Community and Collaboration: The Effects of Participation in an Online Leadership Cohort on the Self-Efficacy of School Leaders

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Community and Collaboration: The Effects of Participation in an Online Leadership Cohort on the Self-Efficacy of School Leaders

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Abstract

This action research project was conducted to see if participation in an online leadership cohort would affect the self-efficacy of school leaders. Using an online platform, seven Montessori heads of schools from the United States gathered to discuss topics of greatest importance to them. The schools represented were public, private, non-profit, proprietary and charter. The heads of schools ranged in experience from 3 to 33 years. They met once a week, for four weeks, for an hour each session to discuss four topics most relevant to the group, as determined by their suggestions. Data was collected using pre and post intervention self-assessments and surveys, as well as field notes, observation records, and tally sheets taken during the four leadership cohort sessions. The researcher facilitated the group and guided the conversations with prompts and continued questions. The heads of school asked questions of each other, offered answers, and shared resources. The intervention was shown to increase the self-efficacy of some participants, decrease the self-efficacy of some participants, and not affect the self-efficacy of others. However, the participants all reported feelings of gratitude for the opportunity to come together, citing community and collaboration as the most positive rewards.

Keywords: online leadership cohort, self-efficacy, head of school, community, collaboration
Self-efficacy, or the belief in one’s abilities, drives many decisions, influences relationships, and in part, self-efficacy shapes lives. It can frame how a person weighs a decision, or interacts with friends, family, and colleagues, and accepts or denies challenges that lead to successes. In school leadership, self-efficacy can drive decisions that impact teachers, students, and families alike. Decisions that involve student supports, parent education, staffing, and financial stability are all influenced, in part, by a head of school’s self-efficacy.

Many principal training programs focus on the importance of building self-efficacy in school leadership. But opportunities for school leaders to build self-efficacy once they are on the job, occur less frequently. Responding to feedback received from heads of schools who expressed feeling isolated in their work, often solving problems without a sounding board, mostly without personal connection to other heads of school who might share some of the same challenges, the Leadership Cohorts were formed. A group of seven heads of school were to come together once a week for an hour each time, using an online video/teleconferencing platform. These sessions were to give the participants the opportunity to talk specifically about topics of interest to them. Creating meaningful ways for school leaders to connect and collaborate, two ways that self-efficacy is built and supported, is a crucial task and one some educational organizations are undertaking. Designed to give heads of schools a forum to discuss pressing issues of the work, to share strengths and challenges, to pose questions, and also seek answers, these Leadership Cohorts might even build self-efficacy.

Building self-efficacy starts with trust. Trust between a parent and a child, a teacher and a student, or a leader and an employee. Whether a parent coaxing their
infant forward knowing their legs have the strength to walk, or the teacher drawing out
the ability of a student who is unsure, or an adult growing more confident as a peer turns
to them for advice. Peer to peer self-efficacy building also begins with trust. It is no
small thing to believe in someone, wholly and completely. It is no small thing that
someone believes in your abilities so much so that they convince you to believe in
yourself. Feeling self-assured, confident, comfortable in one’s own knowing, is an
essential part of growth and development.

In school leadership, this thought of self-efficacy being built on a foundation of
trust, translates to a head of school trusting and believing in the ability of their teachers,
and a teacher trusting and believing in the ability of their students. It is also translated to
the families, support staff and greater school community. But again, where are the
opportunities for heads of schools to collaborate with other heads of schools? The work
of a school principal can sometimes feel isolating. It can be lonely at the top. The job
description of a school leader is to support the teachers in your classrooms, the students
in their classrooms, the parents and families in the school community. But where does a
leader turn for such support?

Unique to the position I hold as a school improvement manager in the Montessori
world, I spend my days talking about identifying and improving school quality with
heads of schools from around the world. There are a couple of observations from my
work that have informed this study. The collective wealth of knowledge and wisdom that
head of school holds is great. Second, heads of schools are grateful to have someone ask
them what they need to be successful in their work. One of the problems this research
will seek to affect is creating a space where heads of school can ask questions and have
assistance developing answers. This in turn creates an opportunity to build self-efficacy. Another problem this research seeks to affect is creating a space where heads of school can learn from one another, a space where heads of school can develop confidence in their work and help others do so. No head of school should function in isolation, though many do. Creating networks of leaders doing the same work in different places allows for shared learning and community building, and potentially building self-efficacy.

The purpose of this research was to determine how participation in an online leadership cohort will affect the self-efficacy of school leaders. What would happen if the research created a way for school leaders to share what they know, and learn from other school leaders in a safe and supportive environment? One hypothesis is that as school leaders help each other to build self-efficacy, the quality of the work their work increases, thereby increasing the quality of the work environment for the teachers, students, and overall experience of the school for families. The development of self-efficacy in school leaders is critical. The confidence and self-efficacy of the school leader impacts everything from teacher satisfaction to student learning outcomes (Hesbol, 2019).

This research examines what happens when school leaders have the opportunity to share the wealth of information they hold and the experience they draw from with others. When a school leader with many years of experience has the opportunity to see the work through the eyes of someone new to the profession, and likewise for a young leader to see the perspective of someone with many years on the job. Both have something valuable to share with the world, and with the field. Both have experienced challenges and hopefully some successes as well. Learning is not only what one person
experiences and internalizes, but also what one gains listening to the experiences and internalizations of others.

