UP for Learning's Mindset, Metacognition, and Motivation Program:
Evaluation of Hazen Union High School Pilot

July 2016

Steve Netcoh
University of Vermont
408 Waterman Building
Burlington, VT 05401
snetcoh@uvm.edu

Executive Summary

Introduction

      Up for Learning's Mindset, Metacognition, and Motivation (M3) program is designed to build students' capacity to take ownership of their education by helping them understand the learning process and how it is constructed. At the end of the 2015-16 school year, Hazen Union High School piloted the M3 program to help students understand the relevance of mindset, metacognition, and motivation to their own learning and lives outside the classroom. This program was implemented weekly in all ninth-grade teacher-student advisories (TSAs) over the course of a five-week period. Youth took the lead in carrying out the M3 program by serving as curriculum facilitators and sharing recent brain research on mindset, metacognition, and motivation through texts and video and leading activities and discussions to help students understand the relevance of concepts to their own lives.

Evaluation Objectives

    This evaluation was designed to answer the following questions about Hazen Union High School's M3 pilot:

1. What are ninth-grade students' key learnings and takeaways from the M3 curriculum?
2. What are some of the perceived (a) benefits and (b) challenges of having youth serve as the teachers/facilitators of the M3 curriculum?
3. In what ways do the student facilitators perceive they have grown through their participation in the program?
4. What do student participants, ninth-grade TSA teachers, and youth facilitators perceive as areas for growth in the M3 program?

Methods

    The evaluation was based on semi-structured individual interviews with three ninth-grade students who participated in the M3 program, a focus group with six of the youth who facilitated the M3 curriculum, a focus group with six of the ninth-grade TSA teachers, and video recordings of the youth facilitator training and initial presentation of the curriculum to teachers. Structural codes (Saldaña, 2016) were used to label segments of the data related to each evaluation question. Descriptive codes (Saldaña, 2016) were then used to further specify the concepts and ideas addressed within each structural grouping. Finally, the constant comparative method was applied to group the descriptive codes into categories according to their similarities, which serve as the basis for the evaluation's findings.

Findings

    The evaluation findings are organized around the four questions that guided this study. In the following section, each evaluation question is provided with the primary themes that emerged from the data related to these questions.

    Question 1: What are ninth-grade students' key learnings and takeaways from the M3 curriculum?

- *Growth Mindset and Persistence* – The main takeaway of the M3 program for the three ninth-grade students who participated in the evaluation was that they (and their

peers) could learn new skills and achieve personal goals by keeping a growth mindset and recognizing that learning requires effort, persistence, and time.

- *Applying Learning to Personal Lives* – Each of the ninth-grade evaluation participants described specific ways they had or intended to apply their learning from the M3 program to their personal lives and adopt a growth mindset in school. For example, one student spoke about how she used her learning from the M3 program to overcome initial frustrations and struggles with an English assignment and produce one of her best writing projects of the year. These types of examples demonstrated how ninth-graders' learning from the M3 curriculum extended beyond the confines of the program and found its way into their day-to-day lives as students.

Question 2a: What are some of the perceived benefits of having youth serve as the teachers/facilitators of the M3 curriculum?

- *Establishing Relevance* – Youth facilitators were able to relate with students and find ways to make the curricular content more relevant to their personal lives.
- *More Dialogic and Relational Teaching* – Youth facilitators adopted more conversational and relational approaches to teaching that helped reduce some initial student resistance to the curriculum and engage even the most reluctant learners.
- *Engaging on a Peer-to-Peer Level* – Students were more receptive to and interested in the curriculum coming from peers because they were on more "equal footing" with the facilitators.

Question 2b: What are some of the perceived challenges of having youth serve as the teachers/facilitators of the M3 curriculum?

- *Age Proximity and Not Seeing Youth as "Teachers"* – Some individuals felt that the age proximity between the youth facilitators and ninth-graders made it difficult for some students to take the youth facilitators "as serious as they would a teacher."
- *Limited Teaching Experience and Formal Teacher Training* – Youth facilitators had minimal experience leading activities and discussions with students and limited teacher training and therefore struggled at times with facilitating class conversation and dialogue.

Question 3: In what ways do the student facilitators perceive they have grown through their participation in the program?

- *Increased Comfort and Confidence Presenting* – Some youth facilitators became much more comfortable with and confident in their presentation skills after leading their peers through M3 lessons and activities.
- *Deeper Learning of M3 Content* – Other youth facilitators felt they learned the M3 content on a much deeper level and more readily observed the concepts in their own lives after critically engaging with the curriculum and puzzling through ways to demonstrate its relevance to their peers.
- *Seeing Oneself as a Role Model* – One particular youth came to understand himself as a role model after serving as a facilitator for the M3 program, developing

relationships with ninth-grade students, and recognizing that younger students may indeed look up to him and be attentive to how he carries himself in and responds to different situations.

- *Understanding Teachers' Experiences* – Another youth came to see and better understand the educational process from a teacher's perspective after taking on the role of a teacher and gaining first-hand experience with some of the challenges of being an educator.

Question 4: What do student participants, ninth-grade TSA teachers, and youth facilitators perceive as areas for growth in the M3 program?

