

Implementing the Change Process for Staff and Student Success: An Instructional Module

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Successful schools have a clearly defined vision for student success, usually measured by college and career readiness standards. They are able to articulate success indicators for student performance as well as success indicators for the staff performance needed to meet those student indicators. Successful schools are able to describe a theory of change, or change model, which drives their school improvement process to close the gaps between their current reality and their desired future state or vision. This article discusses change theory, describes the tenets of a change model, and illustrates those tenets describing a grant-funded change initiative in one school that has demonstrated sustainability.

Keywords: change model, continuous improvement, professional development, smaller learning communities, theory of change

Implementing sustainable change has eluded education practitioners for decades. This has been compounded by the perception of a divide between theories of educational leadership and practical application in the K-12 world. Offering both theory, field and research examples, this article helps to bridge this perceived gap by describing how a theory of change can manifest within a district and/or school system, regardless of the size or demography of that district. This article also offers support to both faculty and students in educational leadership preparation programs by showing it is possible to build stronger theorist/practitioner collaborations. Our intent is to help soon-to-be, as well as existing, practitioners in school leadership positions understand the “why” and “how” of change in order to stimulate more deliberative thought in decision making, thus circumventing the reactionary symptoms often present in the current education system. Implementing sustainable change requires closing the gap between theory and practice, as well as having a theory of change to bridge that gap.

This article has three proposed outcomes:

- Understand the structure of a research-based change model as an integral part of the continuous improvement process.
- Understand the importance of using a systematic, intentional change model.
- Demonstrate an understanding of the change model by applying field results based on personal experience during the past 10 years.

Background

Traverse City West Senior High is a large (1,800 students), ninth through 12th grade, comprehensive high school located in a primarily rural region of northwestern Michigan. Students at West Senior High have historically done well academically. However, in 2007 there was a desire to do more for those students who were not doing well. Specifically, the leadership at West Senior High wished to (a) increase the opportunities for all students, (b) reduce the number of failed courses in the ninth grade, (c) increase personalized interactions between staff and students, and (d) close the achievement gap within a diverse socioeconomic landscape.

The school had the opportunity to become part of a five-year federally funded Smaller Learning Communities (SLC) Consortium, which represented a collective commitment by four different geographic areas in Michigan to create successful, personalized learning environments for every student as a pathway to college and career readiness. It was hoped that change would result in acceptable, equitable achievement and success for all following graduation.

The Michigan Smaller Learning Communities Consortium was formed with the assistance of the Michigan Coalition of Essential Schools (MCES), and the grant was authored by Sharalyn Brandell and Jim Bodrie from MCES (Brandell and Bodrie, 2007). The grant outlined four milestones which the Consortium needed to accomplish. These milestones included the following: English Language Arts and Mathematics Catch-Up; Comprehensive Guidance and Academic Advising, Interdisciplinary; Data-Driven Core Teaching Teams; and Advance Placement, Dual-enrollment Opportunities (Brandell and Bodrie, 2007).

The grant application proposed a third-party evaluator. Evaluators, Dr. Susan Printy and Dr. BetsAnn Smith, from Michigan State University (MSU) evaluated the progress of the SLC grant implementation. Traverse City West Senior High was one of the schools in the Michigan Smaller Learning Communities Consortium and is the school primarily used in this article as an example of putting theory of sustainable change into action. Traverse City West Senior High School was able to meet all milestones and benchmarks at the end of the five-year grant period. The data and

evidence provided in this article were obtained from the final MSU evaluation report for the SLC grant (Printy & Smith, 2013). The evaluators were actively engaged with the Consortium participants over the five years of the grant, providing accountability measures as well as valuable feedback to the processes and practices being implemented.

Identifying the Problem

Many school systems have “initiative fatigue,” which we define as systems continuing to implement various changes in efforts to obtain a golden ring—the one program or initiative that will achieve their goals and make all of their problems go away. However, many districts have not defined the fundamental problem(s) they are trying to address, even as they grasp at trendy programs promoted by neighboring districts or professional associations.

To achieve sustainability, any proposed change initiative must have a purpose: a why. This purpose is typically a problem of practice—a challenge area of learning or need to change something that is interfering with progress toward a goal. What exactly does a school or district want to “get smarter about” in relation to teaching and learning? In this age of accountability, a place to develop this purpose might be found in data. However, many schools and districts immediately jump to standardized test scores for their data, which are often a moving target based on what appears to be state or federal legislators’ whims. Although test scores may be a good place to start, other data should be explored more deeply. Three areas of data should be explored including demographic data such as attendance rates, enrollment trends, behavioral data; achievement or outcome data, which should include both standardized as well as classroom assessment data, and perception data. Process or classroom observation data should also be included when gathering information. Is there evidence other than standardized test scores to support a challenge area of learning that has been tentatively identified? Is there a trend to be found in local assessments or other regional assessments?

In addition to analyzing test score data, a school or district should look within the instructional core to gather additional data about the problem of practice or challenge area of learning. What is really happening in the classroom when students and teachers connect in the presence of content? Elmore (2007) defines the instructional core as the intersection between student, teacher, and content. Additional information can be gleaned by looking at the task teachers are asking students to do, as well as the tasks students are actually completing. For example, if assessment scores indicate students are struggling with higher levels of cognition—such as within Bloom’s Taxonomy or Webb’s Depth of Knowledge (Anderson & Krathwohl, 2001; Webb, 2002)—educators should gather observational data within classrooms by looking at relevant tasks students are being asked to complete and those they are finishing. This will offer a clearer picture of where the learning or teaching may be breaking down.

The federal SLC grant’s “Absolute Priorities” included “preparing all students to succeed in postsecondary education and careers.” (Brandell & Bodrie, 2007). The problem and subsequent data that drove these priorities —stemmed from several decades of research by the Coalition of Essential Schools (CES), the Gates Foundation, and others, which indicated that schools with fewer than 500 students graduated more students who were college and career ready as measured by various student achievement tests and benchmarks. The U.S. Department of Education identified the problem of practice as being related to large, comprehensive high schools where the learning environment was not personalized and students were “lost” in the crowd (Brandell & Bodrie, 2007).

In theory, if students were in smaller learning environments, they would be better known and therefore their academic, social, and emotional needs could be known and met.

Three of the six schools in the Consortium applying for this grant represented inner-city high schools in Grand Rapids and Muskegon—communities supported by a business and industry economic base. Marquette High School in the comparatively isolated Upper Peninsula city of Marquette, Michigan (home of Northern Michigan University) also was involved. Two Traverse City high schools participated, one of which was West Senior High; both are located in a large, primarily agricultural area that includes popular tourist destinations. All of the Consortium's schools had a significant number of economically disadvantaged students, as well as ethnically diverse populations. Students struggled with the common problems of large high schools, including isolation, disengagement from the education process, and large achievement gaps among subpopulations.

The Consortium members unanimously agreed that a collective, collaborative effort would dramatically enhance the likelihood of success more than individual efforts to improve and reform. Consortium members set forth a plan to accomplish the SLC grant's Absolute Priorities by implementing a coherent set of strategies and interventions aligned with the National Association of Secondary School Principals (NASSP) Breaking Ranks II (NASSP, 2006), the Michigan Coalition of Essential Schools Comprehensive School Improvement Framework, and the national Coalition of Essential Schools Common Principles and Practices (Brandell & Bodrie, 2007).

The grant required that all students were to be randomly placed and included in an academic SLC by 2012. The federal SLC monies gave the high schools additional resources to use for activities such as release time, professional learning opportunities, and coaches to assist in creating smaller learning communities within the large high schools. Professional development and coaching services from the grant's technical assistance provider, a regional center for the CES, were utilized and were instrumental in guiding the work of the Consortium (Printy & Smith, 2013).

Theoretical Underpinnings of Change

Clearly identifying the problem is only a beginning. The problem must be addressed using a theory of change that will explain the how and why of the desired change and link various activities and outcomes to this vision. According to Laing and Todd (2015), a theory of change is a theory-based approach to planning, implementing, or evaluating change at an individual, organizational, or community level. It explains how a project is intended to achieve outcomes through specific action steps while keeping the context in mind. The focus is on outcomes (results) vs. outputs (activities), allowing a portfolio of data to be collected that will help determine if an intervention has succeeded or failed and why.

Laing and Todd (2015) identified key approaches in developing their theory of change, which includes these four approaches:

- A deductive model using existing research and knowledge.
- An inductive model built from observations.
- A mental model derived from stakeholders' knowledge and experience.
- A collaborative model co-created through academic expertise (research) and practice expertise (the stakeholders' views).

The authors cautioned that using a theory of change carries the risk of presenting change as linear. They argued that change theory should be thought of more as a network—as links between strands of action that demonstrate complex relationships. The SLC grant priorities implied an

integration of these four approaches as reflected in the Gates Foundation Small Schools research and publications which influenced grant programming at the time (Brandell & Bodrie, 2007). The Michigan State University, third party evaluation team, also used methodology integrating the approaches.

Another approach to presenting a theory of change is the use of a logic model. According to the Kellogg Foundation (2004), a logic model can be defined as “a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan to do, and the changes or results you hope to achieve” (p. 1). In other words, a logic model can serve as a broad road map for a change initiative. It is a framework for describing the relationships between investments, inputs, activities, and results/outcomes; it provides a common approach for integrating planning, implementation, evaluation, and reporting. The Michigan Coalition of Essential Schools was instrumental in preparing the SLC grant application and included a W. K. Kellogg Foundation logic model template (Brandell & Bodrie, 2007).

Goal: Student Improvement

To create sustainable change and achieve a vision of student success, leaders need to view their schools as learning systems for both adults and children. The reason to initiate any change should, of course, be based on student outcomes—on the conditions of learning we want to change for our students. Those conditions must be based on quantitative and observational evidence. School organizations are usually adept at collecting and analyzing numerical data, but that has to be followed by observing actual practices to verify or help to better explain the quantitative information, as mentioned previously.

When a student learning problem has been identified and verified through observational practices, then it is time to look at the adult learning needed to improve instruction or make the changes that will result in improved student learning. A deceptively simple question must be answered: what do the principals, teachers, students, and parents as stakeholders need to know, understand, and be able to do in order to successfully implement and sustain the change? Paying attention to this adult learning offers a huge return on the investment in whatever change is desired. Just implementing a program or strategy and hoping it will have an impact, without ensuring that adults are able to effectively implement new strategies, may be a waste of precious human and fiscal resources resulting in little improvement in student learning.

Elmore’s (2007) description of the instructional core as the intersection of student, teacher, and content means a school cannot hope to improve upon student learning by only making a change in one leg of that three-legged stool. To improve student learning, schools need to look at the teachers’ learning as well as the quality of their interactions and the alignment of whatever content is used. Organizations must allocate resources of time, funds, and people to train staff in the continuous improvement process and embed those resources into daily work. A targeted professional learning component will need to be developed that is appropriate for each of the team members; not all of them will need the same training.

To improve student performance there were four main goal areas outlined in the federal SLC grant proposal, with prescriptive strategies and professional development to meet those goals:

1. Create an environment in which a core group of teachers will:
 - Know the needs, interests, and aspirations of each student well through Advisories or other structures.

- Monitor each student’s progress.
 - Provide the academic and other support each student needs to "catch up" students and close the achievement gap.
2. Utilize interdisciplinary and data-driven core teaching teams, which will be assigned common students and common planning time to:
 - Align instruction with standards.
 - Develop common assessments.
 - Integrate career pathways and interdisciplinary instruction.
 - Examine student work and other data to make decisions.
 - Assist with student exhibitions.
 3. Assure that teachers focus on mastery for learning:
 - Students will demonstrate mastery with exhibitions, portfolios, and capstone projects, as well as standardized tests.
 4. Increase engagement with relevant interdisciplinary instruction and real-world application by aligning place-based education, service learning, internships, etc., with essential learnings.
 - Teach literacy skills across all content areas.
 - Flex schedules to accommodate strategies consistent with how students learn most effectively and for teachers to effectively team with one another.

According to the independent evaluation of the SLC grant conducted by MSU researchers, Drs. Susan Printy and BetsAnn Smith (2013), most of the goals and strategies were met by all of the schools. However, Traverse City West was the only school that consistently implemented all of the goals and maintained the structures, systems and strategies design in the Theory of Change to sustain the SLC project (Printy & Smith, 2013).

The Consortium schools committed to identifying students entering high school who were below grade level in ELA and/or mathematics; they were to be provided with accelerated “double dipping” opportunities during the school day and before and after school. Online credit recovery would be available for students to access 24/7, and core content seminars would be provided for guided independent work. Intervention programs would (a) be designed to equip participating students with grade-level reading/language arts and mathematics skills by no later than the end of the 10th grade, (b) be grounded in scientifically based research, and (c) use age-appropriate and culturally sensitive instructional materials and strategies.

According to the MSU evaluation, Traverse City West successfully met the “catch-up” goal by using EXPLORE and/or PLAN scores– to identify below-grade level students then “double-dipping” them in either Read 180, Adolescent Accelerated Reading Initiative, English or Math Concept Class, or E2020 for credit recovery while keeping them on track for graduation. 169 students took the Academic Resource class for guided independent study and the Academic Assistance Room was staffed and open before, during, and after school providing support to students (Printy & Smith, 2013). At the end of the grant period, there was a 17% decrease in failures of Algebra I as well as a mere 6% failure rate in English 9 and English 10 (Printy & Smith, 2013)

According to the SLC grant requirements, students, teachers, administrators, and community members had to participate in a culture of inquiry using student data—placing students at the center of the educational experience and sharing a vision and focus to help all students reach high standards. Workshops, collaborative teams, study groups, staff retreats, and technical assistance from highly skilled school-redesign coaches were some of the pathways used to build the knowledge base and skills of all stakeholders.

To increase the percentage of students who entered postsecondary education in the semester following high school graduation, comprehensive guidance and academic advising were provided to students and their parents. This included assistance in selecting courses and planning a program of study that provided the academic preparation needed to succeed in postsecondary education. The primary structure developed to meet this objective was “Advisories” that served all students. In year one of the SLC grant, Traverse City West developed the Advisory structure, curriculum, and personal learning plan (PLP) format. It implemented student-led conferences using PLPs and electronic student portfolios as cornerstones for self-monitoring progress. 100% of the students met in advisories twice a week for 30 minutes each. A committee of teachers developed the curriculum and met frequently to monitor progress and modify lesson plans. Career Cruising is used for college and career planning to be integrated into the PLP’s (Printy & Smith, 2013).

As a result of these efforts, student participation in Advanced Placement (AP) and/or dual enrollment classes increased by more than 5% with 18% of the AP tests taken by disadvantaged students (Printy & Smith, 2013). There was also a 41% increase in the number of students participating in Upward Bound, which is a federally funded program for disadvantaged students to help prepare them for post-secondary opportunities (Printy & Smith, 2013). Today, taking an AP class or dually enrolling at the local community college is common practice for high school students at West Senior High beginning in their sophomore year. All students complete a common application in their advisory.

The activities in the SLC grant relied on Deming’s Plan-Do-Study-Act methodology with the addition of Cycle of Inquiry. With assistance from the CES, a cycle of continuous improvement was used to implement the plan and evaluate progress during the SLC grant. Theory of change and feedback loops were used to continually modify the plan. The knowledge, skills, and dispositions developed during the grant period were enhanced by staff learning and growth. As West Senior High’s continuous improvement expertise evolved, instructional rounds protocols and the Learning Forward protocol were added.

Identifying and Engaging Stakeholders

A Carnegie Foundation for the Advancement of Teaching white paper (Park, Hironaka, Carver, & Norstrom, 2013) presented six common themes that characterized three types of educational organizations engaged in continuous improvement. One of those six themes stressed the role of communication and engagement with stakeholders. Identifying who the appropriate stakeholders are and the roles they will play in a change initiative is fundamental to any successful change process. The most successful change initiatives are enacted when a group of people share a common vision toward a better, more productive, more efficient organization.

Before implementing any change initiative, there must be a sense of urgency (Chandler, 2016; Kotter & Cohen, 2002). Urgency is generated when the pain/fear/concern of staying in the current situation is greater than the anticipated pain and effort that will be needed to change. To generate a sense of urgency within the organization, it is best to include internal stakeholders in collecting the evidence, establishing an inquiry stance, and identifying the purpose, as described previously.

Involving external stakeholders is also appropriate; a school organization will get the most support when community members, parents, business leaders and service providers are involved with the solution. At the very least, all external stakeholders should understand the purpose behind any change effort. DuFour and Eaker (1998) stated that “. . . a process that also includes

representatives of parents, community members, area businesses and student is preferable” (p. 67), explaining that each person brings a different perspective that is valuable to the change process. People outside the school setting have a “customer” viewpoint to current processes and can assist in identifying the future in terms of benefits for their children and/or community.

Chavan (2012) also spoke of the power of collaboration. He believed that one person’s ideas would be limited, whereas a collaborative effort would include multiple perspectives and competencies that could further germinate thoughts and ideas. He stated that change is most successful when those who are responsible for implementing the change initiative have a strong voice in the design of that implementation.

Finally, Kouzes and Posner (2003) stated they were unable to find examples of extraordinary achievement occurring without the active involvement of many people. The authors wrote:

We’ve yet to find a single instance in which one talented person-leader or individual contributor accounted for most, let alone 100 percent, of the success... the winning strategies will be based on the “we, not I” philosophy. Collaboration is a social imperative. (p. 20)

In deciding who the stakeholders are for a change initiative, certain questions need to be answered:

- At what level will the change initiative actually be implemented (e.g., classroom, building, district, or community)?
- Who will be affected by the change?
- Who will actually implement the change?
- What level of involvement, direct or indirect, will each of these people need to have?
- Who are your existing team members?
- What knowledge, attitudes, skills, and behaviors do those team members bring to the initiative?
- What training, information, or professional development do they need to have to help support the initiative?

For the implementation of some initiatives, internal individuals might be the most effective team members. In other situations, involving people outside of the organization in the actual implementation is critical to success. Each change initiative will need different internal and/or external stakeholders as team members, depending on where the change will occur and how large the impact is expected to be. For an example, if the change initiative is curricular, more internal stakeholders at the table would be appropriate. On the other hand, if the change is something the school community is strongly tied to such as an athletic program or community garden, then it would be necessary to include key external stakeholders.

Once it has been determined where the change will be implemented and who will be affected by this change, a list of names and roles can be generated for internal and external stakeholders. Next, determine who the people of influence are on this list of stakeholders. Who will the key people be able to assist in advocating for the change and where are they located—inside or outside of the organization? Will they be directly responsible for the change, a supporter of the change, a bystander assessing the effect of the change, or an interested community member?

At this point in the process it is important to have a conversation with several key stakeholders, as mentioned above, to discuss the idea of the change initiative and why it is important. The feedback from these conversations will identify areas of support or resistance. These individuals may end up being a type of informal or formal advisory committee.

To support the stakeholders’ understanding of the need for change—and their understanding of the process as it is underway—they need access to research and information. Some of the team

members will need more information than others, so it is important to use the right dissemination methods. This means communicating in a variety of ways because everyone has a preferred communication style: snail mail, email, social media, and/or face-to-face meetings. Also, communication is a continual process; a one-time informational session will not bring either internal or external stakeholders along.

Traverse City West had several staff members participate in the district Future of Learning Summit including parents, students, and stakeholders to inform and gather feedback about the high school transformation efforts. Parents and students were the targeted audience for Planning for the Future workshops that focused on completing FAFSA and college applications. The Administrative team conducted frequent “listening” sessions for parents. A student voice program was established to involve students not traditionally involved in the decision-making process (Printy & Smith, 2013).

Finally, especially for internal team members, professional development will be needed. It is unlikely that anyone will have a full understanding of the change and implementation processes required. In the KASAB process, Killion (2007) identified a means for assessing the knowledge, attitudes, skills, beliefs, and behaviors needed for this targeted professional learning. A brief survey might be utilized to assess the knowledge of the team members and then identify specific training. This will ensure that everyone has a basic understanding of the need for change; how it occurs; and how it could be a productive, positive initiative for all involved.

The organizational design for the SLC project supported classroom teachers with structures and practices that directly promoted knowing students well; this included student groupings, schedules, professional development, decision-making strategies, teacher collaboration, and powerful teaching and learning strategies. The design contained several structures, systems, and strategies that supported the Consortium as a whole as well as each of the four districts and six schools. A “train the trainers” approach was reflected in the establishment of some of these key structures.

- A Consortium Council, which included district- and building-level leaders, was charged with the coordination of the project and accountability to the evaluation process and the U.S. Department of Education.
- A Leadership Team was established at each school, which monitored all activities and ensured fidelity to the grant goals and action plan. The Leadership Institutes provided professional development for each school’s Leadership Team members, enhancing their knowledge and competencies for shared leadership.
- A Critical Friends Group (CFG) was created at each school—facilitators for the professional learning communities that informed classroom and schoolwide practice. The CFG members were trained in the structure of different learning designs, the use of protocols or structured conversations, and facilitation skills.

Each school in the Consortium had at least five teachers on its Leadership Team and another five as CFG facilitators. By distributing leadership across the teaching staff through professional learning communities and examining data (including student work), achievement gaps could be identified and addressed. Nationally trained school-redesign and content coaches provided support to each school. The West Senior High participants were diligent about taking what they learned during professional development sessions to the rest of the staff. Staff meetings were dedicated to sharing information and collaboratively planning implementation of grant priorities and strategies. The Leadership Teams used release time to meet on site to plan and implement the work. They were also diligent about collecting data to inform the plan as each step unfolded.

At West Senior High, interdisciplinary and data-driven core teaching teams were assigned smaller units of shared, randomly selected students. These teams had common planning time available to align instruction with standards, the MME (Michigan Merit Exam), and the ACT college entrance exam. They identified essential learnings, developed common assessments, integrated career pathways and interdisciplinary instruction, and looked at student work and other data to make teaching and learning decisions. Strategies related to rigorous learning were implemented, including the establishment of essential learnings students were required to master to graduate. Tapping research by Hayes-Jacobs (2010), Wiggins and McTighe (2010), Stiggins (2014), the Michigan CES facilitated a collaborative process for teachers to formulate essential learnings aligned with state standards and content expectations. This process built the capacity of the professional learning communities to use a student data-driven cycle of continuous improvement for decision making regarding classroom and schoolwide practices. Over 50% of the staff assumed some form of leadership (Printy & Smith, 2013).

Teachers focused on student mastery for learning versus focusing on what was “covered.” For example, they assisted students in developing student exhibitions. In addition, literacy was taught in all subjects using content area materials. Efforts like this helped the teaching teams become masters at identifying outcomes and collecting and analyzing student, classroom, and schoolwide data.

All students demonstrated their mastery with 360-degree assessments such as exhibitions, portfolios, and capstone projects, as well as “slice” assessment of state standardized tests within their advisory. Student engagement heightened as interdisciplinary instruction, teaming, and emphasis on real-world application increased relevance to their lives, aligning place-based education, service learning, internships, etc. with essential learnings. This practice continues today.

Finally, schedules were constructed by the neighborhood teaching teams to assure there was flexibility to accommodate teaching strategies consistent with the way students learn most effectively. These schedules allowed for effective teacher teaming and lesson planning, and included common planning and blocks of time for extended learning activities.

Accountability Processes to Create Sustainability

Systems-level thinking for change also requires setting up structures across processes and around goals, both of which promote interactions and coordination across the organization. The data collection and analysis processes put in place to support a change initiative should create collective responsibility for teacher practice and student learning, as well as a systemic structure with clear accountability for implementing and monitoring the change desired in relation to the goals.

Putting together a cross-disciplinary leadership team containing members with varied strengths and philosophical beliefs helps to create collective responsibility. The first item on the agenda should be to create a vision for the team, as well as a set of norms to guide the work and how the team will conduct the work. To generate optimum investment and buy-in, the volunteer leadership team members should be given a list of responsibilities to help guide their decisions when they become members of the leadership team. These practices will shape the leadership team’s work and create collective responsibility and accountability. What sometimes occurs is that a member or members of the leadership team will act in name only. In other words, they will agree with the group behind closed doors, but then “drop out” and let the building leader take responsibility for the message to the broader school community. It is imperative that all leadership team members take on their role and responsibilities as true and active leaders of a system. If

something is agreed upon as a team, then all need to stand behind that decision as a team in front of the staff.

To move toward sustainability, a leader needs to empower the team members by giving them tasks and responsibilities and then get out of their way. This can be accomplished through a well-written, structured plan of action as outlined in the theory of change. The plan should be developed initially by the leaders, then discussed and amended as needed in coordination with all team members. Any plan needs to include timelines and accountability for each action step.

Research from the past few decades supports the theory that school communities must change their structures and their policies and practices to adequately prepare all students to succeed in postsecondary education and careers. This work has a particular focus on challenging the inequities that exist for students who are disadvantaged, have disabilities, or are students of color. For the changes to be comprehensive and sustainable, extensive professional development must occur (NASSP, 2006).

Thus, high-quality professional development was provided throughout the project to (a) advance the practice of teachers, administrators, and other school staff; (b) define and implement effective, research-based instructional strategies for improving the academic achievement of students, particularly students with academic skills that were significantly below grade level; and (c) provide the knowledge and skills staff needed to participate effectively in the development and implementation of SLC.

For example, the CES facilitated school change by providing professional development that created a school-wide professional learning community focused on improving instruction and student achievement through collaboration, inquiry, and reflection. This process was driven by student achievement data and utilized a theory of change or road map based on research from the Consortium for Policy Research on Education (CPRE). These professional learning communities became the decision-making bodies of the school—a transfer of responsibility and accountability from school administrators to the practitioners (Furhmann & Odden, 2001).

The professional learning communities collaboratively investigated best practices in instruction. This included literacy strategies across content areas, formative assessments, extended instructional time, skills for catching up, curricula development for academic support, use of a continuous improvement cycle for data-driven decision making (including student work and other authentic assessments), identification of students needing support, and differentiated instruction. The Michigan CES professional development approach aligned with Learning Forward's characteristics of high-quality professional development adopted by Michigan's Board of Education. It was job-embedded and delivered in a variety of ways, primarily through on-site workshops that occurred during professional development release time days, during staff meetings, and/or during common planning time or release time where small groups of staff members were rotated through workshops or provided collaborative work time facilitated by a school-redesign coach.

Traverse City West structured smaller learning communities by grade-level neighborhoods so cross-curricular teams could meet during common planning time to discuss student concerns, successes, and areas that need improvement. In addition, time was built into the school calendar for PLC's in the core content areas to refine assignments, projects, Common Core and state standards alignment, common assessments and review student work using Critical Friends protocols. The schedule included six 90-minute meetings and one monthly meeting over the course of the school year. Many PLC's chose to meet even more often. Professional Learning included Writer's

Workshop, RAISE Literacy strategies, Instructional Rounds, and collection and analysis of student data to inform instructional practice (Printy & Smith, 2013).

Continuous Improvement

Continuous improvement is a critical component in any commitment to systematic and intentional change. Continuous improvement efforts depend on leaders with a learning or growth mindset. They do not look for a “silver bullet,” but rather focus on disciplined processes for developing, testing, evaluating, and improving their work.

W. Edwards Deming (2000) is generally credited with the continuous improvement movement as a process he used to assist the Japanese industrial recovery following World War II. His Plan-Do-Study-Act (PDSA) cycle focuses on the goals of the organization, analyses of data to identify gaps between those goals and the current reality, and a plan to close the gaps. This business-based methodology emphasizes the collection of data to improve quality and create continual progress for the development of organizations. Deming (2000) stated that improving quality would reduce expenses while increasing productivity.

The PDSA cycle tests a change in the work setting by planning the change, trying it, observing the results, and acting on what is learned for the next cycle. The process has no endpoint, with four steps repeating as part of an unending cycle of continuous improvement:

- *Plan.* Identify a goal or purpose, formulate a theory, and define outcomes for success.
- *Do.* Implement the components of the plan.
- *Study.* Monitor outcomes to check the validity of the plan for signals of progress or problem areas for improvement.
- *Act.* Integrate what was learned by the entire process—adjusting the goal, methodology, or initial theory—and begin the cycle again. (Deming, 2000).

Although the term “continuous improvement” has been used extensively in educational circles in recent years, its actual implementation does not seem to be occurring on a wide scale. However, when it has been implemented, it has produced significant results (Park et al., 2013). Implemented with fidelity, continuous improvement models like PDSA in curricula could be groundbreaking in an educational setting.

In the Carnegie Foundation for the Advancement of Teaching white paper, the authors presented six common themes that characterized their review of three levels of educational organizations engaged in continuous improvement:

1. The classroom level, which promotes data-informed decision making in the classroom
2. The system-wide level, which implements a broader number of structural improvements from the administration and school board to support classroom activity (e.g., monetary investments in professional development)
3. The collective impact level, the broadest of the three, which involves a long-term commitment from a group of participants from outside the educational system who have a common agenda for solving specific problems (Park et al., 2013).

The six common themes were:

- Building capacity
- Data collection and analysis
- Methodology
- Organizational infrastructure
- Communications and engagement

- Leadership and strategy

According to Park et al. (2013), the processes used by organizations conducting continuous improvement work in the field of education included the following characteristics:

- Entry points were not mutually exclusive but could be multiple in varied contextual settings.
- Continuous improvement was not synonymous with simultaneous improvement of all processes.
- Research and learning cycles were iterative and gradual in nature.
- Despite being both iterative and gradual, it was imperative that the work be planned and undertaken in a rigorous, thoughtful, and transparent manner.

Any continuous improvement methodology needs to focus on system outcomes for specific beneficiaries—in this case, students. The act of measuring key processes and outcomes is crucial and needs to be embedded in the daily work of the staff. Quality improvement requires the application of an evidence-based methodology with its inherent standards, protocols, and guidelines, meeting new conditions as they evolve over time. This systems approach aligns with Deming’s premise that results are viewed (and situated) as natural outflows of the current design of the system (Deming, 2000).

In this grant-funded effort, the CES road map to student achievement mileposts included a data-centered continuous improvement process. This process included the creation of professional learning communities, alignment of instruction and assessment with state standards, and improvement in practices in four key areas: school organization, classroom practice, leadership, and community connections.

The overarching goal for this Consortium was for students to be college and career ready, and the theory of change identified the following outcomes to achieve that goal:

- Schools would be reorganized into smaller learning communities.
- Classroom instruction would be reorganized around interdisciplinary, project-based themes.
- Leadership would be distributed to teacher teams responsible for the academic growth and support of the students in their SLC.

Ultimately, students and their success were at the center of the school changes at West Senior High. School structures that changed included advisories, smaller learning communities of teachers and students, and professional learning communities engaged in job-embedded professional development. 100 % of incoming freshmen had a peer mentor as well as a teacher advisor. At the end of the grant cycle, 75% of students reported feeling like they had more than one adult in the building they could go to (Printy & Smith, 2013). School practices that changed included best-practice instructional methods; data-driven decision-making; and collaborative and reflective design of curricula, instruction, and assessment. Although both Traverse City high schools were awarded the same grant funding and participated in the same professional learning opportunities and experiences, 10 years later, only West Senior High continues to operate the same structure of school "neighborhoods" with Advisories or SLCs.

Professional Learning

A final aspect of successful change involves professional learning and development. Hord and Roussin (2013) identified five interconnected phases of change as it relates to professional learning. These phases include preparation, incubation, insight, evaluation, and elaboration. Hord and

Roussin suggested three tips for a successful change initiative: (a) use data, (b) use stages of concern to help support and influence staff, and (c) use Learning Forward's Innovation Configuration Maps to help navigate the process.