**Theoretical Framework**

I utilized Albert Bandura’s theory of self-efficacy as the lens through which to examine my research topic of how the self-efficacy of a school leader could be affected by participation in an online school leadership cohort. Albert Bandura developed the self-efficacy theory (as part of his social cognitive theory) in the late 1970s, and fifty years later, it remains one of the most referenced theories in psychology. Self-efficacy is the confidence one has in their abilities to accomplish goals and solve problems. Self-efficacy can determine how people feel or think, and in turn, how they motivate themselves and how they behave (Bandura, 1994). Individuals with strong self-efficacy are more apt to meet a challenge head-on, whereas those with weak self-efficacy might shy away from difficult tasks (Bandura, 1994). People are not born with self-efficacy; it is something that develops over time (Bandura, 1977).

Research has shown there are four distinct ways to build self-efficacy (Bandura, 1977), the first of which is experiences with mastery or repeated opportunities to feel success. The second way is through social modeling or actively preparing for a situation; the third is by social persuasion or watching others experience mastery and vicariously absorbing efficacy. And fourth, through states of physiology/moods or being led into believing one can solve a problem/overcome a challenge (Bandura, 1977). The building of self-efficacy can happen in many different settings and serves individuals in many fields.
This belief in oneself is critical for school leadership as well as school teachers. According to a study done by the Wallace Foundation, “Leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school” (Leithwood, Seashore Lewis, Anderson, & Wahlstrom, 2004, p.5). A school leader needs to be confident in their abilities to lead effectively in order to support and motivate teachers, build a culture of collaboration, and generate enthusiasm for the shared vision of the school. Similarly, a school teacher needs to be confident in their abilities to teach effectively in order to create a positive learning environment for all students and build relationships with families. When teachers and work together, collective teacher self-efficacy can have a marked positive impact on student learning (DeWitt, 2019).

Collective efficacy is the overall feeling of confidence in a group’s abilities as shared by a group of individuals. Collective efficacy develops when the concerted efforts of a group yield a result that is validated through data and then recognized as such, through evidence of impact. Collective efficacy is a social resource that renews, not depletes, with use (Bandura, 1993). School leadership can influence collective efficacy by encouraging collaboration and creating high levels of trust amongst staff for this collaboration to take place (Donohoo, Hattie, & Eells, 2018). School leaders can help to build efficacy in teachers, and can also build efficacy in the school community by controlling the narrative of the school. For example, school leaders who talk about high expectations, growth, and what it means to be a good learner as opposed to bus timetables, test schedules and compliance to procedures, have the opportunity to shape what learning looks like and how the school defines success.
With this in mind, some principal preparation programs recognize the importance of principal self-efficacy (Versland, 2016), and offer opportunities for students to build self-efficacy before assuming a leadership position. These preparatory programs understand that when a school leader feels confident or has strong self-efficacy, they are more likely “to set increasingly challenging goals and exceed their initial goals by a significant margin” (Abusham, 2018, p.65). They are also more likely “to modify intermediate goals & strategies to respond to the needs of the individuals whom they lead” (Abusham, 2018, p.66). And they are likely to reframe any failure as a challenge to overcome. But how does a school leader, who has already assumed a leadership position build self-efficacy or engage their self-efficacy?

In summary, this action research study aims to showcase the human potential of each of the participants by creating an opportunity to grow and learn. It aims to offer each of the participants experience in building self-efficacy by being part of a small, supportive cohort, who will hear them deeply, listen to their challenges and celebrate their successes, and ultimately affect their self-efficacy.

**Review of Literature**

“Joy, feeling one’s own value, being appreciated and loved by others, feeling useful and capable of production are all factors of enormous value for the human soul.”

( Montessori, 1973, p.128)

Children and adults alike need opportunities to learn, grow, and share. The passage to mastery is often marked by an exclamation of confidence. *I did it!* This feeling can lead an individual to mastery of another concept or skill by influencing how they feel about their ability. *I did it once; I can do it again!* Which after it repeats
several times, the exclamation sounds more like: *I can do anything!* Albert Bandura (1994) defined self-efficacy as “people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives” (p.1). The literature reviewed examines the definition of self-efficacy, how to develop self-efficacy, the importance of self-efficacy specific to the field of education, the topic of collective efficacy, building and coaching teams, and the use of a virtual setting to gather team members.

**Developing Self-Efficacy**

The term self-efficacy is essentially the confidence one has in their own abilities. Self-efficacy helps to determine how one will react to challenges and accomplish goals. People with high assurance in their abilities set challenging goals for themselves, and commit to them fully. While people with low assurance have low aspirations, and a weak connection to their goals. (Bandura, 1994).

Building self-efficacy starts in infancy, when babies explore cause and effect experiences (Bandura, 1994). The parents or caregivers of infants reinforce efficacious behavior by providing a rich environment for their infants to explore. Young children build self-efficacy when developing physically, socially, and cognitively. The family and peers of young children can reinforce the growth by offering an opportunity for the young child to measure their capabilities.

As children grow, their learning environments shift from the home to school. “School is the place where children develop the cognitive competencies and acquire the knowledge and problem-solving skills essential for participating effectively in the larger society. Older children gain validation of competencies in the school setting, where
mastery of skills grows self-efficacy. Adolescents experience great change and challenge and depend on the self-efficacy they have built through prior mastery.

