Professional Learning Communities: Empowering Teacher Leaders for the Twenty-First Century

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Introduction

Teaching is a complex endeavor. Given the diversity in today's classrooms as well as recent federal legislation, this task becomes more and more challenging. It is apparent that teachers are caught between doing what they know is best for students and meeting federal and state expectations. Teachers know what they should do to meet students' needs, but fear the repercussions of not meeting specified outcomes. Teacher empowerment has become an issue. "Empowerment" has at its base the concept of "power," and, from the perspective of school, "teacher empowerment," particularly here in the twenty-first century, raises issues about teacher decision-making and accountability. No Child Left Behind, the common core curriculum, and the resultant high-stakes testing have placed unprecedented expectations on teachers. The problem is that teachers, as has already been stated, are charged with providing appropriate instruction and are held accountable by school districts for meeting expectations of state mandates, but have been marginalized in their ability to make decisions regarding best practice. "Empowerment, as perceived by Short, Greer, and Melvin (1994, see Bogler & Somech, 2004) is defined as 'a process whereby school participants develop the competence to take charge of their own growth and resolve their own problems'" (Bogler & Somech, 2004, p. 278).

"According to Maeroff (1988, see Bogler & Somech, 2004), teacher empowerment consists of improved status, increased knowledge, and access to decision-making. Short and Rinehart (1992, see Bogler & Somech, 2004) identify six dimensions of teacher empowerment: decision-making, professional growth, status, self-efficacy, autonomy, and impact" (Bogler & Somech, 2004, p. 279). Regarding the six dimensions of teacher empowerment, decision-making refers to teachers' participation in critical decisions that directly affect their work. Professional growth refers to the teachers' perception that the school provides them opportunities to grow and develop professionally. Status refers to the professional respect and admiration that the teachers perceive that they earn from colleagues. Self-efficacy refers to the teachers' perception that they are equipped with the skills and ability to help students learn, and are competent to develop curricula for students. Autonomy refers to the teachers' feeling that they have control over various aspects of their working life. Impact refers to the teachers' perception that they can affect and influence school life (Bogler & Somech, 2004).

There are two activities that can lead specifically to a feeling of empowerment. These two activities are for effective teachers to (1) be involved in a professional learning community and (2) to be an active teacher leader in their schools. In recent times, since the late 1990's and for sure since 2004, a lot has been written by various groups, organizations, and people, about conceptualizing, and re-conceptualizing, frameworks of curriculum and teaching necessary for success in the twenty-first century.

Some of the groups and organizations are the Partnership for 21st Century Skills, the North Central Regional Education Library (NCREL) and the Metiri Group, the Organisation for Economic Co-operation and Development (OECD), the National Leadership Council for Liberal Education and America's Promise, the International Society for Technology in Education (ISTE), and the Educational Testing Service (ETS) (Dede. 2010).

Some of the people include Howard Gardner (2007) and his "five minds for the future," Linda Darling-Hammond (2010) and her "policies for the 21st century," and Chris Dede (2009) and his ideas about technology implementation. Although each framework is somewhat different in nomenclature, they all cluster around five main concepts. These are (1) a common core of learning in English language arts, mathematics, science, social studies, world languages, and the arts, (2) technology and digital literacy, (3) thinking skills, especially critical and creative thinking, information gathering and processing, problem solving, decision-making, (4) life and career skills, and (5) professional development. We believe that a key component of the five main concepts is professional development, especially as it regards effective teachers and teaching. Also, we believe that professional development is best accomplished through professional learning communities, in the mode of our CAIPPT (see below). Additionally, effective teachers have an obligation to become a leader or a change agent in their school districts (Bond, 2011; Nolan & Palazzolo, 2011; Mascovici, 2003). In twenty-first century schools, the role of a teacher must extend beyond the obvious instructional duties. According to Moller and Katzenmeyer (1996) and Sheppard, Hurley, and Dibbon (2010), teachers are viewed as leaders when they contribute to school reform or student learning, when they influence others to improve their professional practice, or when they identify with and contribute to a community of leaders.

This means that teachers participate in being leaders and collaborative partners in the decision making process of a school. In addition, teacher leaders are expert teachers who devote their time to both the classroom and various leadership roles throughout their careers (Danielson, 2006; Nussbaum-Beach, 2007). Teacher leadership roles can vary from informal roles, such as shared decision-making, to formal positions including a department chairperson (Mangin & Stoelinga, 2010; Moller & Katzenmeyer, 1996; Nolan & Palazzolo, 2011). Harrison and Killion (2007) identify ten roles for teacher leaders. These include resource provider, instructional specialist, curriculum specialist, classroom supporter, learning facilitator, mentor, school leader, data coach, catalyst for change, and learner. Whatever the role, teacher leaders have the potential to positively influence schools in terms of both instructional practice and student achievement (Cram & Germinario, 2000; Danielson, 2006; Mangin & Stoelinga, 2010; Moller & Katzenmeyer, 1996; Nolan & Palazzolo, 2011). Angelle and Schmid (2007) define teacher leaders as those who have the self-confidence to lead and take action on their beliefs. Teachers must be advocates, innovators, and stewards within the profession (Phelps, 2008).

