Brokering Learning in Unconnected Environments: Digital Empowerment Agents and Student Ambassadors

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Ensuring equitable access to meaningful learning opportunities is a critical social justice issue that affects students worldwide. The HIVE Research Lab's 2015 white paper turns attention to the critical need to better understand the process of brokering resources within connected learning environments with a goal of being able to amplify best practices (Ching, Santo, Hoadley & Peppler). The goals, theories, and practices outlined in the white paper align strongly with our research group's ongoing efforts to increase college access through the use of online and game-based tools. Our research findings, however, differ slightly because our current work emphasizes researching and implementing digital tools with students and educators in under-connected and unconnected school contexts. Consequently, we have been concerned with who brokers resources for students who do not participate in clearly articulated learning networks? How might students at under-resourced schools build and maintain social capital? And what role do under-connected educators play in supporting students to develop social capital?

In an effort to complicate understandings of how social capital evolves in schools without a highly connected learning infrastructure and/or for students who do not have access to connected learning environments, we share selected findings from a large-scale federal research project designed to improve postsecondary outcomes for low-income students through an online game-based social media intervention called the *Mission Admission Challenge*. Findings from the first year of deployment echo the HIVE white paper's assertion of the value of educators in

facilitating learning opportunities, but also highlight how educators make efforts to broker learning opportunities when connected environments do not exist. We pay particular attention to the potential of online resources as a tool in this process.

To better understand the contexts of student learning, our team collected mixed methods data about the college-going culture and digital infrastructure in low-income high schools across California. First-year research activities sought to document the role teachers and students played in supporting the implementation of the game-based social media intervention. Educator-focused findings derived from: (1) surveys administered to high school educators at 60 low-income schools across the state of California designed to assess their attitudes about the college culture at their high schools as well as gauge their comfort level with technology; (2) interviews with key personnel at each participating school including teachers, counselors, Information Technology leads, and administrators; and (3) observations of project deployment at 18 school sites.

Over the course of one year our research team documented persistent and widespread school-level "first-level digital divide" issues such as the prevalence of broken laptops and tablets, the inability of teachers to schedule their classes into computer labs or to receive laptop carts due to heavy use from other classes, and weak broadband connection on school campuses. We also documented multiple cases of teachers who were disinterested, unprepared, or unqualified to engage with the digital intervention. These problems have particularly strong ramifications for the students low-income schools serve, who frequently lack access to digital tools and robust digital learning opportunities (Campos-Castillo, 2014; Hargittai & Hinnant, 2008; Margolis, Estrella, Goode, Holme & Nao, 2011; Selwyn, 2004).

Digital Empowerment Agents Our research activities also highlighted multiple instances of teachers counteracting institutional constraints and brokering meaningful learning opportunities for students. In the context of this study, these educators acted without the benefit of an articulated connected network. Building onto Stanton-Salazar's (2011) concept of empowerment agents, we suggest that these educators act as *digital empowerment agents* (Corwin & Tichavakunda, forthcoming). The concept of empowerment agent moves beyond understanding educators as institutional agents where they offer the potential to broker institutional resources—and highlights the transformative potential of educators who recognize: (a) the unique identities, backgrounds, and needs of students and (b) the institutional and/or societal barriers facing those students. Empowerment agents help students understand social injustices as well as illuminate students' funds of knowledge—historically and culturally informed knowledge as theorized by González, Moll, and Amanti's (2005). By cultivating students' critical consciousness and creating learning opportunities given unjust contexts, empowerment agents have the potential to broker the formation, maintenance, and expansion of social capital ways that are likely to impact students. *Digital* empowerment agents capitalize on the scalable and pervasive nature of online resources—including social media—to facilitate meaningful learning opportunities and the growth of social capital. By highlighting the digital aspect of empowerment agents, we intend to turn attention to the role digital resources play in how educators broker resources given the equity challenges surrounding digital access and infrastructure in low-income communities.

Granted the concept of digital empowerment agents is easily applicable in situations where educators are connected and actively seek ways to broker connections for their students. What we found particularly compelling, however, were instances where we observed educators

acting in isolation as digital empowerment agents within school contexts. One educator, for example, surreptitiously ensured that her students could connect to the school's wi-fi network on their mobile phones for class projects so that they did not have to use up their limited data plans. Another teacher, recognizing that her students do not have access to a network of industry professionals, builds networking opportunities into her classroom by inviting experts to visit the school and creating opportunities for students to visit industry workplaces. This teacher then facilitates job shadowing and internship opportunities outside of the classroom. Another teacher was adamant about communicating to students that he believed in their capabilities despite the fact that other teachers had told them that they would not be successful in learning computer programming.

Student Ambassadors When designing the *Mission Admission Challenge* we sought to find ways to engage students across school campuses and beyond into after-school and home contexts. We recognized that students would be key in facilitating the success of this approach. At each of the participating schools, we invited the school site lead to appoint five students as ambassadors for the *Mission Admission Challenge.* These students had access to special trainings prior to the *Challenge* launch and volunteered to serve as local experts and leaders on their school campuses. The idea was that students would serve as liaisons to their school's site lead, working together to foster interest and engagement in the *Challenge* across their campuses. Student ambassadors were also to serve as champions for expanding their school's college-going culture.

In reality, most schools were not successful in communicating with and empowering the ambassadors in their roles as leaders. Print and digital materials that our research teams prepared for ambassadors often did not reach the students and communication with them was often poor.

The research was designed so that schools would take the lead on training and engaging their own student ambassadors. Despite our research team's efforts to provide the information and materials for empowering these student leaders, the relationship building required at the school-level frequently did not come to fruition. Only in schools where members of the research team had frequent communication with the student ambassadors did they achieve their role as empowered student leaders and motivators. Our team is currently assessing how to harness the potential for student leaders for future *Challenges* and is re-evaluating how to support under-connected schools in empowering students as leaders in their school communities.

Moving Forward: Brokering Critical Consciousness

In an ideal world, *all* educators would be connected in robust and sustainable ways to other educators and professionals who are positioned to share resources and opportunities with students. Given the challenging realities faced by educators in under-resourced schools, we assert that a critical step in facilitating learning opportunities lies in the process of creating a critical consciousness in both educators and students—and channeling that knowledge and orientation towards fostering advocacy and action. These efforts will be most effective if they connect students to digital communities and resources that enable them to expand their social capital. We contend that being critically conscious of barriers faced by under-served students, as well as capitalizing on the potential of funds of knowledge, increases the likelihood that educators and student leaders can effectively provide students with opportunities to increase their access to resources conducive to learning and expand their social networks.

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