As young adults move into adulthood, self-efficacy is built through partnerships and relationships, both professional and personal. For older adults, “perceived self-efficacy can contribute to the maintenance of social, physical, and intellectual functioning over the adult life span (Bandura, 1994, p.14).

Bandura (1977) stated that there are four main sources of influences to building self-efficacy: performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal. For each of these sources, there are many different modes of induction or means of acquiring the experience. Building self-efficacy through performance exposure, performance desensitization, participant modeling, and self-instructed performance are all types of performance accomplishments. “The most effective way of creating a strong sense of efficacy is through mastery experiences.” (Bandura, 1994) Vicarious experiences can also influence self-efficacy through live modeling and symbolic modeling, such as observing others performing challenging activities without adverse consequences. Building self-efficacy through vicarious experiences is the idea that if others can do it, so can I. Verbal persuasion is a third source of self-efficacy and can be affected through suggestion, exhortation, self-instruction, and interpretive treatments. Lastly, self-efficacy develops with emotional arousal through attribution, relaxation, as well as symbolic exposure and desensitization.

**Self-Efficacy in School Leadership**

Self-efficacy is an essential trait in education, as the two top predictors of student success are the quality of teachers and the quality of school leadership. (Seashore Lewis,
Leithwood, Wahlstrom, & Anderson, 2010; Leithwood, Seashore Lewis, Anderson, & Wahlstrom, 2004). High amounts of self-efficacy in both teachers and school leaders directly correlate to the quality of their work.

A school leader that embodies high amounts of self-efficacy demonstrates a sense of accomplishment and personal well-being, self-assured in their capabilities they approach difficult tasks as challenges to overcome (Patterson & Kelleher, 2005). In sharp contrast, a leader that embodies low amounts of self-efficacy might approach challenges in their work as problems best to be avoided. Furthermore, a leader with high amounts of self-efficacy recovers quickly from setbacks; and understands any failures to be insufficient effort or deficient knowledge, which can be remedied by trying harder and gaining skills. Though it is important to note that for mastery experiences to be truly meaningful and efficacy building, they need to be challenging (Patterson & Kelleher, 2005).

The efficacy of a school leader has been shown to correlate to student outcomes, community well-being, and overall teacher efficacy. In the study by Hesbol (2019) on the influence that principal self-efficacy has on the school improvement, the findings show a correlation between high levels of principal self-efficacy and fostering a collaborative school climate and a shared vision for the future. In Versland’s study (2015) on the importance of exploring self-efficacy in education leadership programs, they offered three recommendations for better preparing school leaders; create instructional activities that foster mastery experiences, design internships of length to build relationships, and advance program rigor to ensure that students have opportunities to build responses to manage challenges.
Collective Efficacy

Donohoo, Hattie, and Eells (2019) listed collective teacher efficacy as the most influential factor of student achievement, more prominent than prior achievement, socioeconomic status, or home environment (the three other factors closest in influence). Collective efficacy is built in much the same way as an individual’s self-efficacy with a couple of added factors.

As researched by Bryan and Kaylor (2018), and developed by Michael Fullen, five conditions contribute to building collective-efficacy in a group. The team must create a culture of trust, an expectation of transparency, and an environment of nonjudgment. The team must also be specific in terms of practice, and clear on the particular evidence the team will collect. Dewitt (2019) looks at self-efficacy as the confidence one has in themselves and their abilities; collective efficacy is the confidence we have in the group to make a difference.

Collective efficacy is a powerful tool for building a school community, as it is the belief of a group about their capabilities to produce a desirable end-result.

Building and Coaching Teams

For this research, I will be coordinating, convening, and facilitating the discussions. I will assume an active role as a coach of reflective thinking (Bryan & Kaylor, 2018). Aguilar (2013) named this coaching facilitative, which means that the primary focus of the coach is supporting the participant to learn new ways of thinking and being, which will in-turn grow and awareness that will influence their behavior.

When creating trust in the group, the facilitator will clearly state the purpose of the convening is to share the varied experiences and wealth of knowledge that all
participants bring to the table, both in strengths and challenges. By encouraging all participants to practice deep, authentic reflection, the coach will prioritize listening, paraphrasing, and using questions to clarify or expand the thinking of the cohort, creating transparency (Bryan and Kaylor, 2018).

When creating a climate of nonjudgement, the facilitator will allow each of the participants time to hear their words and clarify their intentions, by asking open-ended questions that assume positive intent, and by making sure that there is equity in the group with opportunities to speak. The facilitator/coach will ask reflective questions about practical data and help collaborators to set specific, data-informed, measurable goals for the convening. The coach will also set the expectation that the participants make their progress visible to each other throughout the study.

Lastly, in terms of specific evidence that the cohort will collect, the coach will pose reflective questions that encourage the cohort to learn from each other by deprivatizing their practice and sharing their successes and challenges. Aguilar (2017) stated that coaches do their best work if those involved are there voluntarily. In other words, the participants should want to take part in the cohort and be eager to grow. Similarly, a best practice when coaching is allowing leaders to set their own goals, which then allows each individual to feel intrinsically motivated to pursue those goals.

**The Cohort Sessions**

It is important for participants in any coaching session, to have an understanding of and willingness to grow and change, as well as trust in their coach or facilitator (Bryan and Kaylor, 2018). Beyond that, participants need to know what the purpose of the coaching will be. The coach and the participant come together in supportive, shared
leadership, which will focus on autonomy, self-management, empowerment, and cooperation. (Rock, Zigmond, Gregg & Gable, 2011).