Taking on the role of a teacher leader enables teachers to create an environment in the classroom that is conductive to learning and more importantly is a place where students want to be (Roby, 2011). Teacher leaders are those individuals that choose to focus on improving overall teaching strategies in their schools as a way to enhance student learning (Mangin & Stoelinga, 2010; Harrison & Killion, 2007)). Furthermore, teacher leaders are those within the school setting that want to have an impact on student achievement and want to set the pace for the profession. Raspberry and Mahajan (2008) suggest that teachers can become empowered by participating in PLCs. They also say that by becoming a part of a PLC, and thus empowering themselves, teachers improve student learning. Teachers who are leaders provide many benefits to the teacher and the school (York-Barr & Duke, 2004; Yost, Vogel, & Rosenberg, 2009; Nicols & Parsons, 2010). Nolan and Palazzolo (2011) suggest that teachers who are leaders have (1) an increase in job satisfaction, (2) increased commitment to student achievement, (3) an increase in attendance, and (4) a decreased rate of teacher burnout. Teachers, however, must be given the opportunity to lead and become involved in the school. For teachers to be fully empowered, they need a supporting environment in which they are cared for, are not isolated, are respected (Tyson, 2010), and are given opportunities to participate regularly in decision-making that affects them as teachers (Wenzlaff & Wieseman, 2004).

When teachers participate in such decision-making, their self-efficacy, their commitment, and their dedication become very strong (Hicks & DeWalt, 2006; Thornburg & Mungai, 2011; Chant, Moes, & Ross, 2009; Sheppard, et al., 2010). Additionally, according to Brown and Hughes (2008), relationships are paramount to improving teacher performance. Teachers need to perceive that they belong to and are a part of the vision of the school.

With that in mind, we began a professional learning community (the Curriculum and Instructional Practices Project Team, CAIPPT) and we believe the caring, supportive environment of the CAIPPT project has shown the importance of teacher collaboration. The focus of this article, then, is to discuss how involvement in the CAIPPT has been empowering for us (the five of us who are teachers) and the subsequent effect on our morale, our students' learning, and our effectiveness as teacher leaders.

To learn how involvement in a professional learning community would affect the professional development of five teachers as teacher leaders, the information in this article about the effect on teacher empowerment (specifically, professional development of the CAIPPT members, influence on other teachers, and the effect on student learning) is from middle schools and high schools. The schools are in mainly urban and suburban areas. Also, the five teachers all have master's degrees. Of the four high school teachers, one (MacKay) is a social studies teacher, one (Fuchs) is a mathematics teacher, one (Voydanoff) is a science teacher, and one (Pietras) is an English/Language Arts teacher. The middle school teacher (Rogers) is a mathematics teacher. The information is based on our self-reflections as we met in the CAIPPT. Each project discussed here used the habits of mind (Costa & Kallick, 2000. 2008) to influence the classroom environment and the Thinking/Learning (T/L) System (Edwards & Sparapani, 1996; Sparapani & Calahan, 2013) to differentiate instruction and teach for higher-level thinking. Each project began in a CAIPPT member's classroom and, because of the success in that classroom, extended beyond, to classrooms of teacher colleagues. What follows are brief vignettes explaining each of three of the projects, plus a vignette about a teacher leader project in a graduate-level course for teachers.

Project One: Instructional Leader (Science)

This project began in an Applied Physics class (taught by Voydanoff) designed to cover all the material necessary to pass the state-mandated test (the ACT) necessary to earn a high school diploma in Michigan. In the class students were taught strategies and content to help them be successful on that test. Students took the class for two reasons. The first reason was to fulfill the third (and final) credit for science to graduate high school. A second reason was to achieve the highest score possible on the ACT. From the CAIPPT, the habits of mind and the T/L System had been utilized continuously in the classroom with a great deal of success both in academics and classroom behavior. Over a three-year period, test scores rose around 10% for the same class taught each year. Also there was a considerable decrease in behavior referrals, from about two a week to about one a month. From this success the teacher started meeting with fellow colleagues discussing his success and how his colleagues could benefit from it. The teacher collaborated with two mathematics teachers and helped them start implementing the habits of mind into their lessons. Subsequently, they expressed an improvement in behavior and, with that, a slight improvement in their students' overall grades.