- *More Hands-On and Engaging Activities* – Youth facilitators, student participants, and ninth-grade TSA teachers all felt students were much more engaged when they were asked to participate in hands-on and kinesthetic activities and that there could have been more of them in the curriculum to increase student investment in the program.
- *Timing and Duration of the Program* – Evaluation participants suggested that the program would have been more successful if it started at the beginning of the school year when students were not distracted by final exams and the impending summer break. They also asserted that extending the duration of the program would have increased student buy-in and enabled participants to more deeply engage with the M3 concepts over a longer period of time.
- *Leaving Time for Reflection and Application* – Many youth facilitators and teachers felt scheduled reflections were lost in the rush to cover the M3 content within the time allotted for the program and recommended building more time into the curriculum for reflection on and application of the M3 concepts.
- *Communication with Teachers* – Some teachers expressed a desire for greater communication with youth facilitators and UP for Learning about their role within the program and day-to-day classroom activities to better understand how they could support youth facilitators in their implementation of the curriculum.

Conclusion

Hazen Union High School's pilot of the Mindset, Metacognition, and Motivation (M3) program demonstrates the initiative's capacity to help students understand the process of learning and take steps toward greater ownership and control of their education. The three ninth-grade students who participated in this evaluation were able to articulate their understandings of growth mindset and described ways they had or intended to apply their learning from the program to their lives within and outside of school. For a couple of these students, this learning contributed to positive outcomes in school as they offered specific examples of how adopting a growth mindset enabled them to overcome challenges they encountered in their classes.

Having youth serve as facilitators of the curriculum proved to be a powerful aspect of the program as they were able to relate with student participants on a personal level and find ways to demonstrate the relevance of M3 concepts to their lives both within and outside of school. The youth facilitators themselves also experienced personal growth through their involvement in the program. Some of the most prominent areas of growth among students were increased confidence and comfort presenting to peers, a deeper understanding of M3 concepts and their

relevance to their lives, a new self-perception as a role model for younger students, and a deeper appreciation of teachers' experiences in the classroom.

In addition to the successes and positive aspects of the program, there were some perceived areas for growth. Moving forward, youth facilitators of the M3 program could benefit from training in specific teaching skills and strategies such as wait time, asking prompting questions during lulls in discussion, and re-framing questions to more effectively elicit student responses. Other recommendations for the future based on evaluation findings are 1) start the M3 program at the beginning of the school year and extend the amount of time students engage with the curriculum, 2) incorporate more hands-on, kinesthetic, and engaging activities in the curriculum, 3) build more time into the curriculum for students to reflect on M3 concepts and apply them to their personal lives, and 4) increase communication with teachers about their role within the program and daily activities.

Introduction

As secondary schools in Vermont transition toward personalized learning, students are being asked to take increasing responsibility for their education. Act 77, the law mandating personalization in Vermont middle and high schools, intends to give students more control over their learning by allowing them to pursue flexible pathways through the education system that are best suited to their individual interests, needs, and aspirations as learners. For students to take full advantage of these flexible pathways and personalized learning opportunities, they must understand their own strengths, interests, and needs as learners, become skilled goal setters, and take increased control over the direction and management of their own learning. These types of skills and responsibilities are new for many students, however, because teachers have typically controlled most aspects of the learning process in public school classrooms. With Act 77 encouraging students to take a lead role in shaping their own learning, schools will need to develop students' capacity to take on the new responsibilities associated with this ownership and control.

UP for Learning's Mindset, Metacognition, and Motivation (M3) program is intended to prepare students to personalize their learning by equipping them with the knowledge and skills to take control over their own education. As the initiative's name suggests, M3 aims to introduce participants to the concepts of mindset (i.e., expectations about achievement), metacognition (i.e., "thinking about thinking" or "learning about learning"), and motivation (particularly as it relates to rigor, relevance, relationships, and shared responsibility) and help them understand their relevance to their lives both in and out of school. Up for Learning believes that by helping students understand the learning process and how it is constructed, they will be better prepared to take control over their own learning and become active participants in their education. The organization also hopes that reflection on mindset, metacognition, and motivation, will help students and teachers develop a common language they can use to become full partners in the learning process. The ultimate goal of the M3 program is to build students' capacity to take ownership of their learning.

In partnership with UP for Learning, youth-adult teams at Hazen Union High School drew on the successes and lessons of previous iterations of M3 to implement their own version of the program during the 2015-16 school year. As with past versions of the initiative, Hazen students took on integral roles in the implementation of M3 by tuning the curriculum to suit the needs of their school context and facilitating activities during teacher-student advisory (TSA) time to help ninth-grade students better understand the relevance of mindset, metacognition, and motivation to their own learning. After attending a one-day training where they learned about M3's key concepts and engaged with the curriculum's activities, youth facilitators visited all ninth-grade TSAs at Hazen once-a-week during a five-week period between May and June of 2016 to engage students with the M3 curriculum. During these sessions, youth facilitators shared recent brain research on mindset, metacognition, and motivation through texts and videos, facilitated discussions on the relevance of this research to their own lives, and led activities to help students experience some of the curricular concepts in action. In addition to these classroom-based activities, youth facilitators hung posters and flyers around the school that reinforced some of the themes and ideas related to mindset, metacognition, and motivation covered in the curriculum. Collectively, these activities sought to raise student awareness about key facets of their learning and equip them with the skills to take ownership of their education.

