

Full Length Research Paper

Collaborative evaluation: A catalyst for transforming professional networks

Liliana Rodríguez-Campos¹ and Cynthia B. Bauman^{2*}

¹University of South Florida, 4202 E Fowler Ave, Tampa, FL 33620, USA.

²Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33431, USA.

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This study examines teachers' perceptions of the influence professional networks have on their sense as teacher leaders for school improvement. The Model for Collaborative Evaluations (MCE) was used to examine the potential for the inclusion of teacher professional networks in school improvement efforts. Findings indicate teachers within these professional networks believed in their collective capacity to accomplish a shared mission of student achievement. Implications of the study results, including the role of collaborative inquiry for innovation, are discussed.

Key words: School improvement, teacher leadership, professional networks, model for collaborative evaluations.

INTRODUCTION

Although there has been much research about educational leadership as a function of administrative and supervisory roles, the role and characteristics of the teacher leader continue to be much less consistently defined (Nappi, 2014).

Research suggests that teachers can demonstrate leadership within contexts that provide opportunities to showcase and share their learning for school improvement (Collinson, 2012). Relationships aligned with common goals can foster teacher leadership to build and strengthen collaborative action and collective capacity for student and school improvement (Harris, 2011). Empowering teachers and school communities

requires open, transformational leadership that is characterized by authenticity, trust, accessibility, and risk-taking (Anderson, 2009). Understanding the contexts that challenge and support teacher leadership, as well as the perceptions of the actors within those contexts, can inform our approaches to enhance teacher agency, collaboration and growth as leaders within their school communities. The purpose of this study is to examine teachers' perceptions of the influence professional networks have on their sense of themselves as teacher leaders for school improvement. The Model for Collaborative Evaluations (MCE) was used with the current study to examine the potential for the inclusion

*Corresponding author. E-mail: baumanc@fau.edu.

of teacher professional networks in school improvement efforts. Findings indicate teachers within these professional networks believed in their collective capacity to accomplish a shared mission of student achievement. Implications of the study results, including the role of collaborative inquiry for innovation, are discussed.

Contemporary views of teacher leadership

Many contemporary studies of teacher leadership focus on the role of the principal and the conditions administrators create that support or inhibit teacher leadership (Poekert, 2012). Another perspective to take is to examine the networks that teachers develop within a sphere of professional influence. Less research has been undertaken to record and analyze the quality and quantity of the networks that occur as a result of collaborative practice (Pitts and Spillane, 2009).

The call for collaborative and democratic relationships in school culture is directed not just between administration and teachers (Beachum and Dentith, 2004; Woods, 2004), but also amongst all teachers (Helterbran, 2010). Additional research investigating perceptions of teacher leadership within networks can highlight the contexts that support or challenge teacher leadership.

Collaborative evaluation approach

MCE is used in conjunction with this study to illustrate how school leaders can maximize the potential within these networks to impact school improvement planning and implementation. Collaboration within educational networks is crucial for school improvement and evaluation. It builds trust, encourages diverse perspectives, and promotes the sharing of best practices and lessons learned. By creating a safe space for open dialogue, stakeholders can work together towards shared goals and develop a sense of ownership over the evaluation process. In addition, inclusion of diverse perspectives leads to more comprehensive evaluations and avoids groupthink. By sharing a collective vision, stakeholders can avoid duplicating efforts and build upon each other's successes, leading to more efficient and effective solutions to educational challenges. By purposefully working together, stakeholders can achieve their goals more effectively and drive meaningful change in education. Collaboration within educational networks can build collective efficacy, which then can support student achievement (Moolenaar et al., 2012). The inclusion of teacher leaders in the evaluation process is crucial, as they are major stakeholders in the implementation of school improvement strategies.

Several collaborative methodologies exist (Fetterman et al., 2014), each has advantages and disadvantages. In this article, MCE was used because it can provide additional resources for the inclusion and engagement of teacher professional networks within this process.

The MCE is a framework for guiding collaborative evaluations in a precise, realistic, and useful manner (Rodríguez-Campos and Rincones-Gómez, 2013). The model revolves around a set of six interactive components specific to conducting a collaborative evaluation in order to establish priorities and achieve a supportive evaluation environment (e.g., Rodríguez-Campos, 2015; Rodríguez-Campos and Rincones-Gómez, 2018). The following are the MCE components: a) identify the situation, b) clarify the expectations, c) establish a collective commitment, d) ensure open communication, e) encourage effective practices, and f) follow specific guidelines (Figure 1). Within an MCE approach, evaluators retain control while collaborating with stakeholders. This arrangement helps safeguard the credibility of evaluation products, while integrating collaboration into the design (Hicks et al., 2018).