According to authors Rock, Zigmond, Gregg and Gable, 2011, effective virtual coaching has four demonstrable skills. The skills include saying more and saying less, setting and evaluating goals, personalizing feedback, and remaining positive. Every virtual interaction is different based on the participants and the subject matter being addressed, but virtual coaching based on respect can have lasting positive effects (Rock, Zigmond, Gregg & Gable, 2011). As the sessions for this research focus mostly on participants sharing challenges and then others suggesting solutions, naming the four skills above as guidelines for all participants is essential. Each of the cohort participants has valuable experience to share, and it is in this sharing that we will look for demonstrations of self-efficacy.

Conclusion

The subject of self-efficacy and the importance of self-efficacy in education are well-researched topics. There has also been research done on how to build the self-efficacy of students in educational leadership programs, and how to build and coach teams, as well as how to convene groups online. The following action research aims to stand on the shoulders of the aforementioned research and explore how participation in an online leadership cohort, will affect the self-efficacy of school leaders.

Methodology

The approach used for this study was experimental in design. It used quantitative data collected pre-cohort sessions and post-cohort sessions via Google Form surveys to determine whether participation in an online leadership cohort had an effect on the self-
efficacy of school leaders. It also used Tally sheets during the sessions, to determine the level of participation for each of the different session topics. Additionally, the approach used qualitative data collected during the four sessions in Field Notes and Observational Forms.

What effect does participation in an online leadership cohort have on the self-efficacy of a head of school? This study on building self-efficacy in school leadership addressed a problem the researcher saw, heads of schools with vast experience, a veritable wealth of information, with few ways to share what they know or ask questions to others in a small, personal setting. The intervention the researcher chose was the formation of the online leadership cohorts; a series of four sessions with a specific format, facilitated by the researcher and her colleague, who acted as coaches. They moved the conversation forward, asked new questions to the group, offering prompts when the conversation slowed, but did not offer advice or insight. Instead the researchers trusted that the answers to the questions being asked were to be found by the individuals asking them if the right guidance was offered.

The population studied was seven heads of Montessori schools from the United States. This research study took place over the course of four weeks. The leadership cohort met once a week, on Wednesdays, from 2:30-3:30pm EST. Initially, an invitation to AMS Pathway participating schools that had done their initial Pathway consultations with me went out via email, along with a letter of consent (Appendix A) that described the research project. Ten heads of school volunteered to participate, and submitted their top three choices for time of day, and day of week for the cohort to meet. The researcher
tallied the day and time that most could participate. After that, seven were able to participate and the cohort was formed.

Topics to be addressed by the cohort over the four weeks were determined by the participating heads of schools. When they returned their signed letter of consent to the researcher via email, they also submitted their top choices for topics to cover in the cohort. The email asked the participants to suggest topics that were most present in their work as challenges, topics they wanted to discuss in depth and hear from other heads about. Common threads emerged as the researcher reviewed the suggestions.

The researcher looked at each of the surveys to determine which four topics were most commonly reported as topics of interest to discuss. The four topics were: Supporting Students with Behavioral Challenges, Parent Education, Staffing, and Financial Stability & Sustainability. In an email prior to the first session, the researcher outlined the four topics and the dates the cohort would be addressing each of them. The researcher also included directions to reflect on the topics and be prepared to share both their perceived challenges and successes regarding each topic with the group.

Each cohort session started with a round of introductions, and a review of the purpose of the cohort meeting. The researcher explained that the sessions were designed as safe spaces for the participants to gather, share openly and honestly, learn about themselves, learn from each other, build community and engage collaboratively. The researcher reviewed housekeeping notes like muting one’s mic when listening in order to offer the best sound to the speaker and introducing one’s self when speaking in order to help those teleconferencing in to understand who had the floor. The sessions then began with the researcher offering a short centering activity to bring concentration and
awareness to the group. The guided activity instructed the participants to put their feet flat on the floor, find a comfortable place in their seat, feel their lungs expand and contract, listen to their breath rise and fall, and then open to their eyes to begin the discussion. The researcher read specific excerpts from the surveys that helped to refresh the memories of the participants as to their thoughts in relation to topics, and then asked for someone to state their challenges to the group. The participants then took turns posing questions, offering answers, suggesting articles and other resources, listening and speaking, as the conversation continued. At points the conversation became quiet, and the researcher read another excerpt from the surveys to help start the conversation from a different perspective. The researcher also intervened when a question appeared to go unanswered, by bringing the group back to the question posed and asking for the group’s help to support the participant who posed it.

The researcher collected qualitative and quantitative data before, during, and after the four cohort sessions over the course of four weeks. Prior to the first session, the researcher administered two surveys: The Principal Sense of Efficacy Self-Assessment (Appendix B) and the Initial AMS Leadership Cohort Self-Efficacy Survey (Appendix C). The Principal Sense of Efficacy Self-Assessment, adopted from Dr. Tschannen-Moran (2004), measured the general perceived efficacy of the school leader. The scoring of the assessment was done in three parts, questions 1-6 measured efficacy for management, questions 7-12 measured efficacy for instructional leadership, and questions 13-18 measured efficacy for moral leadership. Both surveys were completed using a Google Form that collated data in a usable spreadsheet. The Initial AMS Leadership Cohort Self-Efficacy Survey was created to measure the participants efficacy
for each of the four topics of the sessions: 1) Supporting Students with Behavioral
Challenges, 2) Parent Education, 3) Staffing, and 4) Financial Stability and
Sustainability. A prompt was offered in both surveys for clarity: *Please respond to each
of the questions by considering the combination of your current ability, resources, and
opportunity to do each of the following in your present position.* The questions were
worded in the following manner; “In your current role as principal, to what extent can
you…” Participants answered each question using a scale from 1-9, 1 meaning “none at
all” and 9 meaning “a great deal.” Each of the cohort participants completed both
surveys prior to the first cohort session.