Evaluation Objectives

The purpose of this evaluation was to address the following focusing questions related to the M3 initiative at Hazen Union High School:

1. What are ninth-grade students' key learnings and takeaways from the M3 curriculum?
2. What are some of the perceived a) benefits and b) challenges of having youth serve as the teachers/facilitators of the M3 curriculum?
3. In what ways do the student facilitators perceive they have grown through their participation in the program?
4. What do student participants, ninth-grade TSA teachers, and youth facilitators perceive as areas for growth in the M3 program?

Methods

The primary sources of data for this evaluation were interviews and focus groups with M3 youth facilitators, ninth-grade student participants, and ninth-grade TSA teachers. Video data was also collected to gain further insight into program activities. This section outlines these data collection activities in further detail and describes the methods used to code and analyze the data.

Interviews and Focus Groups

Semi-structured individual interviews were conducted with three ninth-grade students who participated in the M3 program. These interviews focused on participants' primary learnings and takeaways from the program, the extent to which they were applying ideas and concepts from the program to their personal lives, aspects of M3 they found effective, program elements they found less effective, and their perceptions of having fellow students facilitate the M3 curriculum.

Focus groups were also conducted with M3 student facilitators and the ninth-grade TSA teachers. Six student facilitators participated in one of these focus groups. This focus group centered on 1) facilitators' perceptions of what worked well with the program, 2) what changes they would make to the program moving forward, 3) the personal growth they experienced through participating in the M3 program, and 4) their advice for future facilitators of the curriculum. A separate focus group was conducted with six of the ninth-grade TSA teachers about their perceptions of 1) the program's successes, 2) areas for program growth, 3) how teachers in the school could be mobilized to support M3 work, 4) the extent to which they felt learning from the program was deep and sustainable, and 5) having students serve as the teachers of the M3 curriculum.

Artifacts

Videos of the M3 youth facilitator training and presentation of the curriculum to ninth-grade TSA teachers were also collected to gain further insight into the program and its activities. These videos showed the processes by which youth facilitators learned the M3 curriculum, tuned it to their unique school setting, and shared it with the ninth-grade TSA teachers. Videos offered context for program implementation and helped triangulate the data gathered through interviews and focus groups. Overall, just over 44 minutes (26 minutes of presentation to teachers and 18 minutes of youth facilitator training) of video data were collected for this evaluation.

Data Analysis

Structural codes (Saldaña, 2016) were first used to label segments of the data related to each evaluation question. For example, the code AREA FOR GROWTH was used to mark sections of the data in which participants discussed aspects of the program they felt could be improved upon moving forward. Data assigned the same structural codes were then grouped together, and descriptive codes (Saldaña, 2016) were used to further specify the concepts and ideas addressed within each structural grouping. The constant comparative method was then used to group these descriptive codes into categories according to their similarities, and these categories serve as the basis for the findings described in the following section.

Findings

Findings from this evaluation are organized around the four questions that guided this study. The first section addresses ninth-grade students' key learnings and takeaways from the program. The second section explores the perceived benefits and challenges of having youth serve as teachers and facilitators of the M3 curriculum. The third section examines facilitators' perceptions of how they have grown through their participation in the program. Finally, the fourth section focuses on perceived areas for program growth among student participants, youth facilitators, and ninth-grade TSA teachers.

Evaluation Question #1: Ninth-Grade Students' Learnings and Takeaways

All three students who participated in interviews for this evaluation described key learnings and takeaways that related to the value and importance of maintaining a growth mindset both within and outside of school. Their primary takeaway about growth mindset was that they (and their peers) could learn new concepts and skills with time, practice, and persistence, and each student described ways that this learning had application to their personal lives. This section explores these students' takeaways and their perceptions of their application to their personal lives in further detail.

Growth mindset and persistence. The importance of trying and keeping an open mind emerged as key themes in the three ninth-grade participants' descriptions of their takeaways from the M3 program and their understanding of growth mindset. For these students, one of the main lessons of the M3 program was that they could learn new skills and achieve personal goals with effort, persistence, and time. When asked what would stay most with them from the M3 program moving forward, one student replied, "I guess that if you keep trying and trying, you'll get better at it, and it'll increase the things that you want to do." Another student described a similar takeaway from the program when they said:

> Basically, kind of just trying again and again. You get better every single time you do it and if you have more of a growth mindset, like you're open to it, and you're thinking 'I can do this' or 'I'm not the best now, but I'm going to get better,' that it's easier to learn. So just to try and be open when trying new things.

For this student, one of the key lessons from the M3 program was that it is easier to learn with a growth mindset and a recognition that improvement will come with sustained effort and practice. Through their participation in the M3 curriculum, this student came to understand the importance of maintaining an open mind and having a "can do" attitude when attempting new tasks. This "can do" attitude was also a key takeaway for the third ninth-grade participant who explained that, "I've always been the kind of person that was like, 'I can't, and I can't, and I can't,' and I

get very frustrated. And taking away that I can do it eventually, and I just need to keep working at it." The M3 curriculum offered this student new perspectives on their individual capacities and mindset and helped them recognize they had the ability to learn and grow with a "can do" attitude and continuous effort. Based on these comments, the concepts of growth mindset and persistence left the most lasting impressions on students from the M3 curriculum.

