/Intended/Planned	Norms Rating
8/22/17	PLC 2:30-4:00	Protected	1
8/29/17	4th Grade team planning: 4:20-6:00	Intended	1
8/31/17	4th Grade PLC 8:30-9:15	Protected	1
9/1/17	4th Grade team planning 4:15-5:30	Planned	1
9/5/17	4th Grade Planning 4:15-6:00	Intended	1
9/7/17	4th Grade PLC 8:30-9:15	Protected	2
9/8/17	4th Grade Planning 4:15-5:00	Planned	2
9/11/17	4th Grade PLC 2:55-4:00	Protected	2
9/12/17	4th Grade planning 4:20-6:00	Intended	2
9/14/17	4th Grade PLC 8:30-9:15	Protected	3
9/15/17	4th Grade Planning 4:15-5:00	Planned	3
9/18/17	4th Grade PLC 3:00-4:00	Protected	3
9/18/17	4th Grade Planning 4:00-6:00	Intended	3
9/20/17	4th Grade Planning 4:30-5:30	Planned	3
9/21/17	4th Grade PLC 8:30-9:15	Protected	4
9/25/17	4th Grade PLC 3:00-4:00	Protected	3
9/25/17	4th Grade Planning 4-4:30	Intended	3

9/27/17	4th Grade Planning 4:15-5:00	Planned	3
9/28/17	4th Grade PLC 8:30-9:15	Protected	4
10/2/17	4th Grade PLC 3:00-4:00	Protected	4
10/2/17	4th Grade Planning 4:00-5:30	Intended	3
10/5/17	4th Grade PLC 8:30-9:15	Protected	4
10/6/17	4th Grade Planning 4:15-5:30	Planned	3
10/9/17	4th Grade PLC 3:00-4:00	Protected	4
10/9/17	4th Grade Planning 4:00-5:30	Intended	3
10/12/17	4th Grade PLC 8:30-9:15	Protected	4
10/16/17	4th Grade Planning 4:30-6:00	Intended	3
10/19/17	4th Grade PLC 8:30-9:15	Protected	4
10/23/17	4th Grade PLC 3:00-4:00	Protected	4
10/23/17	4th Grade Planning 4:00-6:00	Intended	4
10/26/17	4th Grade PLC 8:30-9:15	Protected	4