Each of the MCE subcomponents, shown as bullet points, includes a set of ten steps suggested to support the proper understanding and use of the model. Consequently, checklists can contribute to the improvement of validity, reliability, and credibility of an evaluation. The MCE emphasizes the involvement of stakeholders, in this case teacher leaders, thereby increasing the chances that evaluation recommendations will be utilized within the school context. Collaborative evaluation has its special strengths. It creates an environment which fosters a shared vision of student growth and achievement. The study findings were used to reflect upon opportunities to blend collaborative evaluation with cycles of continuous school improvement.

METHODOLOGY

Methodological approaches are included to illustrate the model's emphasis on systematic stakeholder engagement in the evaluation process. This analysis utilizes network data which described the characteristics of an educational advice-seeking professional network within one school. Multiple check points were designed to collaborate with the members of the professional network being described. Transparency and communication about the methods of data collection such as observations, surveys, and interviews allowed for feedback by stakeholders about the processes and procedures surrounding these methods. In this way the data collection was not done to them but done with them. By engaging stakeholders in these early stages of the evaluation, their awareness of the evaluand's culture and context could be leveraged to select the most appropriate methods of data collection, plan implementation strategies, and provide feedback for improvement. This is because an important aspect of stakeholder engagement in the collaborative evaluation process is their involvement in identifying the sources of information and intended

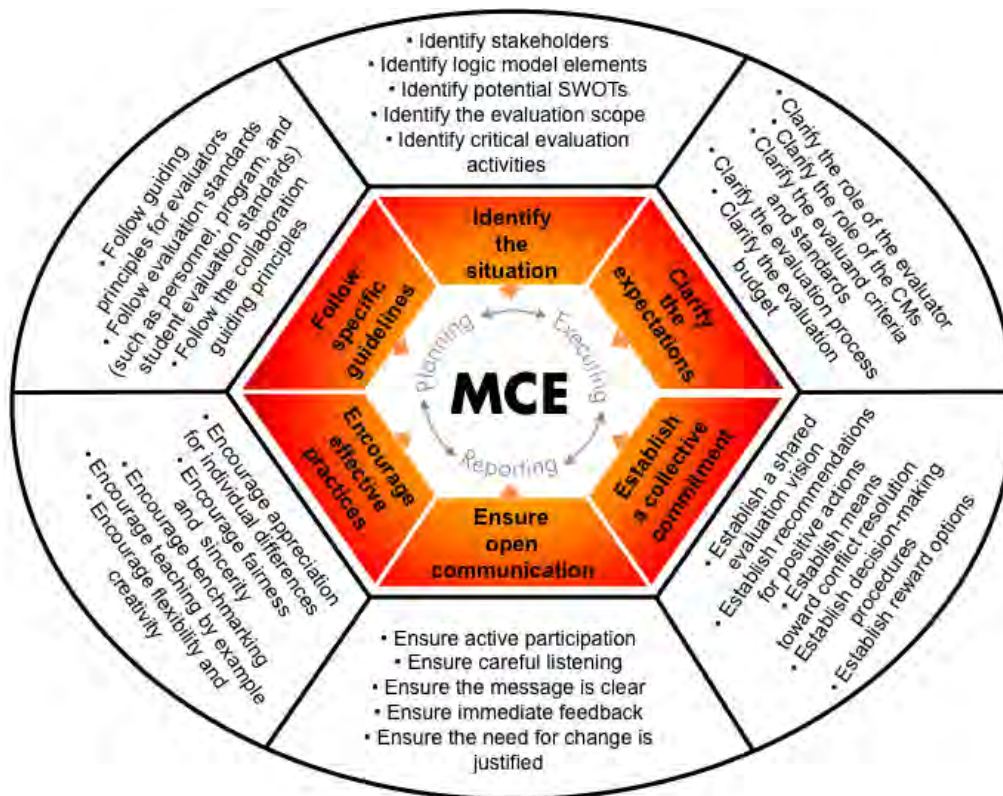


Figure 1. The model for collaborative evaluations.
Source: Rodríguez-Campos and Rincones-Gómez 2013.

users of the evaluation findings. This aligns with multiple components of the MCE including identify the situation and clarify the expectations. The MCE component ensure open communication fosters reciprocal communication.

From the beginning of the evaluation, transparent communication was key to the collaborative effort. Instructional staff was made aware of each step of the process and the reason for those actions. The scope and sequence of the evaluation was collaboratively defined. It was imperative for the evaluator to build trust in the process to ensure active participation and buy-in. Evaluation team members were given the opportunity to provide input as to those processes of data collection. At one point, members were asked to determine whether or not to include administrative personnel as a source of advice in the survey distribution. A majority of the instructional staff were in favor of including administration because they felt the principal and assistant principal were such an important part of their advice-seeking network. This collaboration made the survey results more meaningful and relevant to the member stakeholders by helping to identify additional stakeholders.