Applying learning to personal lives. In response to questions about the utility of M3 concepts in their personal lives, each student described specific ways they had or intended to apply their learning from the program by adopting a growth mindset in school. One student explained, "I guess I try to tell myself that I'm going to have a better day in history or science or English or French more" and that "it makes it feel easier." Another student described how they adopted a growth mindset for a specific English assignment. After initially feeling frustrated and unable to figure out what to write, this individual "remembered [to] keep pushing through it and you'll eventually be able to figure it out." In describing the outcome of the project, the student said, "That was one of my stronger writing assignments because I really worked at not thinking immediately I can't do this and that I can eventually." By applying their learning from the M3 program and adopting a growth mindset, this student was able to overcome their initial struggles with the assignment and complete one of their best written products of the year. Although the third student interviewed did not describe any specific ways they adopted a growth mindset in school, they discussed how they intended to apply their learning from the M3 program in the future. This student asserted, "When it's something new or hard or I'm uncomfortable with a situation, I'll know I'll get better or that it's a process…You work up to things and…yeah." As with their peers, this student perceived a direct application of growth mindset to their personal life. Collectively, these comments demonstrate how ninth-graders' learning from the M3 curriculum extended beyond the confines of the program and found its way into their day-to-day lives as students.

Evaluation Question #2a: Benefits of Youth Facilitation

Student participants, teachers, and youth facilitators perceived three distinct benefits of having youth serve as messengers of the M3 curriculum. These benefits were: 1) their ability to relate to students and make the curriculum more relevant to their lives, 2) their use of more dialogic and relational approaches to teaching, and 3) their ability to engage with students on a peer-to-peer level. Each of these benefits is described in greater detail in this section.

Establishing relevance. The three student participants interviewed for the evaluation described a number of benefits of having their peers serve as the facilitators of the M3 curriculum. A common theme in their descriptions was the extent to which youth facilitators could relate to students and make the material more relevant to their lives. One student explained, "I would say it's more fun than having a teacher do it just because they're closer to your age so they know what interests you and what doesn't." This student perceived that youth facilitators were able to effectively relate the M3 curricular material to students' interests and therefore made the experience more emotionally engaging. Another student described how having peers as facilitators made the program "more relatable, and you wanted to listen to what they had to say because if they took the time to do it, then why not you?" This individual noticed their peers' investment in the M3 concepts, which made it easier for them to engage with the material and understand its relevance in their own life. Because the facilitators took time to learn the curriculum and prepare to teach it to their peers, students were more open to the idea that the material was actually important to their lives. A couple students also talked about the youth

facilitators' relatable approach to teaching and how it made them more open to the curriculum. One student described, for example, how the facilitators were able to put their own personal touches on the curriculum, which made it feel less scripted and lecture-based and more like they were working on something together as a group.

More dialogic and relational teaching. These more personal approaches to teaching and their positive effects on student participants were also evident in the youth facilitator's descriptions of their experiences implementing the M3 curriculum. Many of the facilitators talked about the conversational and dialogic teaching approaches they used during the M3 program and how it contributed to student engagement with the curriculum. One facilitator recounted how she used conversation on numerous occasions to help disengaged students understand the relevance of the content to their own lives. As this facilitator explained, "I've found that some of the kids who weren't as engaged, one of the most useful things was to just talk with them, try to find ways it connected to their lives and have them tell me about their interests and how it worked." As students themselves, the youth facilitators were able to engage reluctant learners in conversation about the M3 material and its application to their own lives on a peer-to-peer level. The facilitators who utilized this dialogic teaching approach found it effective in reducing some initial student resistance to the curriculum and helping their peers understand the relevance of the program to their own lives. In this way, the youth facilitators' ability to relate to their peers on a more personal level made it easier for some students to access the curriculum than if the same material had been presented by adults.

Engaging on a peer-to-peer level. The ninth-grade TSA teachers described similar benefits they perceived of having students as facilitators of the curriculum. As with students, teachers felt the M3 material was more interesting for youth when it was delivered by their peers as opposed to teachers. One teacher hypothesized that students were more open to the material when youth were the messengers because of the "equal footing that they were on to access this information rather than an authority figure telling them that this is important and you have to learn this." For this teacher, youth facilitation afforded the M3 material increased legitimacy and reduced some of the resistance students might display if the same information was brought to them by teachers. Another teacher explained how "having the students deliver the message is going to be more powerful than having adults deliver the message." These comments suggest many teachers, like their youth counterparts who participated in the evaluation, believed that students were more receptive to the curriculum because it was introduced by their peers rather than adults.

Summary. Teacher and student comments during interviews and focus groups indicate that youth facilitation of the M3 curriculum was a significant contributor to some of the program's successes. As students and youth themselves, facilitators had intimate knowledge of their peers' interests, needs, expectations, and aspirations as learners. They used this understanding to help their peers see the relevance of the M3 curriculum to their own lives. They also used their deep knowledge of the student experience at their school to employ more dialogic and relational teaching approaches that engaged some their peers who initially resisted or showed disinterest in the program. Both teachers and students felt that the facilitators' status as youth and students afforded the curriculum greater authenticity and legitimacy because it came across to them as less imposed by an adult authority and more like peer sharing and collaboration.

Evaluation Question #2b: Challenges of Youth Facilitation

Although there were many benefits associated with youth facilitation of the M3 curriculum, evaluation participants acknowledged some challenges of having students teach their peers. The main challenges these participants perceived were 1) the proximity of age between students and some of the youth facilitators and 2) the facilitators' limited teaching experience and formal teacher training. These challenges are explored further in this section.