During the four cohort sessions, the researcher collected Field Notes and
Observational Records (Appendix D) and completed a Tally Sheet (Appendix E). The
Field Notes captured qualitative data such as the topic covered during each of the
sessions as well as the subtopics. The researcher noted the initial prompt as well as the
invitation to the topic of the discussion, the subsequent questions that were asked, and the
answers that were suggested. The field notes also captured any resources that were
suggested and at the request of the leadership cohort, created a Google Drive folder
where the participants could link articles, documents, photos of book titles, school
policies and other resources that were shared. These notes were collected to show how
school leadership participated in the conversation and demonstrated efficacy. The Tally
Sheet captured how many times each participant asked questions or suggested answers.
This data showed how engaged participants were in the topics covered in the sessions.

After the four sessions, the researcher administered The Principal Sense of
Efficacy Self-Assessment and the Initial AMS Leadership Cohort Self-Efficacy Survey
again. This post-session data was compared to the pre-session data. To analyze the data, a series of four graphs that represented the topics and how many times a participant offered a question or an answer in response to that topic, were created. These graphs were compared to the data collected in the pre and post cohort sessions. The data from the survey showed which of the subject areas, if any, the participants experienced a pattern of growth in regards to self-efficacy identified in relation to each of the topics. The data was also used to establish whether there were any overall trends in self-efficacy growth after participation in the online leadership cohort.

Analysis of the Data

The purpose of this study was to examine whether participation in an online leadership cohort could affect the self-efficacy of heads of schools in the study. The research design was experimental, data on perceived self-efficacy, both in general as a school leader and specific to the four session topics, was gathered both before and after the sessions. Qualitative and quantitative data was gathered over the course of four weeks, during each the four online sessions.

The participants in the study were heads of Montessori schools in the United States. There were seven in total, six of them were female, one was male. The participants ranged in years of experience from 3 years to 33 years as a head of school. All but one of the participants held Montessori credentials. Specifically, the group held four Administrator credentials, one Elementary 1/Elementary 2 credential, two Early Childhood credentials, and one Toddler credential. Every participant had earned a Bachelor’s degree, three had also earned a Master’s degree.

Pre-intervention Data Collection
The Principal Sense of Efficacy Self-Assessment and Leadership Cohort Self-Efficacy Survey were both given pre-intervention, before the sessions began. The results were varied.

The 18 questions of the Principal Sense of Efficacy Self-Assessment (Tschannen-Moran, 2004) examined three themes of efficacy: moral leadership, instructional leadership, and management. Each of the average scores for the themes were determined by the self-assessment of the participant in relation to the six questions of that theme.

The participants rated their perceived self-efficacy on a scale of 9, with 1 representing “None at All”, 5 representing “To Some Degree” and 9 representing “A Great Deal.” The average perceived self-efficacy of the participants in moral leadership was 7.1, which was also the group’s average in instructional leadership. In terms of management however, the group’s average was slightly higher at 7.2 on a scale of 9. There was little to no correlation between the perceived self-efficacy to other factors, such as the number of years a participant had held the position of head of school, the type of Montessori credential a participant held, or highest college degree a participant earned.
Figure 1. The results of the pre-intervention Principals’ Sense of Efficacy Self-Assessment with participant details

The Leadership Cohort Self-Efficacy survey showed that on average, the participants reflected a confidence in their ability to facilitate support for students with behavioral challenges of 6.57 on a scale of 1-9 (the same scale as used in the self-assessment). There was an elevated average of the perceived self-efficacy of the group for their ability to facilitate proper staffing, with the average of 7.86 on the scale. Participants on average reflected the greatest confidence in their ability to facilitate parent education with an average of 8.14 and their ability to facilitate the financial stability and sustainability of their schools.
Table 1

Results from the Leadership Cohort Self-Efficacy Survey given pre-intervention

<table>
<thead>
<tr>
<th>Questions</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>Avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent can you facilitate support for students with behavioral challenges?</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>6.57</td>
</tr>
<tr>
<td>To what extent can you facilitate parent education?</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>8.14</td>
</tr>
<tr>
<td>To what extent can you facilitate proper staffing in your school?</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td>7.86</td>
</tr>
<tr>
<td>To what extent can you facilitate the financial stability and sustainability of your school?</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>8.14</td>
</tr>
<tr>
<td>Average Perceived Self-Efficacy for each participant</td>
<td>6.25</td>
<td>7.5</td>
<td>8.5</td>
<td>8.0</td>
<td>8.5</td>
<td>8.0</td>
<td>7.0</td>
<td></td>
</tr>
</tbody>
</table>

Scale 1=None at All, 5=To Some Degree, 9=A Great Deal

Both surveys established baseline data for the study, as individual participants and as a group as a whole. The two surveys served as a means to understand the level of confidence each of the participants identified with in terms of the four session topics, and the three different facets of the work of a school leader; moral leadership, instructional leadership, and management.

