

THE MIRACLE IN THE MIDDLE: EDUCATIONAL SERVICE AGENCIES PROVIDE THE STRUCTURE FOR SUCCESSFUL K-12/HIGHER EDUCATION PARTNERSHIPS

by

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The urgent need for effective collaboration between K-12 schools and postsecondary institutions is well documented (edBridge Partners, 2014; Bosma et al., 2010). The recent emphasis on preparing all students for college and careers recognizes that higher education should not be considered simply the consumer of the K-12 product. Rather, higher education must be a partner in applying research to practice and preparing teachers capable of dramatically increasing student academic outcomes. Mere cooperation or coexistence are no longer adequate.

Education leaders agree that collaboration is necessary; yet they also agree that a host of governance, finance, and political issues prevent sharing resources and expertise that could radically improve student learning (National Center for Public Policy and Higher Education, 2009). Findings from a recent study commissioned by the American Association of School Administrators and the American Association of State Colleges and Universities show the distance between the vision of genuine collaboration and the reality of many projects (edBridge Partners & Hart Research Associates, 2014):

[Ninety] percent of district superintendents and 80 percent of post-secondary system leaders agree that collaboration is extremely or very important.... However, few think that

they are collaborating effectively: only 33 percent of district superintendents and 34 percent of college leaders say they are collaborating extremely or very effectively. (p.1)

Organizational recommendations from this study suggest that both dedicated staff and committed leadership are needed in order to create more productive working relationships between K-12 and higher education. We agree these components are necessary, but they are not sufficient. We propose that an element between staff and leadership is the most essential cog in the organization and implementation of large-scale, enduring collaboration that advances learning. The structure we are calling for includes not only the formal leadership of the collaborating institutions and the hired staff that carries out the projects but also relies on a specialized team composed primarily of educational service agency personnel who become a type of switching station between these two groups. We are reminded of such a team by a popular cartoon that shows two men standing in front of an equation at a chalkboard (Harris, 2006). The younger man has written the initial numbers at one end of the board and a sophisticated solution at the other, but in between has written just the words “then a miracle occurs.” The older man observes, “I think you should be more explicit here in step two.”

Background

The need for a so-called miracle in the middle does not happen only in the rarified world of equations. It happens in human enterprises where crossing the chasm between the starting conditions and the desired future requires a multitude of complex operations and an understanding of all stakeholders. We argue that successful implementation of a project requires skilled implementers and dedicated leaders as well as an in-the-middle mechanism that becomes

an essential support structure by interpreting the motivations, actions, and pervasive culture of each of the partners to all of the other partners. This team is different from the P-16 coordinating councils that often are viewed as the answer to better collaboration (University Research Council, January 31, 2011). In our experience, coordinating councils comprised of overseers from partnering institutions are often victims of too little understanding of the extent of care and feeding needed for successful partnerships. System leaders meet infrequently and direct major initiatives through their subordinates. While this approach does create action, it is often not the type of action that supports the project sufficiently to realize a long-standing partnership. Rather than coordinating from above, our new type of middle team is closer to the action while also having the benefit of a somewhat removed perspective. We have come to this conclusion over the past eight years through our experience as members of important middle groups in the operation of two large scale collaborations: (1) the Minnesota Region 11 Math and Science Teacher Partnership (MSTP) (funded through Title II, Part B of ESEA, as amended by the NCLB Act of 2001) and (2) the National Science Foundation EngTEAMS (Engineering to Transform the Education of Analysis, Measurement, and Science) partnership (NSF DUE-1238140).

We began in 2007 as a group of administrators from three educational service agencies (ESAs) exploring how to respond to a new opportunity in Minnesota, a legislative initiative to create regional math and science teacher training intending to capitalize on K-12/higher education partnerships. We saw this initiative as an answer to requests from our member school districts for sustained and in-depth STEM (Science, Technology, Engineering, and Math) training for teachers. Of particular urgency was a need to train middle level teachers to prepare

students for algebra by grade eight. As we sought higher education partners and began designing our training model, we translated what we had learned from other successful projects run by our regional agencies into our working structure.

We started by remembering the ultimate purpose of ESAs is to increase academic achievement of all students through support of a group of member school districts in a region. We reflected on the range of services our ESAs provided, from operating specialized schools to coordinating professional development to offering technical assistance on a host of educational topics. We came to a new appreciation of how our ESAs had provided a ready-made infrastructure of relationships among school districts—one that engendered trust at the outset and the promise of sustainability as projects matured.