Members also participated in ensuring the validity of the data by engaging in member-checking observation and interview transcripts to clarify and confirm the content. The data collection was designed to reveal the composition and context of the professional networks within the school setting. Gathering evidence with the cooperation of individuals as well as seeking understanding about the structures that may facilitate networks required careful observation, questioning, and listening skills across multiple contexts. It required the evaluator to become immersed in the evaluand environment.

This systematic inclusion of key stakeholders throughout the study helped to select the most appropriate methods of data collection, plan its implementation, discuss strategies, and provide feedback for improvement. This type of stakeholder involvement was found to be essential for establishing ownership and building commitment to the evaluation process. Moreover, by acting upon the evaluative conclusions, stakeholders could improve the quality of decision-making, build commitment to the evaluation process, and drive meaningful change.

Data utilized in this collaborative evaluation was taken from a single, exploratory case study (Stake, 2010) done by Bauman (2018). The case study was guided by the question, to what extent do teachers utilize professional networks to seek information and influence others as teacher leaders working toward a common goal of student achievement and school improvement? The MCE components *Encourage Effective Practices* and *Follow Specific Guidelines* ensure a strategic plan for the successful completion of the evaluation, while allowing for creativity and flexibility in the execution of the plan. Data collection occurred in three phases that were designed to build layers of thick descriptions from a variety of sources. Layers of data collection from a variety of participants contributed to rich, thick descriptions that link ideas and experiences within the case. Content analysis (Hsieh and Shannon, 2005) was used to reveal prominent themes throughout a variety of collected data, including documents, observation notes, and interview transcripts.

Validation strategies such as journaling to clarify researcher bias and member checking occurred throughout the data collection and

analysis to provide greater trust in the findings. Clarification of ideas and continued engagement with participants can increase the trustworthiness and dependability of the work (Hamilton and Corbett-Whittier, 2013).

Phases of data collection

Organizing the evaluation into phases allowed for collaboration and feedback from stakeholders and team members throughout the process. During Phase one school-based document that referenced strategies for implementing and fostering teacher leadership within a collaborative culture were collected. An initial document review and information request set the stage for this collaborative process. The evaluator worked initially with the school administration as well as teachers in formal leadership roles to understand the various structured and systemic opportunities for collaboration within the school. This allowed for additional investigation around informal situations for advice-seeking and collaboration. Phase two was designed to reveal the formal and informal professional networks that exist in this school setting. Observations of structured collaborative meetings were conducted to collect information about the formal professional network. In addition, a social network survey was distributed to collect information about the informal networks in the school. Social Network Analysis (SNA) was used in an exploratory manner (Patton, 1990) to visualize and describe informal advice-seeking networks for instructional innovation. Key actors in the professional networks were then identified and interviewed. Phase three of data collection, teacher interviews, was designed to collect teacher's perceptions of these networks, both formal and informal. These key actors within the networks as revealed through SNA would have a unique perspective about the opportunities for collaboration, leadership and innovation for instruction.

Measures and analysis

The modeling unit in SNA is the level at which the data are modeled or summarized (Wasserman and Faust, 1994). Although the unit of observation in this analysis is the member/actor within the (based on survey, observation, and interview results), these data points are combined to create a model of the whole network. Informal networks (survey) and formal networks (observations) can be reviewed separately or combined to identify the strength of an actor's presence within the whole network. Subsequent whole-network analysis results in measures of individual actors in relation to the network (Carolan, 2013). This network visualization (Bauman, 2018) focused on measures of centrality.

This case recorded whom a teacher chose to seek advice from and how often, in both formal and informal networks. Directionality, in-degree and out-degree centrality was utilized to visually represent advice-seeking within networks. In addition, frequency of the interactions, as represented by weight of the ties, was included as a factor to help better define the in-degree measures of centrality. This gave a better indication of the strength of the individual's presence in both formal and informal professional networks. Individuals with a strong presence in the network were subsequently interviewed for their perceptions of leadership within the network. Content analysis was used to review interview transcripts. Interview data were analyzed through multiple readings. Utilizing a matrix of four constructs: leadership, networks, innovation, and efficacy, interview responses (words, phrases, sentences, paragraphs) were sorted and clustered to determine concepts within a construct. Concepts took on the quality of a theme if three or more teachers similarly referenced the concept to

make it a dominant part of the whole analysis. The process included organizing and categorizing themes into groups and subgroups, finding patterns of evidence. Having a thorough understanding of the context of the case helped ensure relevant themes and key categories were discovered (Hsieh and Shannon, 2005). Thoroughly documenting this process by journaling as an analytical tool added to reliability in the process of analysis.