Live-Session Data Collection

The researcher took field notes and observational records during each of the four sessions of the intervention. The examples of participation were classified into three categories; questions asked, answers offered, and resources suggested.
Table 2

Examples of Field Notes/Observational Records

<table>
<thead>
<tr>
<th>Questions Asked, Answers Offered, &amp; Resources Suggested</th>
<th>Session 1: Supporting Students with Behavioral Challenges</th>
</tr>
</thead>
</table>

*Example Question from P6:* We are struggling right now trying to figure out how we can be inclusive and what that means. Do you have thresholds? If so, how do you measure the threshold?

*Example Answer from P4:* We are able to look at it on a case by case basis, we do not have a threshold, we consider each case. And that always starts with the question; is this child being served?

*Example Resource from P3:* We are currently engaged in a year of mindfulness training. We have a trainer that works with our staff on a weekly basis, and our parents on a monthly basis.

In addition, the researcher tallied the number of participatory comments, which included questions asked, answers offered and resources shared, for each of the heads of school during each of the sessions. The table below is a tally of the participatory comments from the Session 1: Supporting Students with Behavioral Challenges. This session produced 4 questions, 13 answers, and 10 resources. Indirectly, the number of questions asked by a single participant did not correspond to growth in self-efficacy for that participant. For example, in Session 1, participant 1 and participant 7 both asked 2 questions. In their post-intervention surveys, participant 1 reported an increase in perceived self-efficacy and participant 7 reported the same amount of perceived self-efficacy.

Session 1 had a total of 27 participatory comments, Session 2 had 36, Session 3 had 16, and Session had 42. Session 2: Parent Education and Session 4: Financial Stability
had the highest total number of participatory comments, which did not correlate to the greatest increase in self-efficacy of the group.

![Participatory Comments for Each Cohort Session](image)

*Figure 2. The number of participatory comments for each of the cohort sessions*

**Post-Intervention Data Collection**

After the sessions, the participants completed the Principal Sense of Efficacy Self-Assessment and Leadership Cohort Self-Efficacy scale surveys again. The results from the first surveys were not shared with participants, so the second self-assessment and survey were given exactly as the first.

The Post-Intervention Principal Sense of Efficacy Self-Assessment results were varied. This chart examines the average efficacy of the group in relation to the three sections of the Principal Sense of Efficacy Self-Assessment: Management, Instructional
Leadership, and Moral Leadership. The efficacy average of the group before the intervention took place was measured against the efficacy average of the group after the intervention. The Moral Leadership level, as noted, remained the same in both the pre and post intervention surveys. The Instructional Leadership efficacy average did increase slightly. The Management efficacy average increased the most of the three sections.

![The Principals’ Sense of Efficacy Self-Assessment](image)

*Figure 3. Pre and post intervention perceived self-efficacy from The Principals’ Sense of Efficacy Self-Assessment*

The Leadership Cohort Self-Efficacy Surveys reported the self-efficacy of participants in regards to the four topics of the sessions, Supporting Students, Parent Education, and Financial Stability/Sustainability. The first session topic, Supporting Students is depicted in the next chart. The lighter green measurement is the self-reported efficacy of the participant before the cohort met, the darker green measurement...
afterwards. The surveys were given four weeks apart. For three participants, their level of self-efficacy in relation to Supporting Students stayed the same, for three participants their level of self-efficacy increased, and for one participant, their self-efficacy decreased. The scale on which self-efficacy was measured went from 1=None at All to 9=A Great Deal.

Figure 4. Pre and post intervention comparison for Session 1: 3 participants reported an increase in self-efficacy, 3 participants no change, and 1 participant a decrease.
Figure 5. Pre and post intervention comparison for Session 2: 3 participants reported an increase in self-efficacy, 3 participants no change, and 1 participant a decrease
Figure 6. Pre and post intervention comparison for Session 3: 3 participants reported an increase in self-efficacy, 2 participants no change, and 2 participants a decrease.
The comparative data of the Leadership Cohort Self-Efficacy surveys showed that after the Session 1: Supporting Students, 3 of the participants reported an increase in self-efficacy, 1 reported a decrease, and 3 reported their self-efficacy remained the same. The data from Session 2: Parent Education also showed an increase in self-efficacy for 3 participants, a decrease for 1, and 3 that remained the same. The data from the last two sessions changed. In Session 3: Staffing, the researcher found 3 participants reported an increase, 2 a decrease, and 2 remained the same. In Session 4: Financial Stability, the researcher found that 2 experienced an increase, 3 a decrease, and 2 remained the same.
When looking at the results of the perceived self-efficacy over the course of all four sessions, there was no correlation between how much self-efficacy a participant reported and the number of years the head of school had been in the position. For the participants who had been heads of schools for 0-6 years, one increased in perceived self-efficacy, one remained the same, and two decreased. For the participants who had been heads of school for 7-12 years, one increased in perceived self-efficacy and one decreased. And for the participant who had been a head of school for 13-99 years, one decreased in perceived self-efficacy.

This finding suggests that all participants, regardless of how long they have been in a position, are affected differently by participation in a leadership cohort, and there is no correlation between perceived self-efficacy and the number of years a participant has been a head of school.