Our coalition represented three ESAs: the Metro Educational Cooperative Service Unit (Metro ECSU), Intermediate District 287, and Northeast Metro 916. Metro ECSU had a long-standing history of facilitating research-based professional development for teachers and system leaders, and the two intermediate school districts, 287 and 916, had provided direct service to students as well as offered professional development requested by members. Each of these ESAs had independently established a reputation for creating cultures of sustained, high quality professional learning and had systems in place for marketing, registering, and delivery training. Furthermore, these ESAs had a history of working together on large-scale projects. As the MSTP partnership was formed and three higher education institutions added, it became clear that the ESA coalition could have a unique role. By the ESAs managing logistics and communication with their already-established 48 school district partners, the higher education faculty could spend their time exercising their subject area content, pedagogical, and evaluation expertise.

It could be said that ESA executives make their careers in the middle. Their professional roles are to increase effectiveness and efficiency across districts. This group therefore had the skills, positional authority, and charge to support partnerships such as MSTP. These three elements proved to be key in creating what we called an executive design team (our middle group) to provide ongoing support to project staff that went beyond traditional directing and reporting relationships. As a subset of the overall project design team that included representation from all partnering institutions, our executive team helped create the foundation for what continues to be an undeniably successful partnership. In the eight years since its inception, MSTP has flourished, providing to date year-long training and support for 2819 teachers from 401 schools in a range of science, technology, engineering, and mathematics topics.

The MSTP executive design team also has become the model for creating the important EngrTEAMS middle group known as Technical Assistance Leadership Council (TALC). When envisioning EngrTEAMS, the principal investigator (PI) knew she wanted to maintain what she had come to value as an essential function of the MSTP partnership. Even though this project was initiated from higher education and not from K-12, the PI had appreciated the MSTP structure and could see how it would benefit a new, complex project intended to increase grade 4-8 student learning of science concepts as well as mathematical concepts related to data analysis and measurement. She had envisioned this project to have many research aims and potential products stemming from an engineering design-based approach to teacher professional development and curricular development. The PI had seen the ability of the MSTP group to value the unique perspectives of K-12 and higher ed and to translate among the partners to

enhance the working relationship. She knew the team could provide a layer of support to her and give a safe space to work out ideas for this new project with a group of stakeholders that have just the right amount of distance from the school participants and university researchers to be able to, she describes it, “push into the fog.” She invited the same representatives from ESAs to form the EngrTEAMS middle group that now also includes the project director, overall coordinator, and event coordinator as well as the PI.

Current Work

In this iteration of our middle group we are coming to understand the TALC team as more than a convenient tactical support structure. We are reflecting on the breadth of our work and seeing how we contribute to the partnership using three organizational lenses discussed in managerial psychology (Rabelo, 2012). We now consciously attend to (1) the strategic design lens, (2) the political lens, and (3) the cultural lens.

Strategic Design Lens

The strategic design lens relates to Max Weber’s philosophy of management that sees organizations as machines built to accomplish certain ends (Ancona, Kochan, Van Maanen, & Westney, 2004). This way of looking at a project includes all of the strategies, policies, procedures, and activities envisioned to enact the plan. For the EngrTEAMS grant, the TALC team has developed the “machinery” that includes writing the strategic plan and developing a level of detail that can bring the ideals of the proposal to reality. These details have included such things as determining the qualifications for teacher participants and wrestling with the logistical puzzle of how to schedule curriculum unit field testing in the summer.

The strategic design lens is based on the perspective that aligning various people and processes is necessary to achieve the project vision and goals. Because strategic design “involves simultaneously drawing boundaries around clusters of tasks or activities...and then creating links across those boundaries....” (Ancona, Kochan, Van Maanen, & Westney, 2004, p. 2), one of the first tasks of our TALC team was to establish the project groups and the links among them. We were in a unique position to do this work because collectively we could identify the strengths and needs of those involved and consider how best to map out a management structure to achieve the goals of the plan. By making the structure explicit, we were able to communicate who was a member of each group and how those groups would relate to one another for decision-making.

A key element in the structure is the EngrTEAMS Partnership Team. This group includes representation from each partnering institution as well as each component group needed to carry out the project (e.g., the researchers, the instructional coaches, and the evaluators). The Partnership Team is the decision-making group for the project, with shared accountability and responsibility. Because of the importance of the Partnership Team to the success of EngrTEAMS, our TALC team takes great care to design and facilitate meetings that have the greatest likelihood to achieve the strategic intent. We keep our attention on the overall timelines and products, assuring that action and decision making is coordinated among the teams and the vision does not get lost in the details. We strive to give all stakeholders a voice in the meetings and use the time together productively to examine potential or burgeoning conflicts. In order to do this well, we also must consider the other two lenses.

Political Lens

The political lens examines the project by the relationships among stakeholders and by determining their interests and sources of power (Reisch, Germino, and Power, 2009). This lens is the one that recognizes how the historical divide between K-12 and higher education “has created political constituencies that focus on each level rather than on what they can accomplish together” (National Center for Public Policy and Higher Education, 2009). TALC has a role in helping understand the differences between the levels and to make sure the basic needs of each are met. An example of the differences is revealed in the relative value each system puts on the end products. While both the K-12 and higher education partners appreciate all aspects of the project design and agree our ultimate goals are to produce scalable products and sustainable processes, the K-12 partners appear to value most the possibility of quick scalability while the higher education partners seem to value sustainability over scalability. In our discussions K-12 stakeholders have voiced a need to support as many teachers as possible in the project and to provide curriculum products for immediate use. Higher education stakeholders, however, have advocated for the long view that places greater value on the research contributions to the field that may not as quickly involve as many teachers and generate as many products but will produce exemplary results and be a firm foundation to generate new learning. By being aware of this difference in basic orientation, we have been better able to agree about resource use that supports both views.

This example shows how seeing through the political lens also gives the opportunity to leverage strengths. TALC works to maximize each partner’s contribution to the project by being explicit about the talents and resources unique to each. The struggle for power and autonomy described in the political lens is managed effectively when it is clear that each partner has a

different reason for being part of the project and each is equally necessary to the project. The TALC team has continued to use the protocol we established in our days of working together on the MSTP project and which has served us well: “No one person has the project figured out totally: there is always room for different or new ideas.” We know that if we are to do something we have never done before, we need one another. For theory to become practice, we need to identify our strengths and admit our weaknesses. It might not always be comfortable for us to travel together but if we respect our differences and keep the overall project aims in mind, we can all benefit.

Cultural Lens

Just as with the political lens, the cultural lens starts by recognizing the differences among stakeholders as well as the need to focus on similar goals. Culture however refers more to “the symbolic or expressive side of human life--actions, objects, and ideas that carry specific meaning to specific groups” (Ancona et al., 2004, p. 47). It also defines a space within which certain behaviors are expected and, to large extent, taken for granted (Cheney, Christensen, Zorn & Ganesh, 2011, p.77). A new project provides the opportunity to establish and manage culture, and the TALC team has been integral in shaping the culture of EngrTEAMS. By using the cultural lens concepts of identity and symbols that have meaning for the group (Ancona et al., 2004), we have focused on two high-leverage ways to establish a culture for success: (1) emphasize professionalism and (2) make information and decision-making transparent among all partners.

We reinforced the professional culture several ways with our first teacher cohort. To create identity with the project, TALC named these teachers “fellows” rather than consider them only

participants or research subjects. We chose this term because of its use in higher education to designate a collegial level of involvement. By using an identifier from higher education applied to K-12 teachers, we helped in the culture transfer between the two levels as well as defined the teacher role as integral to the working of the partnership. Teachers did not simply register for an activity, they applied to be fellows and signed an agreement delineating their commitment to the project as well as the project's commitment to them. Throughout EngrTEAMS, the fellows' importance to the project and equality with higher education stakeholders have been reinforced consistently. One example of this is the TALC team's encouragement of fellows to submit research papers and make conference presentations. A strong indicator of our success in establishing and reinforcing a constructive organizational culture is that over the life of the project the great majority of fellows have requested to be involved past their initial year.

Perhaps the most important symbol of our professional culture is the project's logo, developed and maintained by the TALC team. In his book on organizational communication, Cheney has said that shared beliefs, artifacts and assumptions all define an organization's culture (2011, p. 79), and the logo relates to each of these aspects. Its design, with images representing collaboration, as well as its use as an artifact of our work, reinforces our shared belief in collaboration and our assumption of equality among partners. This symbol appears on all important communication documents and promotional items given to project personnel and interested parties. With the difficult task of managing partnering cultures while maintaining project success, the TALC team has used the logo as an identifier for all partners to rally around and use to share with outside groups.