Age proximity and not seeing youth as "teachers." One student participant who was interviewed suggested her friends and acquaintances in a TSA with 10th-grade youth facilitators were a bit resistant to having individuals so close in age teach the M3 curriculum. This student said they could relate to their friends' feelings and asserted, "If I had a 10th-grader who was teaching me, I'd be less prone to listen because I don't know – immaturity." The student went on to explain that age proximity made it more likely for facilitators to be friends with students in the TSA and consequently more difficult for students to see the youth facilitators as "teachers." Another student echoed this sentiment when they explained, "I guess people didn't take [the facilitator] as serious as they would a teacher because they think 'Oh, I normally goof around with this person so I'll do it here, too'." Based on these comments, one of the biggest challenges associated with having youth facilitate the curriculum was getting some students to see their peers as individuals who could create meaningful learning opportunities rather than just social acquaintances.

Limited teaching experience and formal teacher training. Another challenge that emerged from interviews and focus groups was the youth facilitators' limited training in formal teaching and facilitation strategies. Although a few of the youth facilitators had given presentations and led workshops for adults prior to the M3 program, they had minimal experience guiding students through a curriculum and limited training in teaching strategies. Given this paucity of experience and training, some facilitators were uncertain of how to elicit student responses during lulls in classroom discussion. One teacher observed that "A lot of times, [youth facilitators] would ask these questions and they would get nothing in response, and they didn't know what to do. But they're students; they're not trained teachers, so they don't have that training." This teacher recommended direct training for youth facilitators on how long to wait for student answers, how to prompt students for responses when nobody volunteers to speak, and how to reframe questions so that students can think about them in new ways that might evoke an answer. A student facilitator expressed interest in a similar type of training when they suggested, "I feel like a little more facilitator training would have been helpful, not only vetting the materials but giving you strategies." Given these comments, another challenge associated with youth facilitation of the M3 curriculum was helping facilitators feel prepared and comfortable responding to the various situations that could have emerged during their interactions with students.

Evaluation Question #3: Facilitator Perceptions of Personal Growth

Youth facilitators reported experiencing various types of growth through their participation in the M3 program. Each individual described a unique type of personal development that they experienced in the process. The primary areas of growth that emerged from the focus group with youth facilitators were: 1) increased comfort and confidence in presentation and facilitation skills, 2) deeper learning of the M3 content, 3) coming to see oneself as a role model, and 4) a better understanding of teachers and their experiences in the classroom. This section elaborates on these areas of growth that youth facilitators experienced through their participation in the M3 program.

Increased comfort and confidence presenting. One student explained that she is "really bad at presenting because [she] gets super nervous" but that she became more comfortable speaking in front of her TSA after facilitating a few lessons and activities from the M3 curriculum. In this way, participating in the M3 program as a facilitator helped this student develop greater comfort in presenting to an audience of her peers. Another student similarly described how she came to see herself as more capable after serving as a facilitator for the M3 program. Although this student had previously facilitated workshops and meetings for teachers and other groups of adults who sought student and youth perspectives, she had not presented to students or audiences that had not requested her knowledge and expertise. By acting as a facilitator for the M3 program, this student came to recognize that she could effectively present to and facilitate learning for different kinds of audiences, which made her feel more capable as a facilitator and presenter. In both of these cases, serving as a facilitator helped youth become more confident in their presentation and facilitation skills.

Deeper learning of M3 content. Other youth described how serving as facilitators of the M3 curriculum contributed to deeper learning of the program's core concepts. Two students talked specifically about this particular outcome of serving as facilitators. As one youth explained:

> But telling it to somebody else is learning on a whole different level, and you're
> really having to make it your own and really relate to it and really learn it, and
> so I think that I became even more familiar with the material and it's become
> even more real in my life.

A second facilitator echoed these remarks by explaining how he developed a growth mindset in his own life because of his deep engagement with the curriculum and has "actually personally seen positive results from that." For these youth, the process of facilitating the M3 curriculum allowed them to engage with the initiative's concepts on a deeper level than if they had encountered the content as students. By serving as facilitators, these youths had to critically engage with the curriculum and puzzle through ways to demonstrate its relevance to their peers. This type of interaction with the curriculum helped youth facilitators make more personal connections with the M3 concepts and more deeply understand their influence in their own lives. Indeed, a few facilitators spoke about how "The more I taught these ideas and concepts, the more I saw them show up in my life."

Seeing oneself as a role model. Beyond learning the curricular content at a deeper level, another facilitator came to understand himself as a role model for younger students through his participation in the M3 program. As this youth facilitator put it, "I now understand why teachers say, 'You're adult role models for the younger kids'." This student explained that prior to the M3 program, he did not see himself as a role model because he did not look up to older students as a ninth-grader. After facilitating the M3 curriculum and developing relationships with ninth-grade students in his TSA, however, this individual came to recognize that younger students may indeed look up to him and be attentive to how he carries himself in and responds to different situations. This individual hoped that through his own engagement with and investment in the curriculum, he was a "role model for new learning" in his ninth-grade TSA. In this way, participation in the M3 program as a facilitator contributed to a new and positive self-perception for this individual as a role model for his younger peers.