**Conclusions**

The purpose of this research was to determine the effect, if any, the participation in an online leadership cohort would have on the self-efficacy of school leaders. The cohort met once a week, for four weeks, for an hour each session. The researchers collected both qualitative and quantitative data over the course of the four-week intervention. Pre-intervention the participants completed both a Principals’ Sense of Efficacy Self-Assessment which measured moral leadership, instructional leadership, and management of participants. The participants also completed a Leadership Cohort Self-Efficacy Survey which measured the confidence participants had in their abilities to affect the session topics in their schools: Supporting Students with Behavioral Challenges, Parent Education, Staffing, and Financial Stability & Sustainability. Participants also completed
these two assessments after the intervention. During the four sessions the researchers collected field notes and observational records that recorded the topics of the sessions and the prompts that were introduced, the questions asked, the answers offered, and the resources shared. The researchers also used a tally sheet to record how many questions were asked, how many answers were offered and how many resources were shared.

The data revealed varied results. The following three tables conclude three findings. First, in terms of The Principals’ Sense of Efficacy Self-Assessment, the average self-efficacy of the group remained the same or increased by .2-.3. Next, in terms of the Leadership Cohort Self-Efficacy Survey, the majority of the participants reported their self-efficacy in relation to the session topics remained the same or increased. Further research would need to be done to fully understand the reason for a decrease in self-efficacy but the hypothesis has been suggested that working on a particular area of growth can make a person more aware and critical, therefore the self-assessment can change as they explore the area more deeply. Lastly, in terms of data collected during the interventions, there were 26 comments made in Session 1, 35 comments in Session 2, 17 comments made in Session 3 and 42 comments made in Session 4. Each of the sessions varied in the number of questions asked, answers offered, and resources shared.

Table 3

*The Principals’ Sense of Efficacy Self-Assessment*

<table>
<thead>
<tr>
<th></th>
<th>Moral Leadership: The average of the seven participants remained the same.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>When participants were asked to self-assess their abilities in terms of moral leadership, instructional leadership, and management both pre and post intervention, the results were varied:</strong></td>
</tr>
</tbody>
</table>
Instructional Leadership: The average of the seven participants increased from 7.1 to 7.3.
Management: The average of the seven participants increased from 7.2 to 7.5.

Table 4

The Leadership Cohort Self-Efficacy Survey

When participants were asked to self-assess their abilities in terms of Supporting Students, Parent Education, Staffing and Financial Stability both pre and post intervention, the results were varied:

<table>
<thead>
<tr>
<th>Session</th>
<th>Stayed the Same</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1: Supporting Students</td>
<td>43%</td>
<td>43%</td>
<td>14%</td>
</tr>
<tr>
<td>Session 2: Parent Education</td>
<td>43%</td>
<td>43%</td>
<td>14%</td>
</tr>
<tr>
<td>Session 3: Staffing</td>
<td>29%</td>
<td>43%</td>
<td>29%</td>
</tr>
<tr>
<td>Session 4: Financial Stability</td>
<td>29%</td>
<td>29%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Table 5

The Amount of Data Gathered During the Four Sessions

During the four sessions, Supporting Students, Parent Education, Staffing and Financial Stability participatory comments were charted and keyed as questions asked, answers offered, or resources shared:

<table>
<thead>
<tr>
<th>Session</th>
<th>Total Participatory Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1:</td>
<td>26</td>
</tr>
<tr>
<td>Session 2:</td>
<td>35</td>
</tr>
<tr>
<td>Session 3:</td>
<td>17</td>
</tr>
<tr>
<td>Session 4:</td>
<td>42</td>
</tr>
</tbody>
</table>

From this data, three conclusions were drawn. Firstly, participation in this leadership cohort affected everyone differently. Some participants reported an increase in their perceived self-efficacy, some reported a decrease, or no change at all. Secondly, some participants perceived a decrease in self-efficacy, which could hypothetically mean the participants grew a larger awareness of the topic, therefore reevaluating what they
thought they knew about the topic prior. Lastly, all participants shared they were glad they chose to participate.

Bandura (1994) discussed four ways to build self-efficacy; through mastery experiences, through vicarious experiences provided by social models, through social persuasion, and finally through reducing people’s stress reactions and their negative emotional proclivities and misinterpretations of their physical states. In this leadership cohort each of these four means of building and/or solidifying self-efficacy were present. There were opportunities for participants to share what they knew to be successful, as well as opportunities for others to vicariously experience those successes through storytelling. There were moments in each of the sessions where the group was able to help an individual find an answer to a question, or help an individual look at a challenge in a more positive light.

Aguilar (2013) discussed using facilitative coaching as a means to provide support to school leadership through the participants learning new ways of thinking and being which in turn grows an awareness that will influence behavior. The researcher employed several of the techniques of facilitative coaching which included building on the participant’s existing skills, knowledge and belief as opposed to sharing expert knowledge. The researcher provided scaffolding for each of the participants to have discussion about the session topics, to keep the conversation moving forward. The researcher focused on the exploration of the group in regards to how they think about the topics and employing reflective practices to guide participants to self-realizations and learning.
Participation in a leadership cohort is an opportunity for heads of schools to gather around topics of greatest importance to their work. Using an online platform allows heads from different schools in different places in the world to participate, ask questions, offer answers, and share resources. While the results were varied, it is clear that the participants all reported positive feelings for being a part. Some of the feedback included:

Table 6

**Examples of Participant Feedback**

When participants were asked to craft a statement about the sessions that could be published, this is what was submitted:

**Example 1:** "Collaboration between Montessori schools often feels abstract, but the AMS Leadership Cohort has made collaboration a concrete experience."