Project Two: Instructional Leader (Mathematics)

The involvement in the CAIPPT allowed this teacher (Fuchs) to develop ideas and techniques that induced a transformation from an isolated teacher into a teacher who worked with colleagues instead. Some of these ideas and techniques included being a teacher leader who worked with other departments for cross-curricular projects and having students create their own arts-based projects that included a mathematical element. The arts-based projects were a great success with students creating wall murals, performance pieces, and almost everything in between. Students created several wall murals including a tree-inspired Pascal's Triangle, a decorative number line, and an instructive Pythagorean Theorem mural decorated using literal symbolism to understand what the different parts of the theorem formula represented. One group of two students wrote a song that described trigonometric ratios and some of their properties. This song was performed for the class and for the entire school. Also, several students integrated the habits of mind into a poster created for the arts-based projects. The use of the T/L System and arts-based projects in mathematics produced a solid instructional practice for differentiating instruction in the high school classroom.

From this, an idea also emerged to become a teacher leader by working with a foreign language teacher to develop a cross-curricular project idea for those students taking both French and a mathematics course. Using the T/L System and allowing students to produce arts-based projects in the mathematics classroom created a noticeably positive effect on students' attitudes toward learning. The use of the T/L System helped to demonstrate to precalculus students the abundance of triangles in the real world and thus to see trigonometry as a useful and applicable tool. The support of the CAIPPT provided the confidence to risk giving an arts-based project for students that lacked structure and included the habits of mind.

As an extension of the arts-based project in mathematics, as mentioned above, a teacher leader project developed which involved a French teacher. This version of the project had students working with a famous French Mathematician such as Descartes or Galois and reporting on them and the towns in which those mathematicians were born or spent a large amount of their time. No matter which version of the project, students showed interest and enthusiasm in producing the arts-based projects that those students chose to do.

Student learning improved because of the arts-based projects, and the CAIPPT gave the courage and professional development to continue creating new and more empowering ideas. Examples of such ideas include (1) creating online pre-assessments to gauge prior knowledge for readiness-level differentiation, (2) continuously creating and implementing habits of mind lessons, and (3) having the courage to risk giving arts-based projects that had varying due dates, and depended on students taking a large amount of responsibility in developing the ideas and producing high-quality products that would be displayed or performed for a large audience.

Project Three: Instructional leader (Social Studies)

Sharing is a cornerstone of teaching. For this teacher (MacKay), the habits of mind have become a key sharing idea that has been shared with teacher colleagues. As a result, the habits of mind are now interwoven into the school's new character education approach that every student is expected to follow. The CAIPPT provided the confidence to share the habits of mind with the whole staff. Trying a new teaching strategy can be nerve wracking. The CAIPPT has given its members the support and confidence to try new ideas in the classroom. The T/L System approach has been shared with the Social Studies Department, and now two other teachers in the department are implementing this strategy. Influencing other teachers is just as important as influencing students. Teachers are leaders in their school community and can add value to other teachers, if the teachers are willing to listen and learn. In present times, though, it seems that teachers who want to empower themselves in the face of stricter accountability have to seek outside avenues. Such empowerment-seeking led to the CAIPPT. The projects that started as a result of the CAIPPT led to improved confidence and a greater ability to meet the diverse needs of a diverse student population.

With the CAIPPT as a way to share ideas and discuss pedagogy, confidence continues to grow, especially confidence in the power of Costa and Kallick's habits of mind. Because of this confidence, a character education format in a single history class turned into a school-wide character education transformation. The habits of mind started as a way to help students see success as something attainable to everyone. Small assignments were given to students to show them different ways people could be successful. Successful people throughout history were shown to students with parallels to present-day examples. The teacher shared the habits with a few teachers and a special grant-funded group. The grant group was tasked with creating a character education program for the entire school. The group of teachers, counselors, health professionals, and, also the administration, openly welcomed the ideas and, in turn, put them at the center of the character education piece. The CAIPPT empowered this teacher to share other ideas such as the T/L System. This approach allowed students at multiple levels to showcase their skills in social studies. The teacher shared the T/L System with other colleagues who noticed the same sort of response from their students. Students' retention of material improved. Students said that they needed to study a little less for tests and quizzes. Students were more comfortable raising their hands and participating.

Project Four: Teacher Leader Project (Graduate-Level Course for Teachers)

Although not a project as such, information about the effect of being a teacher leader on teacher empowerment was also gathered by informally listening to discussions between teachers in one graduate-level course taught by the teacher educator (Sparapani). These discussions were always connected to teacher leader projects that were one of the requirements of the graduate course. The teachers in the course were all placed in PLCs, and in those PLCs each teacher designed a teacher leader project unique to them, something that was a perceived need in their school, and had the approval of the school's administrator. At the beginning of the projects, the teachers typically were anxious, but excited by the possibility of being a teacher leader in their school. They learned quickly, however, that their teacher colleagues were not always as excited, especially if it involved more "work" on their part. Some colleagues began the project, but then dropped out.