Understanding teachers' experiences. A final youth facilitator came to better understand teachers and their experiences in the classroom through her involvement in the M3 program. By taking on a role similar to that of a teacher, this youth gained first-hand experience

with some of the challenges of being an educator. She described students as a more "critical audience" than adults to whom she has presented in the past and felt some resentment from her peers who may not have initially understood the purpose of the program. Based on these dispositions, the youth felt she needed to "break down barriers" to effectively facilitate the curriculum. The experience helped this individual understand why teachers become frustrated with disruptive student conversations in the classroom. As the youth explained, "I understand now why teachers get really annoyed when people start talking in class. I'm sometimes the person talking in class, and now I feel so bad for these teachers because I'm up there and people are talking, and I hate it, so I have to say something to them." By taking on the role of a teacher/facilitator, this student came to appreciate some of the challenges educators encounter on a day-to-day basis. Although the student did not discuss any changes she would make in her life based on this new knowledge and experience, she did reflect on some of her own behavior in the classroom and acknowledged she has talked in class at times, which she would find frustrating as a teacher. In this way, participating in the M3 program as a facilitator helped this student see the educational process from the teacher's perspective, which may inform some of her future interactions in the classroom.

Summary. Youth who facilitated the M3 curriculum experienced various types of personal growth through their participation in the program. Some youth developed greater confidence in their skills as presenters and facilitators while others came to understand themselves as role models through the process. For these youth, participation in the M3 program contributed to increased self-efficacy and more positive self-perceptions. Other youth developed growth mindsets in their lives both inside and outside of school through their deep engagement with the curriculum as facilitators. Finally, one individual was better able to identify with teachers after her experience facilitating the M3 curriculum and having different kinds of interactions with her peers. This student developed a certain level of empathy for her teachers that may carry into her interactions with them in the future.

Evaluation Question #4: Perceived Areas for Growth in the Program

Teachers and students identified a few different areas for potential growth within the program. The main areas for growth discussed during individual interviews and focus groups were: 1) a call for more hands-on and engaging activities, 2) changes to the timing and duration of the program, 3) leaving more time for reflection and application, and 4) increasing communication with teachers. This section explores each of these areas for growth in greater detail.

More hands-on and engaging activities. One of the most common recommendations that youth facilitators, student participants, and teachers made for improving the M3 program was to incorporate more hands-on and engaging activities into the curriculum. When asked what changes they would make to the program moving forward, a student participant said, "I guess more activities where you're moving around rather than sitting in a chair writing on paper." Many of the youth facilitators indeed found students were more engaged when they were asked to participate in hands-on and interactive activities. As one of the facilitators explained:

> I think when we were doing interactive activities, they paid attention much
> more. So when they were doing something and it was exciting. But when there
> was just something that they had to write or watch, they had trouble realizing
> that we were trying to help them because we weren't super…I don't know.

One teacher also talked about how some of the more "stand and deliver" aspects of the M3 curriculum were quite similar to the approaches the school used for students' personalized learning plans and recommended more activity-based lessons to help distinguish M3 from existing initiatives at the school and to increase student engagement with the content. Overall, student and teacher responses suggest participants might have more actively engaged with the M3 content if it was presented through hands-on and kinesthetic activities as opposed to oral and visual presentations.

Timing and duration of the program. Another area for growth that student participants, youth facilitators, and teachers all identified was changing when the program started, how frequently activities occurred, and how long the program lasted. Youth facilitators and teachers suggested the M3 program would have been more successful if it started at the beginning of the school year. They felt a number of students were distracted by their final exams and the impending summer break and therefore did not engage as deeply with the curriculum as they might have at the beginning of the school year. In discussing the distractions of finals and summer break, one teacher said, "I think [that] had a limiting factor to a certain degree, of how far and how deep they could go into some of the material." Both teachers and facilitators suggested the curriculum would have been more applicable to students' lives if it began at the start of the school year because they could have used the concepts from the M3 curriculum to reflect on, navigate, and monitor their own learning and mindsets throughout the course of the year.

Similarly, students and teachers believed extending the M3 program over a longer timeframe and holding more frequent sessions would have increased student engagement with the curriculum. One teacher suggested that students may not have fully bought into the curriculum because they knew they would only engage with the content for a short number of weeks. This teacher asserted, "I think the longer the timeframe of the information that's being presented and reinforced and that they know it's not going away, I think that could just really help to provide the depth in what's happening and increase student buy-in." Another teacher echoed these comments by suggesting that the curriculum could be "drawn out over a much longer period of time and allow for more reflective learning." For these teachers, extending the duration of the program would allow for more continuous engagement with M3 concepts, which would contribute to greater depth of learning and increased student buy-in. A student participant similarly recommended increasing the frequency of M3 sessions when they said, "I think a little bit more engagement would be good, like twice a week maybe at the beginning and then at the end. I really liked having a gap there so then you could really try to work on it and think about it." As with the teachers, this student wanted to increase the amount of time students spent with the M3 curriculum while also allowing for purposeful reflection on the material between sessions.