FINDINGS

The evaluation findings were utilized to gain insights into the lessons learned and to share the results with key stakeholders and external parties. The dynamic role of collaboration was emphasized when presenting the findings to various stakeholders. During the collaborative process, stakeholders had the opportunity to reflect on their shared learning's and reinforced their commitment to the evaluation and its outcomes. There is evidence from interviews that administration and teachers held each other accountable for high expectations and quality work. One teacher stated during an interview, "Doing what's best for the kids. That's kind of like our motto here of what's best for kids." Another teacher noted about the teachers, "They do hold each other accountable." Also, administration exhibited a supportive stance. One teacher said about her principal, "The expectation is here, and if you don't meet the expectation, she's going to tell you, but she's also going to support you." This evidence of a collective commitment provided a supportive setting for collaborative evaluation and a demonstration of the MEC component establish a collective commitment. The collaborative evaluation had many positive characteristics, including increased stakeholder credibility in the evaluation due to shared decision-making and creative problem-solving. Moreover, stakeholders' use of the evaluation findings was strengthened, leading to a more effective implementation of recommendations. Additionally, the collaborative process fostered a sense of ownership among stakeholders, leading to a higher likelihood of implementation and follow-through on the evaluation's recommendations. Overall, the collaborative evaluation approach proved to be a valuable tool for generating meaningful insights, building stakeholder buy-in, and ultimately driving positive change.

During the Phase two direct observations of formal structures for teacher collaboration, only one incidence of advice-seeking for innovation was observed. The incident was documented within a very specific type of collaboration that problem-solved around individual student needs. By analyzing additional sources of information, such as an advice-seeking survey and member interviews, more evidence of advice-seeking for innovation was discovered. This presented a fuller representation of the network for innovation, as well as discovering additional opportunities for collaboration for innovation. This layered approach to data collection could not have been possible without the cooperation and buy-

in of evaluation team members and broader stakeholders. The subsequent findings helped create a SNA visualization that presented a fuller view of the professional networks in the school, and demonstrated where strengths existed that could be built upon.

Survey results

Teachers can have a positive influence on each other and their broader school community by building capacity for leadership, innovation, and student achievement through the relationships, or networks, they develop and maintain (Baker-Doyle, 2015; Hovardas, 2016; Hunzicker, 2012; Moolenaar et al., 2012). There are many different teacher roles within a school. Some teachers do not have the responsibility of one classroom, but may support multiple classes or groups of students across grade levels. Findings within this study discovered that many of these non-classroom teachers had a strong presence in the network. Ranking the network members by in-degree centrality indicates which individuals were more likely to be sought out for advice. For example, ranking the whole informal network by in-degree centrality revealed that most non-classroom teachers fell above the median rank (3) for in-degree centrality. In addition, non-classroom teachers fell in the top 6. Table 1 provides an overview of these non-classroom teachers' roles and centrality in the informal network as revealed through the advice-seeking survey. Also, the inclusion of administration in the survey distribution was key to a clearer picture of the network.

The survey differentiated between advice-seeking for improvement in the practice of instructional strategies and advice-seeking for innovation in the practice of instructional strategies. Respondents were asked to identify these networks separately. In particular, results indicate non-classroom teachers and administrators are dominant members of the professional network for innovation in instructional strategies (Figure 2). For the purposes of this investigation, innovation is defined as the development or creative application of a new or unique strategy as a solution to an instructional issue (Anderson et al., 2014; Robinson, 2011; Schimmel, 2016).

The network for improving practice included 26 nodes and 51 edges stemming from the 21 respondents. The network for innovating practice (Figure 2) had 27 nodes and 54 edges from those same numbers of respondents. Each survey item asked for the respondent to name up to five individuals that they sought out for advice, and some respondents chose to name less than five, therefore accounting for the variation in numbers of nodes. Of interest is the greater number of edges when comparing the networks for improving instructional practice and innovating instructional practice.

This indicates more connections or ties of advice seeking between individuals in the innovating network. While the number of peers respondents reportedly sought out did not significantly change between the types of advice-seeking, the number of ties between did, resulting in a greater density. Advice-seeking for innovation was more evident in the informal network captured by the survey.

Interview results

Although these visualizations of the networks are helpful in noting trends and patterns, such as the prominence of non-classroom teachers and administration, only a deeper conversation with individuals within the network could reveal more about teacher perception of these networks. Eight interviews were conducted with individuals who were predominant in the initial network analysis. During these interviews the same advice-seeking questions were asked as in the survey, but respondents were invited to expand upon their answers to further describe the context of the advice seeking network. In addition, not all the interviewees responded to the initial survey. They were predominant due to being named by others as sources of advice. Therefore, these interviews were able to add key data points to the visualization of the overall professional network. Interviewees included five classroom teachers, two non-classroom teachers, and one administrator. It became clear during the teacher interviews that this administrator played a key role in the professional networks of the teacher leaders interviewed, and her pattern of advice seeking for innovation was included in the interview sociogram (Figure 3), as well as the overall network (Figure 4). She was both a target and a source of advice seeking.