We also have promoted shared beliefs, artifacts, and assumptions about our culture of professionalism and transparency through extensive sharing of the documentation of partner work. We have found that using cloud-sharing software for all documents on the project solidifies identity because the TALC team decided to give all partners view access to every electronic folder. This action has maintained transparency among all working groups as well as created a reservoir of the extent and quality of the work that has been accomplished which itself becomes a symbol of our shared beliefs and assumptions.

Lessons Learned

Over the past several years, our in-the-middle team has drawn three important lessons we will apply in our ongoing work to create and sustain successful K-12/higher education partnerships. We have learned: (1) who should comprise the team, (2) how the team should function, and (3) how the team assures sustainability. ESAs play a central role in each of these lessons.

Who Should Comprise the Team

Unlike many collaborations that start with just one school district approaching one higher education institution or vice versa, our partnership was made possible because it started with a coalition of K-12 districts represented by ESAs. Most states have ESAs whose mission is to support school districts. These ready-made structures are prepared to staff “in-the-middle” teams because these personnel have experience in collaborating across many organizations and often with one another.

In addition to the regional education personnel, our team includes the lead project investigator (PI) and three key staff: the director, the overall coordinator, and the event manager. While each project will have slightly different team membership based on project scope, we have found this team size and composition to be effective to carry out our charge. We each are responsible for the big picture but see it from different vantage points. Most of us have had the advantage of working together on previous projects which also helped create an immediate

working rhythm and trust of one another; however, consciously constructing and adhering to protocols of how the group will function can create the same level of trust over time with any group.

How the Team Should Function

To create a functioning “middle group,” all members must actively support a set of mutually agreed upon protocols that support shared responsibility. These protocols can set up some working parameters for the group, but most important, should reflect commitment to the project, flexible attitudes, and equality among members. The team’s role will change over the course of the project, but these ground rules will promote a firm foundation to grow and change, giving permission for all to voice opinions that may take the project in new directions but will not lose sight of the end destination.

Once established, the main job of the middle group is to use the three management lenses to help coordinate and steer the project. Applying the strategic design lens, the group keeps its eye on the overall goal and then creates structures with the best likelihood of achieving that vision; using the political lens, they act in ways that honor the unique perspectives of all the partners; and employing the cultural lens, they actively manage the culture with shared symbols, artifacts, and understandings.

How the Team Assures Sustainability

The ultimate goal of most K-12/higher education partnerships is to sustain the work of any project past its original life. While most partnerships create some level of products or processes that can be applied to other school systems, there is seldom an ongoing mechanism to support

this use, rendering what was learned neither scalable nor sustainable. By introducing a middle group such as the TALC team into the organizational structure of a project, specific attention can be paid to how the project will live past its initial funding. In the case of the two projects described here, only negligible contribution by the school districts was required and therefore, how to design long-term sustainability has been a necessary focus of the wind-down phase. This kind of problem solving is certainly enabled by the ESA structure that can also be a long-term solution itself. ESAs link to other school districts and funding sources that are sometimes not as readily available or apparent to higher education, and ESA staff job descriptions often include coordinating and conducting professional development and sharing curriculum.

Conclusion

For many years educators have understood the benefits of post-secondary/K-12 partnerships. We are learning what makes them successful, including valuing the cultures and having two-way communication. In our EngrTEAMS partnership we have created an organizational structure with an important middle group that facilitates both the culture transfer and the two-way communication between the institution overseers and the project staff. From our experience, this structure creates a successful project, and even more important, does so in a way that generates capacity to address future challenges. We have found the best way to clear up the amorphous middle is to specifically organize our projects with a middle group that not only assists the Project Investigator and other project staff but also creates lasting relationships among partnering institutions that can best sustain future work. In our experience, we have seen how ESAs provide a ready-made base of purpose and people to leverage long-term higher ed and K-12 partnerships.

The acronym for our middle group in our current project is TALC. We realized only after we had named our group that our purpose is similar to the mineral talc--to reduce chafing. Our TALC team helps reduce friction among the many moving parts of our EngrTEAMS project. We do this not in a way that backs off of the hard questions, but with the same patience, experience, and perseverance used by ESA every day to help all partners collide just enough (Baker, 2015) to improve student outcomes.

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