Leaving time for reflection and application. In a similar vein, evaluation participants also recommended ensuring opportunities for student participants to reflect on the M3 concepts and apply them to their personal lives. Many youth facilitators and teachers felt scheduled reflections were lost in the rush to cover the M3 content within the time allotted for the program during TSA. Students often had five minutes or less to complete their reflections, which limited their ability to deeply engage with their learning and the concepts from the day's activities. There were also instances when facilitators ran out of time for reflection during an M3 session and assigned it for homework. As one student facilitator explained about the reflections, "But then if you wanted to have any time to teach anything new that day, they really had like 5 minutes on

computers so it couldn't be very well formed. So it's like go home and take it home, but that doesn't happen." This sense of feeling limited in reflection time was shared by a number of other facilitators and teachers alike. In addition to allowing more time for reflection, one teacher suggested more time within the curriculum could have been spent helping students identify the direct application of the concepts to their lives. This teacher maintained, "I think there was just a lot of 'Oh, okay. That's interesting,' but what to do with it next beyond just write about what you just heard." Based on these comments, participants perceived that an area for growth in the program is building more time into the curriculum for student reflection on and application of the M3 concepts.

      Communication with teachers. Some teachers expressed a desire for greater communication with youth facilitators and UP for Learning about their role within the program and day-to-day classroom activities. One teacher, for example, had questions about what was expected of them in the classroom, particularly as it related to providing youth facilitators feedback on their presentation of the curriculum to students. This teacher explained, "I think having some kind of structured feedback probably would be helpful and maybe some more clarity as to what the expectations for the teacher in the room. What is our role in commenting on this?" Based on these comments, this teacher was interested in clearer expectations about their role in the program and how involved they should be in providing feedback to youth facilitators. Although this teacher wanted to provide structured feedback to their youth facilitators, they did not know if such action conformed with their role in the program. Another teacher expressed a desire for greater communication with youth facilitators around more logistical aspects of the program. This teacher said, "Sometimes it would have been nice if they'd communicated with me a little earlier about what they might need, 'I need your computer set up, the projector set up.' Or if they weren't coming or were going to be late." As with the teacher quoted earlier, this educator felt greater communication would have enabled them to better support youth facilitators in the classroom. In both cases, better communication would have provided teachers with more information about the optimal ways to support youth facilitators in their roles.

      Summary. Time emerged as a significant theme within participants' discussions about areas for growth in the M3 program. Teachers, youth facilitators, and student participants generally felt the program could have started earlier in the school year and been extended over a longer period of time to increase student buy-in and engagement with the curriculum. Increasing the duration of the program would also have allowed more time for students to reflect on and apply the concepts they learned in the curriculum, which some participants felt could have received more attention during M3 sessions. In addition to the issues related to time, participants believed the program could benefit from more hands-on and engaging activities and increased communication with teachers about how they could support youth facilitators in their implementation of the curriculum.

Conclusion

      Hazen Union High School's pilot of the Mindset, Metacognition, and Motivation (M3) program demonstrated the initiative's capacity to help students understand the process of learning and take steps toward greater ownership and control of their education. The three ninth-grade students who participated in this evaluation were able to articulate their understandings of growth mindset and described ways they had or intended to apply their learning from the program to their lives within and outside of school. For a couple of these students, this learning contributed to positive outcomes in school as they offered specific examples of how adopting a

growth mindset enabled them to overcome challenges they encountered in their classes. The M3 program's capacity to help students take control over their learning is effectively captured by one ninth-grade participant who said, "I think the whole M3 thing has made me more aware of my learning and made me more invested in it because it makes it more personalized and more what do you want to do with your education and stuff."

Having youth serve as facilitators of the curriculum proved to be a powerful aspect of the program as they were able to relate with student participants on a personal level and find ways to demonstrate the relevance of M3 concepts to their lives both within and outside of school. Teachers involved in this evaluation generally agreed that having youth serve as facilitators made students more receptive to the curriculum because it was presented by peers rather than authority figures. The youth facilitators themselves also experienced personal growth as a result of their involvement in the program. Some of the most prominent areas of growth among students were increased confidence and comfort presenting to peers, a deeper understanding of M3 concepts and their relevance to their lives, a new self-perception as a role model for younger students, and a deeper appreciation of teachers' experiences in the classroom.

In addition to the successes and positive aspects of the program, there were some perceived areas for growth with student facilitation of the curriculum and other aspects of the initiative more generally. Findings from this evaluation suggest that moving forward, youth facilitators of the M3 program could benefit from training in specific teaching skills and strategies such as wait time, asking prompting questions during lulls in discussion, and re-framing questions to more effectively elicit student responses. Beyond more direct teacher training for youth facilitators, other recommendations for the future based on evaluation findings are 1) start the M3 program at the beginning of the school year and extending the amount of time students engage with the curriculum, 2) incorporate more hands-on, kinesthetic, and engaging activities in the curriculum, 3) build more time into the curriculum for students to reflect on M3 concepts and apply them to their personal lives, and 4) increase communication with teachers about their role within the program and daily activities.

References

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Appendix A

Ninth-Grade Student Participant Interview Protocol

1. Can you tell me about what you have learned from the M3 program?

   Prompts:
   - What do you feel is your biggest takeaway or learning from the program and curriculum?
   - What new ideas or strategies do you think you have learned from the M3 program and curriculum?
   - What do you think will stay with you from the M3 program?
   - Why do you think those are some of your biggest takeaways?

2. To what extent do you feel that you are making changes in your life or in school based on what you have learned or taken away from the M3 program?

   Prompts:
   - Do you feel like you have been engaging with your schoolwork or teachers in a different way based on what you have learned in the M3 program?
     - o If so, what do you think contributed to that change?
     - o If not, why do you think you haven't made any changes?
   - Do you feel like your learning from the M3 program has made its way into other areas of your life outside school?
   - Can you think of any times that something you learned in the M3 program kind of popped into your mind while you were doing something school or non-school related?