Teacher leadership can be a product of and a stimulus for instructional innovation (Collinson and Cook, 2013; Hovardas, 2016; Muijs and Harris, 2007). The interviews revealed perceptions of teacher leader characteristics that influenced patterns of collaboration and advice-seeking. These included interpersonal interactions that were characterized by positivity, empathy, approachability, trust, and respect. The trust and respect mentioned by teachers is in an individual capacity, between each other. Teachers referenced an individual's ability to demonstrate respect and instill trust in one another. Although ultimately this impacts school culture, it is a trust that originates with individuals, existing within but apart from formal school structures. This trust connects the members of the organization and subsequently the collaborative evaluation team to persevere in maintaining high expectations. They recognized that teacher leaders needed to balance advice giving with continuous encouragement: "I think it's

Table 1. Informal (survey) network ranked by in-degree centrality.

Node Id	District role	School role	Informal in-degree	Informal out-degree
Administration 21	Administrator	Administrator	40	11
Non-classroom teacher 33	Instruction coach	Coach/Admin	20	0
Administration 17	Administrator	Administrator	18	13
Non-classroom teacher 18	Content coach	Teacher/Coach	17	8
Non-classroom teacher 29	Content coach	Teacher/Coach	16	0
Non-classroom teacher 31	Special education	Teacher	10	0
Non-classroom teacher 47	Special education	Teacher	2	0