Example 2: "The value gained from being able to share among a group of your peers from all over the country is humbling, motivating and inspiring."

**Example 3:** "I’m so glad that I took the time to participate in the AMS Leadership Cohort. I feel more connected to the Montessori community and more empowered to make educated decisions for my school."

**Example 4:** "Easy, accessible way to keep Heads of Schools connected. This is an essential component in strengthening our shared vision of high-fidelity Montessori and the tools to conquer day to day challenges."

**Example 5:** "I appreciated the transparency of the group and the opportunity to discuss challenges openly with other heads of school."

**Recommendations**

Based on the data from the surveys and the insight of the participants, there are two recommendations from the researcher. Firstly, this study shows, the positive effects participation in leadership cohorts can have on a school leader. The research
suggests that leadership cohorts could provide a critical framework and collaborative environment for heads of schools. The development of further online leadership cohorts would be beneficial. And secondly, these findings could contribute to principal preparation programs in colleges, by adding a leadership cohort component to their curriculum. The results of heads of school feeling supported in a collaborative, caring community could do nothing but good for the schools that they serve.
References


Appendix A


Name (Last, First):

Total Number of Years as a Head of School:

Number of Years in current Head of School Position:

Degree, if applicable (level and major):

Montessori Credential, if applicable (program level and TEP):

Directions: Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position. Use the following scale:

None at All (1)...Very Little (3)...Some Degree (5)...Quite a Bit (7)...A Great Deal (9)

“In your current role as principal, to what extent can you…”

1. facilitate student learning in your school?

2. generate enthusiasm for a shared vision for the school?

3. handle the time demands of the job?

4. manage change in your school?

5. promote school spirit among a large majority of the student population?

6. create a positive learning environment in your school?

7. raise student achievement on standardized tests?

8. promote a positive image of your school with the media?
9. motivate teachers?

10. promote the prevailing values of the community in your school?

11. maintain control of your own daily schedule?

12. shape the operational policies and procedures that are necessary to manage your school?

13. handle effectively the discipline of students in your school?

14. promote acceptable behavior among students?

15. handle the paperwork required of the job?

16. promote ethical behavior among school personnel?

17. cope with the stress of the job?

18. prioritize among competing demands of the job?
Appendix B

Leadership Cohort Self-Efficacy Survey (Pre-Intervention)

Name:

Total Number of Years as a Head of School:

Number of Years in current Head of School Position:

Degree, if applicable (level and major):

Montessori Credential, if applicable (program level and TEP):

Please respond to each of the following statements using the following scale:

None at All (1)...Very Little (3)...Some Degree (5)...Quite a Bit (7)...A Great Deal (9)

“In your current role as principal, to what extent can you…”

1. facilitate Supporting Students with Behavioral Challenges
2. facilitate Parent Education
3. facilitate Staffing
4. facilitate Financial Stability and Sustainability
## Field Notes and Observational Records

### DATE:

### TIME:

### ENVIRONMENTAL FACTORS TO NOTE:

### TOPIC OF DISCUSSION:

### PARTICIPANTS PRESENT:

<table>
<thead>
<tr>
<th>COMMUNICATIONS</th>
<th>QUESTIONS ASKED/ANSWERS OFFERED/ RESOURCES SHARED</th>
<th>WHO SAID IT?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOPIC PROMPT</strong></td>
<td>Example: Parent Education</td>
<td>PP (participants initials)</td>
</tr>
<tr>
<td><strong>PARTICIPANT QUESTION</strong></td>
<td>Example: Can anyone speak to some strategies of success in retaining third year students in primary?</td>
<td>PP (participants initials)</td>
</tr>
<tr>
<td><strong>PARTICIPANT ANSWER</strong></td>
<td>Example: -parent education evenings</td>
<td>JH (participants initials)</td>
</tr>
<tr>
<td><strong>PARTICIPANT RESOURCE</strong></td>
<td>Example: -one-page handout</td>
<td>JH (participants initials)</td>
</tr>
</tbody>
</table>
Appendix D

Tally Sheet

DATE: 

TIME: 

ENVIRONMENTAL FACTORS TO NOTE: 

TOPIC OF DISCUSSION: 

PARTICIPANTS PRESENT: 

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>PP</td>
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<td>JH</td>
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<tr>
<td>OC</td>
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</tbody>
</table>

Participants Initials

Participants Initials

Participants Initials

Participants Initials

Participants Initials

Participants Initials

Participants Initials
Appendix E

Leadership Cohort Self-Efficacy Survey (Post Intervention)

Name:

Total Number of Years as a Head of School:

Number of Years in current Head of School Position:

Degree, if applicable (level and major):

Montessori Credential, if applicable (program level and TEP):

Please respond to each of the following statements using the following scale:

None at All (1)...Very Little (3)...Some Degree (5)...Quite a Bit (7)...A Great Deal (9)

“In your current role as principal, to what extent can you…

1. Facilitate Supporting Students with Behavioral Challenges
2. Facilitate Parent Education
3. Facilitate Staffing
4. Facilitate Financial Stability and Sustainability

Please share any feedback you have about participation in the online leadership cohort: