



A Theory of Change: The Role of Communication in 21st Century Learning

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The Problem

Technology has the power to dramatically improve teaching quality, administrative burn, institutional organization, and student outcomes, but only if this technology is designed specifically for the classroom and in harmony with the existing ecosystem. The education space is fractured and in desperate need of new tools conceived by those who know the academic environment best, teachers. Among the most chronic and overlooked of these problems is the state of communications.

Currently there is poor and infrequent communication between those in the school (faculty, administrators, students) and those in the community (families and support systems), leading to misaligned expectations, inefficient practices, and ultimately depressed student outcomes.

While communication is independently a major problem in education, there are several other features of the environment that contribute to its inefficiency and serve to amplify its severity. These include:

- The major infrastructure requirement to utilize available software
- Steep procurement and implementation costs
- A misperception of the role technology can play in the classroom, and
- A suite of products developed to uproot the learning model, not work with it

These barriers not only hamper the communications process within the school, but also serve as an obstacle to innovation, new technology adoption, and progress. The unfortunate reality is this fundamental communications gap has been identified as a major problem by many educators, yet to date there has been little invention to address this need. In fact, “more than seven in 10 educators identify addressing the individual needs of diverse learners (83% of principals; 78% of teachers) and engaging parents and the community in improving education for students (72% of principals; 73% of teachers) as challenging or very challenging for school leaders (Markow 2013).” More importantly, parents and support systems are feeling the effects of this shortcoming with “nearly one-quarter (of parents) — [stating] they feel shut out of the collaborative process” and 52% believing that there are too few parent-teacher conferences and insufficient opportunities for communication (NEA 2012).

These obstructions lead the two most crucial student-learning partners, the teacher and the support system, to miscommunicate, often at the students' expense. An illustration of the severity of this problem is that "more than one-quarter of parents state their biggest challenge has been teachers' perceived lack of understanding for their concerns, while one in three teachers cited parents' lack of understanding of their child's issues as their biggest challenge (NEA 2012)." As a result, students are sent mixed messages, receive less supervision, and are easily left behind, as intervention often occurs too late in the academic process. Further evidence of this problem is that, "two-thirds of teachers surveyed believe that their students would perform better in school if their parents were more involved in their child's education, while 72% of parents say children of uninvolved parents sometimes 'fall through the cracks' in schools (Devarics 2011)."

But schools lack an adequate, efficient, and modern way to engage their stakeholders, resorting to outdated methods of communication, and ultimately poor community inclusion. A 2007 survey revealed that "only 54 percent of families received an email or note about their children" and "less than half of families with school aged children received phone calls from the school (Kraft 2012)." Additionally, parents work schedules, lack of availability, access to reliable transportation and other financial resources, bring added complication to the communications process. Teachers also face time and calendar constraints, potential student language barriers, and importantly, "[t]eacher preparation and knowledge may be lacking in how to partner and communicate with parents (Caspé 2015)."

Recently, we have seen this problem addressed by social media outlets and the repurposing of existing products to serve the education market. This is the wrong approach for two reasons. First, it fractures the outreach process, creating multiple destinations that the user must check, wasting time and disengaging the audience. Second, "social media may be seen as 'too social', lacking in credibility for official school information," or that "it is just too soon to make an impact for today's parents" (NSPRA 2011).

A New Thought & Behavioral Approach

So how do we fix this massive problem in education? It is clear that along with school needs, "consumer needs are changing. The backpack folder is no longer the primary source of information for parents. They want and prefer instant electronic information. ... [T]he data demonstrates parents and non-parents alike turn to the web when they need information, and they want it now" (NSPRA 2011).

Given the clear need to modernize the engagement process while still respecting the role of technology in education, Slate & Tablets has identified the following criteria needed to improve the communications process and build strong communities.