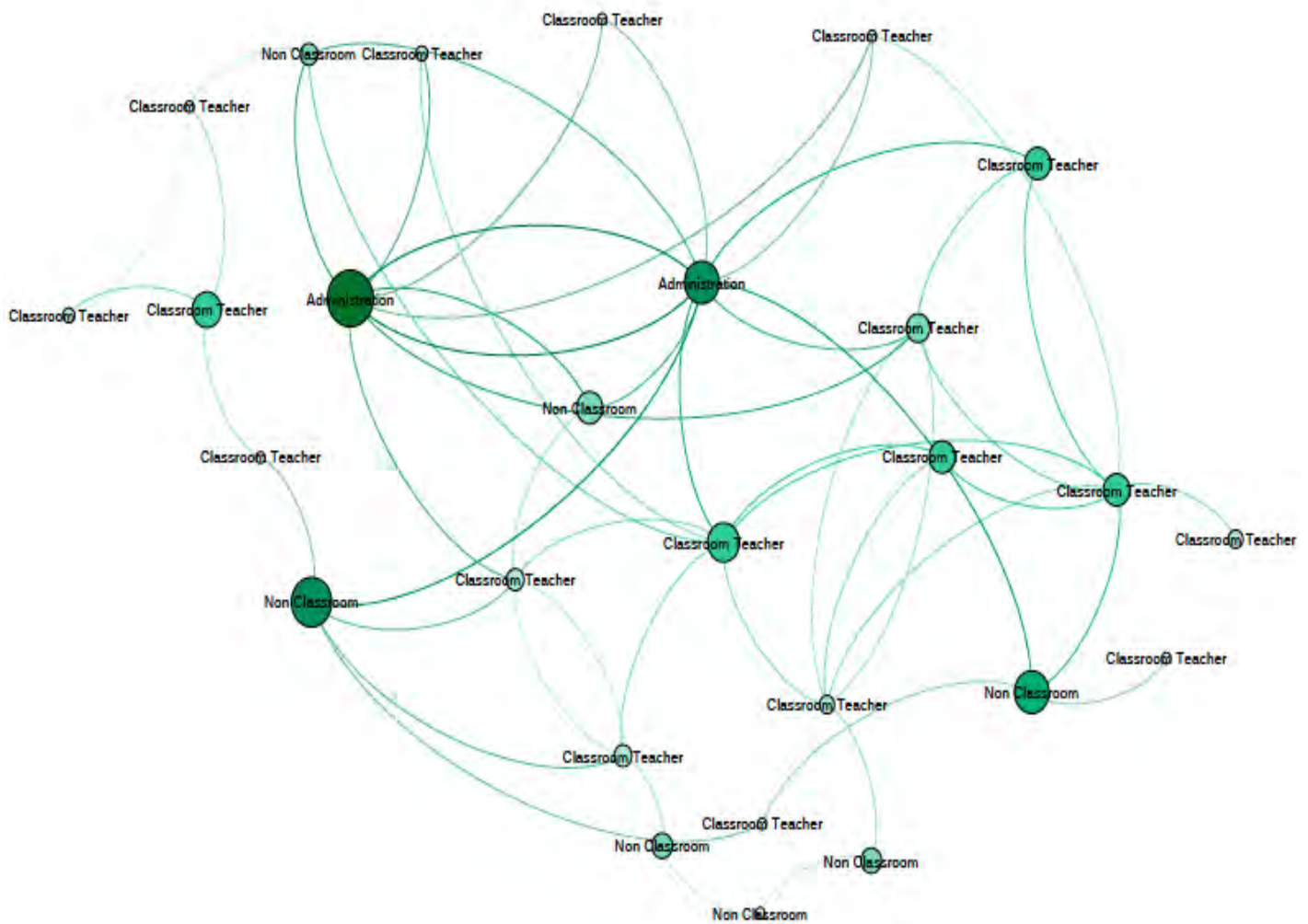


Figure 2. Informal (survey) network in-degree centrality visualization for innovation.

somebody that’s going to challenge them but also walk beside them in the challenge, you know?” Collaboration follows approachability, trust, and encouragement. The

collaboration teachers mentioned includes having a collaborative spirit, being willing to share and others recognizing that need within oneself to share. Once

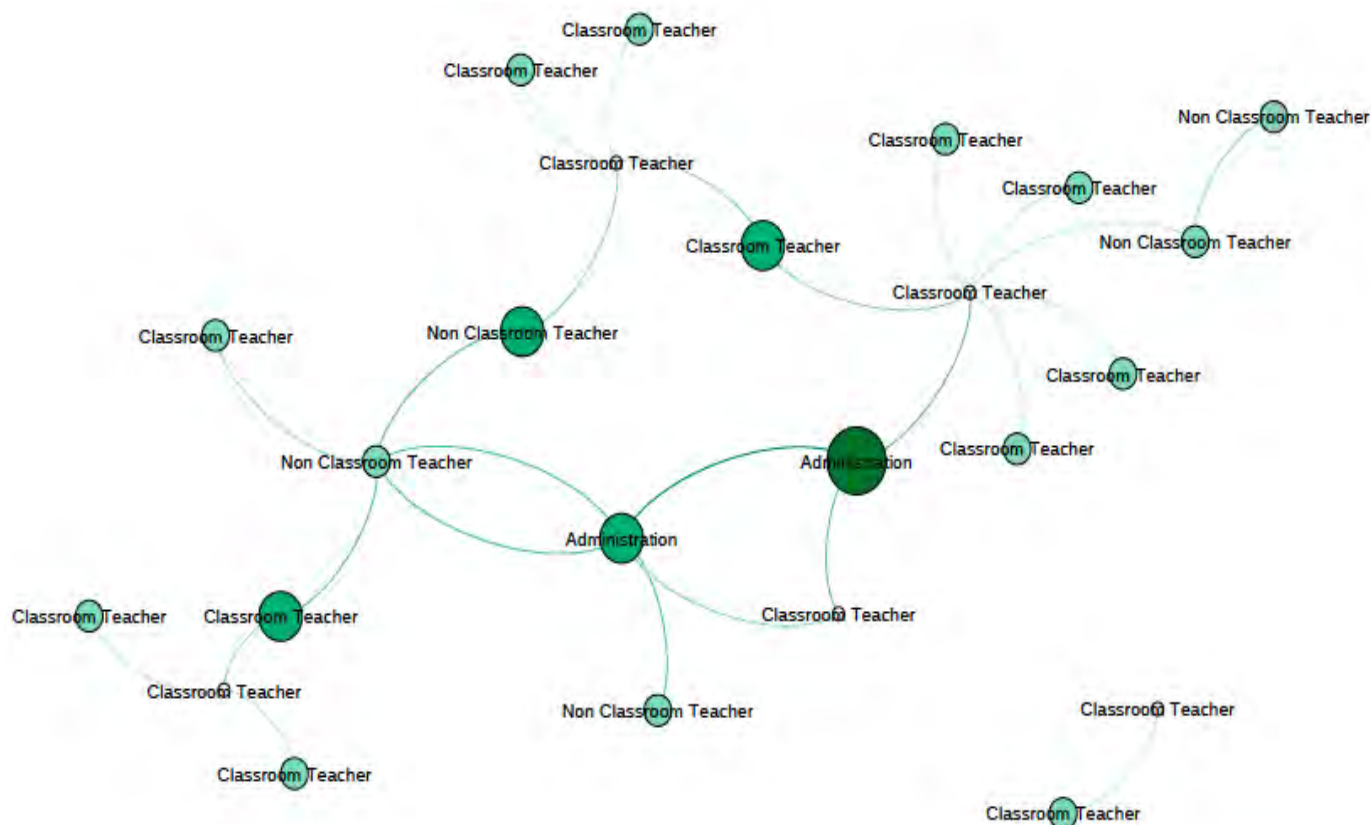


Figure 3. Patterns of advice seeking about instructional innovation as revealed in the interviews.

again, these are individuals speaking about their relationships. This is not about institutional structures for collaboration, but an openness to share, the freedom to ask questions of each other, and the vulnerability that accompanies it. These beliefs and perceptions within an organization set the stage for the utilization of collaborative evaluation and in particular the MCE framework.