This led to drop in morale on the part of some teachers, i.e., the graduate students. The fact the students were in a PLC as a part of the graduate course was extremely helpful to those teachers who were experiencing difficulty with their teacher leader projects. The PLC was a morale booster, and helped the teachers "stay the course." Another major morale booster was the influence of building administrators.

For those teachers (the graduate students) whose building administrators provided verbal support for their projects, the teachers' colleagues stayed with the projects, which spoke to the effect a building administrator could have on teacher involvement and the resultant morale of the teachers in that school.

What We Learned from Our Involvement in the CAIPPT

In reflecting on our projects, eight main points emerged.

Points one and two are connected to professional development and how involvement in a professional learning community (the CAIPPT) affects professional development. The following is what we learned:

- As we discussed our teaching situations in the CAIPPT, it became apparent immediately to us (the five teachers) that we all felt marginalized and often not very respected. This was not a pleasant insight, but it made us feel better, because we knew we were not alone in our feelings.
- Connected to the above, as a result of the regular involvement in the PLC, we soon felt more empowered as
 professionals and more knowledgeable about our practice. Additionally, the professional development
 provided by the PLC proved to be more beneficial to us than the professional development opportunities
 provided by our schools and school districts.

Points three and four are connected to how teacher leaders could influence the professional development of other teachers. About this, we learned the following:

- Because of our collaboration in the CAIPPT and as a result of regular involvement in the CAIPPT, we
 became much surer of ourselves as professionals and felt empowered to take instructional risks in our
 classrooms. Risks that we would otherwise probably not have taken. Also, because of how our students were
 conducting themselves in other classes, our colleagues began paying attention to what we were doing and
 began looking to us for ideas.
- Over time, as teacher colleagues in our schools became interested in what we were doing, we began to share more of our ideas with our colleagues. Our colleagues, however, as evidenced by the conversations of the teachers in the graduate course, even though they were interested, and evidenced as well by an overall low school morale, they (our colleagues) believed that what we were doing was too much additional "work," and not worth the extra time and effort, and even though they listened to us with fascination, it was difficult for us to convince them otherwise.

Points five and six are connected to whether empowering us as teacher leaders through our involvement with the CAIPPT would have a positive effect on student learning. About this, we learned the following:

- As we became more comfortable with differentiating instructional practices (using the T/L System) and the climate of our classrooms became more conducive to higher-level thinking (as a result of implementing the habits of mind), we found that our students were more actively involved, more of our students completed assignments on time, and there was a higher level of in-class achievement.
- The above finding led us to want to take on a more active, focused role as teacher leaders in our schools and implement specific teacher leader projects. This continued a challenging, but rewarding, experience.

Points seven and eight address whether our involvement in the CAIPPT would improve or enhance our morale. About this, we learned the following:

- As evidenced by the teachers in the graduate course, although not a part of the CAIPPT, their involvement in their PLC in the class helped them stay the course, and enhanced their feelings about their school and their colleagues. The PLC often changed their morale from being negative to positive. The PLC helped them see how they could accomplish what they wanted to accomplish. This was also true for those of us in the CAIPPT.
- It is often difficult to get teachers to commit to projects over and above their busy teaching schedules. This has always been true for middle school and high school teachers, and is particularly true in the current educational climate. Teachers want to know what benefit something will have to them by spending extra time doing whatever it is they are being asked to do.

Those of us who committed to be involved in the CAIPPT wondered the same thing as in point eight. We wondered whether the time and energy we were spending to do the things we were learning and being asked to do would be worth it. We learned, however, that it was definitely worth the extra time. Because of our commitment, our attitudes about teaching changed. Our feelings about ourselves as teachers increased tremendously.

We became much more positive, and, as a result, we became instructional leaders in our schools. We found that the time we put into the learning and the planning and the doing was well worth the extra effort.

Concluding Thoughts

The purpose of this article was to examine the effect involvement in a PLC would have on empowering teacher leaders and the subsequent effect on teacher morale and student learning. Regarding the effect on student learning, we learned that to see the effect took time. There were often no immediate successes when it came to student learning; however, with continuous effort successes did come. Additionally, we learned that involvement in a PLC, when the PLC was supportive and nurturing, was extremely empowering. Such a supportive, nurturing PLC, built teacher morale, helped teachers feel worthwhile, enhanced their efforts towards being teacher leaders, and, most importantly, made them feel that what they were doing truly did make a difference.

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