- Equal Opportunity – Low infrastructure requirement and ease of implementation and adoption are crucial in allowing schools to build a technology program at their own pace
- Low Cost Burden - The cost to the school must be very low in order to encourage partnership, adoption, and use. It is vital that technology begin to bridge the digital divide, not amplify it
- Bespoke Tools for Education - Tools must be built expressly for the classroom and respect the unique needs of education stakeholders
- Narrow Product Focus – New technologies must encourage learning and productive student outcomes, not recreation and social networking
- Honoring Existing Habits & Environment - Development must focus on tools that work with the current model, not against it

Respecting these principles, Slate & Tablets has designed “Spotlight,” a crowd sourced community-building tool designed to improve classroom transparency, celebrate academic achievement, communicate education news and updates, and strengthen the connective tissue between the classroom and the home. It is truly a way to improve a schools community without having to dramatically uproot the existing infrastructure. Additionally, the Department of Education, the International Society for Technology in Education, the Convergence Education Policy Group, and a myriad of other think tanks and education experts agree that community building is a key factor in the long-term success of classroom technologies, so for many schools Spotlight will act as a point of introduction to education technology.

Spotlight solves the aforementioned community building pitfalls through the creation of a one-click, digital digest, establishing a direct line of communication to all participants in the academic community. Spotlight’s user interface, taking the form of an electronic magazine, is engaging and inviting, but absent of the distraction and “noise” of social media. In crowdsourcing community outreach, any approved faculty member can now update the entire school community concerning important announcements, special events, student recognitions, and more. It is the perfect balance of informative, personal, and presentable, with the ideal design, as “parents prefer internet communication, although not through social media” (NSPRA 2011). Perhaps most importantly, Spotlight also aggregates existing social media and outreach mechanisms (Facebook, Twitter feeds, etc.) into one centrally located feed. Now the community has a singular destination for all academic information, improving outreach, saving time, and consolidating processes. With Spotlight, there is no excuse for poor communication!

Spotlight is designed to have very minimal impact on existing practices, other than to shift content and intention to a more powerful, targeted platform. It is also designed for minimal institutional impact with a very low cost of acquisition, a small time commitment, and no required infrastructure.

The expected outcomes from Spotlight include:

- Higher communications satisfaction between faculty and support systems
- Improved relationships between the school and the family
- Increased family involvement in the student's education
- Decreased misinformation and stakeholder confusion
- Time and human capital savings
- Enhanced fundraising capabilities and awareness generation
- Stronger relationships amongst student families
- Improved engagement with culturally diverse student families especially those that speak a language other than English at home

The Theory of Change - Theoretical & Empirical Support

Prior to designing Spotlight, the Slate & Tablets team met with superintendents, teachers, students, faculty, parents, other ed-tech companies, investment bankers, private equity partners, venture capitalists, industry analysts, technologists, marketing specialists, policy experts, government officials, think tanks, C-level executives at major education companies, startup specialists, and more. We attended conferences, seminars, policy forums, industry events, and awards ceremonies. Luckily for us, a very clear and favorable message emerged. The essence of that message was this: "No one has yet solved the biggest problem in education, community outreach." We sat with this for a while. How does one create a social network in an industry allergic to social networking? It will need to be intimate, accessible, intuitive, and secure.

It became clear from our research and expert interviews that the importance of outreach and clear communication is largely absent from the academic environment of today. At present, "[t]eachers, parents, and students have little understanding of each other's interests in children and schools...Most teachers do not know the goals that parents have for their children, how parents help them learn, or how parents would like to be involved. Most parents do not know much about the educational programs in their children's school or what teachers require of them (Devarics 2011)." Given the large average class size coupled with other classroom obligations, it is difficult to imagine teachers solving this problem independently without the help of new technology.