Networks for improvement and innovation

When combined with the observations, survey and interviews, the composite advice seeking network for innovation (Figure 4) becomes more apparent. Although some isolates (unconnected personnel) were revealed in the visualization, it is clear that the instructional members of this staff do reach out to each other for advice for innovation. In addition, the number of isolates within any network captured during this data collection most likely reflects the individuals who did not voluntarily participate in the survey or interviews or were not mentioned within someone else's network. It is unlikely that this study

accurately captured the complete network due to less than 100% participation in the study. However, these results can give insight into this network. There is room to grow to include more individual members of the organization in opportunities to collaborate for instructional innovation.

Making it "better"

These patterns of advice-seeking reveal a willingness to reach out within professional networks for growth and improvement. One interviewee said teachers come to her for innovation when they "need something extra." Another referenced the teacher evaluation model that utilized an observation rating of "Innovating" and sought out, or others sought her out, in order to prepare for achieving that rating during an observation. When asked about innovation, still another stated she had "a hard time distinguishing between an improvement and innovation," but went on to relay a variety of unique situations in which she needed specialized advice from a more experienced peer concerning content and/or even parent

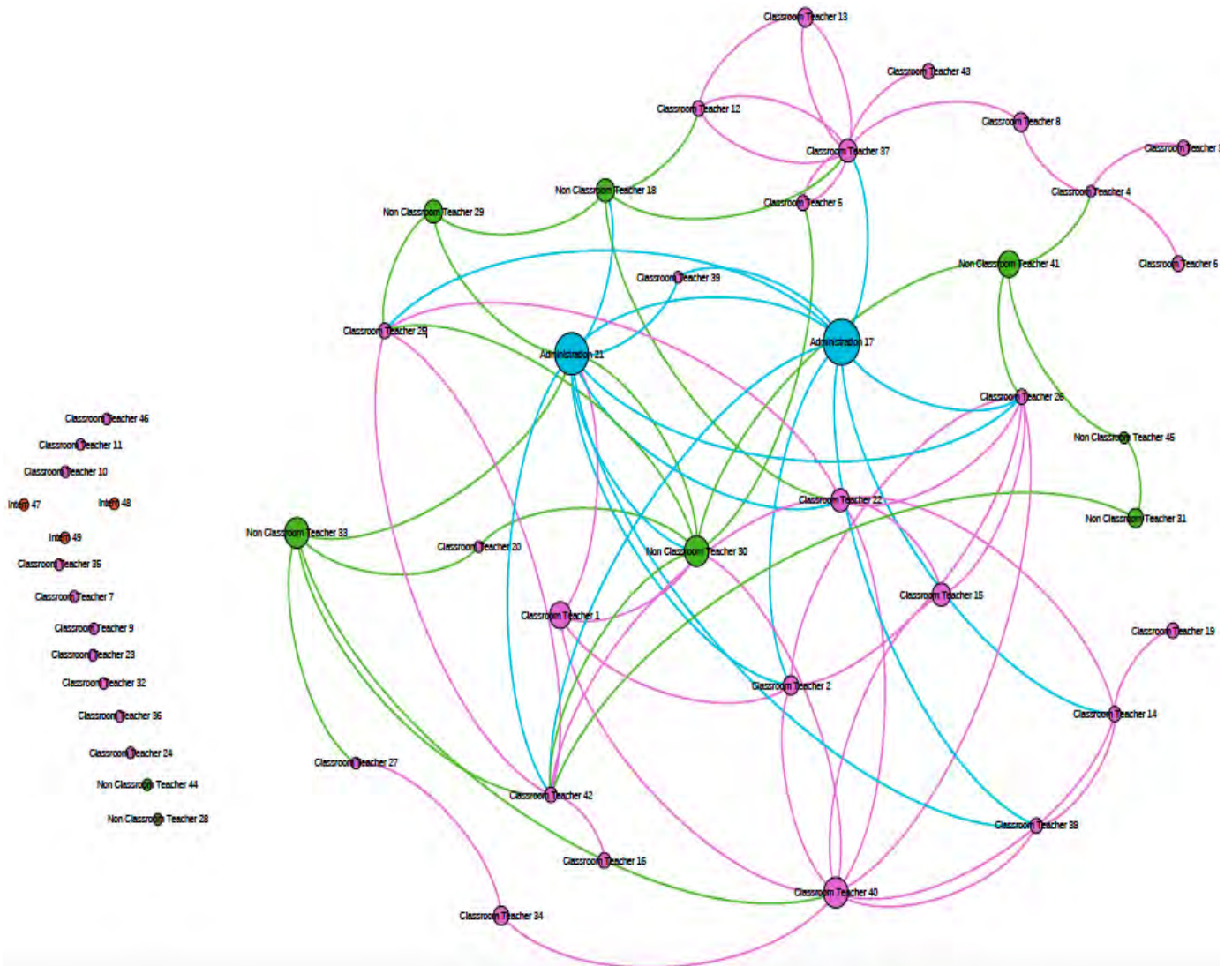


Figure 4. Composite map of all edges (ties) within the network of instructional personnel patterns of advice seeking for instructional innovation.

interactions. When necessary, in order to assist individuals in making the determinations between improvement and innovation, the interviewer presented researched based definitions. This sparked their ideas and provided some consistency with previous data. However, the interviewees were encouraged to tell their experiences and perceptions regardless of the definitions. Experiences with improvement and innovation converged to include all aspect of inquiry within networks for leadership and efficacy. This implies that the act of striving for improvement and innovation as a construct is interdependent upon the other aspects of inquiry within this study, and previous comments mentioned have often referenced becoming “better”: “I want to know, like I want

to make myself a better teacher.”, as one respondent said. Collaborative inquiry played a distinct role throughout this study, but particularly in relation to improvement and innovation. Teachers mentioned feeling comfortable asking questions of each other and having the drive to seek out answers to questions. One teacher reflected, “What could I do tomorrow, you know what I mean, like to make it better?”

DISCUSSION

The overall findings revealed a culture of leadership within professional networks in the school that provided a rich

setting for collaborative evaluation. Teacher leadership continues to be a line of research that investigates ways this phenomenon impacts both systems change and student learning and achievement (Gumus et al., 2018). Where does the expression of teacher leadership as exemplified in this study fit in with opportunities for collaborative evaluation within educator professional networks? Leadership was distributed, as the principal selected individuals to head up specific initiatives, included both embedded professional learning and school-wide professional development. In addition, administration encouraged individuals to seek each other out