3. Can you talk about what has worked for you with the M3 program and curriculum?

   Prompts:
   - What have you enjoyed most about the M3 program and curriculum?
   - What activities have engaged you the most?
   - What activities have helped you learn the most?
   - What concepts or ideas have interested you the most?
   - Is there anything else that has worked well for you with the M3 program and curriculum?

4. Can you talk about what hasn't worked well for you with the M3 program and curriculum?

   Prompts:
   - What parts of the program or curriculum have you found least interesting or engaging?
   - What activities have you learned the least from?

- If you were in charge of the program, what changes would you make to it for next year?
- Why would you make those changes specifically?
- Is there anything else that has not worked well for you with the M3 program?

5. Can you talk about it has been like for you to have fellow students serve as the teachers of the M3 curriculum?

       Prompts:
- Have you enjoyed having fellow students teach the M3 curriculum?
  - Why or why not?
- What has worked well for you about having students teach the M3 curriculum?
- What has not worked well for you about having students teach the M3 curriculum?

6. Is there anything else that came up for you during the course of this interview that you would like to share about the M3 program and curriculum?

Youth Facilitator Focus Group Protocol

1. Can you talk about what worked well with the M3 program and curriculum based on your personal experiences and observations?

   Prompts:
   - What do you think have been some successes of the program and curriculum for students?
   - Which activities do you think have worked particularly well for students and why?
   - What seemed to interest students most about the curriculum?
   - What are some aspects of the program or curriculum that you think should absolutely remain in place for future versions of M3?

2. Can you talk about some changes you would make to the M3 program and curriculum based on your experiences and observations?

   Prompts:
   - What hasn't worked as well with the program and curriculum?
   - Were there any lessons or activities that totally flopped?
     - Why do you think these lessons or activities flopped?
   - Which aspects of the program or curriculum do you feel have been least useful for students?
   - What is one change that you think should absolutely be made for future versions of the M3 program and curriculum?
   - Why would you make those changes specifically?
   - Is there anything else that you think has not worked well with the M3 program?

3. Can you talk about any personal growth you feel you have experienced through participating in the M3 program?

   Prompts:
   - Do you feel that you have developed any new skills through your participation in the program?
   - Do you feel that you have gained any new knowledge through your participation in the program?
   - Has your participation in the program contributed to any new perceptions of yourself?

4. Can you talk about anything new that you have learned through your participation in the program?

   Prompts:

- Have you learned anything new about mindset, metacognition, and motivation from the program and curriculum?
- To what extent do you feel that you are making changes in your life or in school based on what you have learned or taken away from the M3 program?
- Do you feel like you have been engaging with your schoolwork or teachers in a different way based on what you have learned from the M3 program?
- In what ways do you anticipate your learning from the M3 program and curriculum sticking with you as you move forward in your personal and academic life?

5. What advice do you have for future facilitators of the M3 program and curriculum?

    Prompts:
    - Why do you think that is important advice for future facilitators to have?
    - How will that advice help to improve the M3 program moving forward?

6. Is there anything else that came up for you during the course of this interview that you would like to share about the M3 program and curriculum?

Appendix C

Ninth-Grade TSA Teacher Focus Group Protocol

1. Can you talk about what you think have been some successes of the M3 program and curriculum?

    Prompts:
    - What do you think have been some successes of the program and curriculum for students?
    - Which activities do you think have worked particularly well for students and why?
    - What do you think have been some successes of the program and curriculum for teachers?
    - What are some aspects of the program or curriculum that you think should absolutely remain in place for future versions of M3?

2. Can you talk about some changes you would make to the M3 program and curriculum based on your experiences and observations?

    Prompts:
    - What hasn't worked as well with the program and curriculum?
    - Which aspects of the program or curriculum do you feel have been least useful for students?
    - Which aspects of the program or curriculum do you feel have been least useful for teachers?
    - What is one change that you think should absolutely be made for future versions of the M3 program and curriculum?
    - Why would you make those changes specifically?
    - Is there anything else that has not worked well for you with the M3 program?

3. Can you talk a little about the one-page pieces about the M3 work that were distributed to teachers once a week? Do you think they were effective? Why or why not?

4. How do you think teachers can best be mobilized to support this M3 work?

5. To what extent do you feel that student learning from the program and curriculum is deep and sustainable?

    Prompts:
    - How much do you feel that the concepts, ideas, and skills from the program will stay with students and inform their actions in the future?
    - What do you think could be done to make the learning even deeper and more sustainable?

6. Can you talk about anything new that you have learned about mindset, metacognition, and motivation from the program and curriculum?

> Prompts:
> - Have you learned anything new that has helped to shape or inform your own teaching practice?
> - In what ways do you anticipate your learning from the M3 program and curriculum informing your teaching moving forward?

7. Can you talk about it has been like for you to have students serve as the teachers of the M3 curriculum?

> Prompts:
> - What have been some positive aspects of having students serve as the teachers of the M3 curriculum?
> - What have been some challenges of having students serve as the teachers of the M3 curriculum?
> - Would you be interested in having students facilitate a program similar to M3 again in the future? Why or why not?

8. Is there anything else that came up for you during the course of this interview that you would like to share about the M3 program and curriculum?