Hirsch, Psencik, and Brown (2014) described a nine-step theory of change to improve student achievement that included four steps related to professional learning:

- Define clear descriptions of effective practice.
- Develop and maintain leadership capacity.
- Establish a consistent system of support for leaders.
- Collect multiple sources of data to determine professional learning needs.
- Provide differentiated professional learning for individual leaders and teams.
- Assure implementation of newly acquired skills.
- Improve administrator, teacher, and education practices.
- Improve student achievement.
- Continue the cycle.

Using this approach, the first type of outcome that a school organization is likely to see will be educators, principals, and teachers expanding upon their knowledge, skills, practices, and dispositions. To accomplish this, these team members need to ask themselves the following questions: Why did I become an educator? What do I stand for as a teacher? What do I bring to the table? How do I check in or ensure I continue on the learning journey to benefit the students first, and then myself as a professional? (Fullan, 2003). Each team member must truly believe that ALL students can learn and must internalize a growth mindset so that can be transferred to the classroom, and each will ensure that all students are learning.

This individual sense of urgency alone will not make improvements (Fullan, 2003). Each individual educator needs to be supported by a system through the learning and processes that are put in place. The change that is being introduced and initiated can be supported through standards of professional learning (Learning Forward, 2011). Learning Forward developed the following seven Standards for Professional Learning. Professional learning that increases educator effectiveness and positive results for all students includes:

- Learning Communities – Learning communities that are committed to continuous improvement, collective responsibility, and goal alignment.
- Leadership – Skillful leaders who develop their capacity, advocate, and create support systems for professional learning.
- Resources – The prioritization, monitoring, and coordination of resources for educator learning.
- Data – The use of a variety of sources and types of student, educator, and systems data to plan, assess, and evaluate professional learning.
- Learning Designs – Integrated theories, research, and models of human learning to achieve intended outcomes.
- Implementation – The application of research on change and sustained support for the implementation of professional learning for long-term change.
- Outcomes – Alignment of outcomes with educator performance and student curriculum standards.

For example, Learning Forward members subscribe to a learning cycle in which the above standards are applied to any professional learning or change initiative; this results in improvement in educator knowledge, skills, and dispositions. This, in turn, will lead to changes in educator practice, resulting in improvements in student learning (Learning Forward, 2011).

DuFour and Eaker (1998) stated that “. . . enduring catalysts for change are a powerful sense of purpose, a widely shared vision of what an organization might become, and a collective commitment to act in a way that will make that vision a reality” (p. 55). Thus, developing a positive culture is an important factor to the success of any initiative. Do team members feel valued and respected? Do they all feel that they have a voice? Are their needs and concerns understood and respected? The answers to these questions can be reflected at the most practical level. Successful professional development involves identifying training days and times that are flexible and work for the stakeholders’ schedules. This may mean both day and night sessions; multiple sessions at different times; small-group, large-group, and online options; the need for substitute teachers; and an adequate budget.

Creating a Positive Culture for Change

It is important to note that nothing in any documented practice in schools is a model to be followed exactly. Communities have to use the process of continuous improvement with their own data to identify what works for them and for their community.

Hord and Roussin (2013) identified six beliefs about change:

- All change is based on learning.
- Implementing a change is more successful when there is social interaction.
- Individuals must change before an organization can change.
- True, effective change affects emotional and behavioral responses.
- People will embrace change more easily when they are able to see how the change factor enhances their work.
- Sustainable change is more apt to occur when others “own” the change initiative.

The process of change can cause disruption and challenges within any organization. Within most educational institutions, these changes occur more slowly than in the business world because data cannot be obtained as frequently or as quickly to make immediate change visible. Moreover, this kind of long-term improvement and change requires frequent communication with all involved parties, flexibility from all participants, and a shared set of goals.

Change is not a linear process, but the likelihood of success and sustainability will increase if leaders give attention to the following:

- Know the problem that drives the purpose as well as the future state.
- Identify the stakeholders and their needs.
- Ensure student results is the focus; create a theory of change based on a logic model and continuous improvement cycle.
- Create processes and structures to support and sustain change.
- Use research-based resources to support change efforts.

Conclusion

Successful sustainable change in K-12 education requires rigor, patience, intensive thinking and communication, and consistent effort over time—guided by the development and implementation of an underlying theory of change. Traverse City West Senior High’s story presented in this article is a relevant example of how to implement a change model. Administrators first identified a problem; the high school was “too big” and students were getting lost in the cracks academically and socially. They then identified and engaged all stakeholders, ensuring everyone was on the same

page in creating an environment for students where “everyone is known, being known matters”—a motto West Senior High still espouses. Finally, they created accountability structures, new practices, and continuous improvement cycles to ensure the needs of all students were being met. While the smaller learning communities are not currently operating exactly as designed when the grant was originally funded, this large high school retains a personal feel for staff and students. Change worked.

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