From an institutional perspective, Spotlight is a no-brainer. Schools with large student populations can now reach wide audiences without the need for mass email, phone calls, or Facebook / Twitter updates. This is especially useful now as "huge, consolidated school districts deal with a population increasingly diverse by language, cultural and ethnic background, economic status and family composition. As a result, links to the community disappeared. Rebuilding these links with the community should be part of an administrator's public relations program. A school connected with its cultural community enjoys school pride, open communication,

productivity, cooperation, widespread involvement, sense of cohesiveness and acts of caring and sharing (NSPRA 2011).”

Classes, grades, schools, or districts can now share student highlights, intimate learning moments, memorable special events, and crucial information directly with the most relevant and interested population. They have a new tool to track the community, engage with alumni, and generate awareness campaigns. But most importantly, they can now establish their own digital identity independent from the mainstream social networks. Their information is no longer a footnote in an endless string of social updates. This occurs without changing existing habits or the need for budget and infrastructure. And this small step is all that is required to make a dramatic impact on the education environment and student outcomes.

Further, there is significant proof to back our claims that school communication processes can impact student outcomes. Strong communications practices are sought after by families as parents cite it “as one of the most desirable characteristics a new teacher could have (Casper 2015).” Further, “parents who receive more consistent information about their children's school performance report a higher degree of commitment to helping children improve (Casper 2015).”

Proximal outcomes

Spotlight will catalyze a complete change to the institutional stakeholder engagement and communications processes. From day one, schools can now supplement active engagement strategy with a highly intimate, personalized, and accessible passive outreach program. The first step is to establish trust between the support system and the school. Importantly, “parents and teachers consider communication the number one factor to increase trust (Casper 2015).”

Once this trust has been established, two important things happen that change the proximal learning environment. First, parental involvement begins to increase and take shape as “communication serves as the first step to other types of parent involvement to follow (Casper 2015).” Secondly, we see that strong communication processes encourage and result in “higher and realistic parental expectations” aligning messages coming from the school and the home. Research shows that “when teachers and parents are on the “same page” they can engage in more individual and concrete discussion around student progress and develop realistic goals and plans of action that are linked to student achievement.” This is the connective tissue that bridges the proximal outcomes, which are realized rather quickly, with the distal outcomes, which will take more time to measure. Thus, “effective parent involvement comes when a true partnership exists between schools and families. Creating that partnership, especially around academics, is what works for student achievement (Casper 2015).”

Distal outcomes

From a distal perspective, we anticipate higher student outcomes as a result of stronger involvement from families and support networks as a result of more effective communications. These expectations are founded on strong evidence to the positive impact of parent-teacher alignment. Strong communication practices have been shown to:

- increase the rate of homework completion by 40%
 - increase class participation by 15%
 - decrease the need to redirect student attention by 25%
- (Kraft 2013)

Additionally, a mature and thoughtful communications process can “increase average daily attendance rates and reduce chronic absences at elementary schools and at both elementary and secondary schools.” This impact extends to student behavior as “schools with a strong record of family and community involvement often tied these activities to a goal of improved student behavior. These schools reported fewer student disciplinary actions from one year to the next (Devarics 2011).”

Conclusion

Clearly, the process of communicating between the home and the school is much more than a simple way to transmit information to stakeholders. It is an informal contract between school, teacher, and support system to increase academic focus, ensure compatibility and collaboration, drive student attendance and participation, and ultimately improve outcomes. This is our intention with Spotlight. We’ve built a low cost, low infrastructure, intuitive tool to improve community building. This is an activity very much within our control and with a bit of help from technology it can transform the engagement paradigm between the classroom and the home. Our hope is that schools appreciate the importance of community and begin to use technology, any technology, to improve in low cost, high impact ways. With communication, we believe this is just such a case!

Company Overview

Slate & Tablets is an enterprise software company focused on building affordable tools to be used with any personal or school issued device. Our corporate objective is to build and empower the education community with resources to bridge the technology gap and operate in a more intimate and efficient fashion. To date, we have helped over 100,000 students across more than 60 countries learn, organize, and communicate in new ways. Our tools have earned numerous awards and have been featured by Apple and others.

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