based on experience or expertise for additional assistance or direction on instructional matters. Bush and Glover (2012) link distributed leadership and teacher leadership when shared values exist. Teachers within this professional network recognized each other as sources of instructional advice – even those that may not have a formal leadership role. Distributed leadership paired with teacher leadership for shared values produces a perception of shared leadership. Shared leadership has the potential for increased teacher voice and agency and aligns with the components of the MCE. This evaluation's findings can be used to inform best practices for evaluation and continuous school improvement efforts. Suggestions for improvement as a result of this evaluation included expanding formal opportunities within professional networks for teachers to specifically discuss and target innovative practices for problem-solving around individual student needs. In addition, non-classroom teachers can be developed to build capacity for innovative instructional leadership throughout the school setting.

Network analysis can provide unique opportunities to further examine teacher voice and agency within professional networks that engage in collaborative evaluation. While this study focused on the singular, closed network of the school site, pairing SNA with interviews revealed the potential for further investigation into teachers' broader professional interests and influence that expand beyond the school site, including inquiry and practice for innovation. Collaborative evaluations can focus teachers' sense of identity as a leader and might offer broader platforms for teacher voice, agency, influence and efficacy. A collaborative evaluation of educational networks using the MCE framework can lead to better questions, solutions, and outcomes. The MCE framework helps to engage a diverse range of stakeholders, foster collaboration and shared ownership, and generate high-quality information for decision-making.

Conclusion

In this study, key stakeholders were willing to work collaboratively with the investigator because they were part of the decision-making process, and their opinions were valued. This successful collaboration demonstrates the

usefulness of the MCE as a framework for school evaluation and improvement planning. The key strengths of the MCE model include its ability to account for the nature of the work and the full range of stakeholders involved in the evaluation process, ensuring that all perspectives and experiences are considered. The collaborative approach resulted in greater access by the evaluator to the daily reality of school processes and functions. Moreover, the MCE model facilitates shared ownership of the evaluation process, which results in a higher quality of information for decision-making and increased receptivity to the findings. If not for a collaborative evaluation approach, dominant members of the network may have been missed, and their presence overlooked in the final results. The MCE enhanced the quality of the evaluation by establishing an open and shared evaluation environment while attending to the intended and unintended effects of the collaborative relationships (Rodríguez-Campos et al., 2010). Additionally, this model helped users to understand and account for the nature of the work and the full range of stakeholders in the collaborative evaluation process (Rodríguez-Campos et al., 2010). The MCE framework provides a valuable tool for improving the quality of collaborative evaluations and can help to build trust and foster stronger working relationships between stakeholders, ultimately leading to sustained improvements over time.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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