Exploring partnerships between colleges and rural K-12 schools in New York: Successes, challenges, and ideas. ¹

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Introduction

Partnerships between K-12 and colleges and universities (hereafter just "colleges") abound. Examples include teacher training, afterschool programming, tutoring, mentoring, college discovery days, campus tours and trips, school turnaround, curriculum design, and a whole array of subject-specific projects (e.g. Hill, Milliken, Goff, Clark, & Gagnon, 2015; Hudachek-Buswell, Stallworth, Cheatham, North & Banjeree, 2020; Tomanek, 2005).

These partnerships yield multiple mutual benefits. K-12 students gain more and broader academic and cultural experiences, while K-12 teachers gain resources, perspectives and practices from bringing university knowledge and research to public schools. After school care, tutoring, and mentoring of K-12 students happen in places where they might not otherwise, and K-12 teachers gain new professional development opportunities (Hill et al., 2015;, Mallinson & Hudley, 2018; Tavakol & Emmons, 2019; Williams, 1986).

Benefits to college partners include enriched and applied learning; off-campus experiences for college students; and enhanced community relationships. For land grant colleges and universities, partnerships with K-12 schools help meet their mission. Further, these partnerships enrich university and college faculty's understanding of off-campus issues, inform their research, and contribute to the recruitment and preparation of future students (Dahl & Droser, 2016; Druckman, Peterson, & Thrasher 2002; Fliegler 2011; Tavakol & Emmons, 2019; Williams, 1986).

These benefits may be especially helpful to rural schools challenged by decades-long population loss and economic decline (Brown & Schafft, 2019). Rural areas have higher teacher turnover, struggle to attract and retain teachers, and thus have a greater need for staff development and partnerships with colleges often bring new knowledge to K-12 teaching staff, provide formal professional development for regional K-12 teachers, prepare the next generation of teachers in part by requiring field experiences that can also bring new ideas to rural K-12 teachers, in addition to allowing rural schools to learn about potential employees (Adams & Woods, 2015;

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Hammer, Hughes, McClure, Reeves & Salgado, 2005; Mallinson & Hudley, 2018; Winslow, Smith & Dickerson, 2014).

Rural schools often have smaller budgets and are left to cut programming that might be routine offerings for other schools, such as athletics, the arts, and clubs that provide extra-curricular cultural and academic enrichment opportunities to students (Kabaker, 2012; Richard & Hoff 2003). Partnerships with colleges often provide exactly these experiences, as with Science Olympiad, trips to campus for performances, sports camps, tutoring, mentoring, and afterschool programming (Bryan & Sims, 2014; Hill, Milliken, Goff, Clark, & Gagnon, 2015; Tomanek, Moreno, Elgin, Flowers, & May, 2005).

While rural high school graduation rates and standardized test scores average higher than suburban and urban counterparts, their college attendance and completion rates are lower (Marcus & Krupnick, 2017; Nadworney & Marcus, 2018; Showalter, Hartman, Johnson & Klein, 2019). Rural families have higher poverty rates, and may not have the resources to send their children to college; however, many colleges and universities offer course credit for high school students by training K-12 teachers in delivering freshman-level curriculum to their students. More recently, some partnerships are exploring delivering a two-year college diploma to high school students who successfully complete specific curricula. Many of these opportunities for high school students are much less expensive, and sometimes free, thus reducing overall college costs (Zinth, 2014).

Among reasons rural students do not complete college, feeling overwhelmed by unfamiliarity in physical and social contexts is not uncommon (Carr & Kefalas, 2009; Jablonski & Vigeant, 2014; Marcus & Krupnick, 2017; Nadworney & Marcus, 2018). An important impact of partnerships between colleges and specifically **rural** K-12s is the exposure of rural students to college students and cultures. Positive experiences with people different from ourselves increase understanding and compassion, and increases the likelihood that we will choose to interact with them in a positive manner again (Booth & Graves, 2018). When rural schools can partner with colleges for campus visits and other activities that allow K-12 and college students to intermingle, or work together on a project, or get to know each other in a personal way, this may increase K-12 students' positive experiences with interpersonal diversity and college culture and improve outcomes for them in terms of college, career, and civic success (Jablonski & Vigeant, 2014; Spencer-Oatey & Dauber, 2019; Tucker, 2010).

The Rural Schools Association of New York (RSA), in collaboration with Cornell University, explored how rural schools might initiate partnerships with colleges, especially those where K-12 students can form personal relationships with college students. Further, we explore the

process of K-12 initiated partnerships, perceived benefits and challenges from K-12 and college perspectives, and lessons learned for how K-12 might successfully initiate these in the future.

Methodology

Design

In order to learn whether and where rural K-12 partnerships with colleges were happening, we took an exploratory approach using qualitative surveys and interviews. Our target population was college academic administrators and rural K-12 schools in New York State. Our goal was to learn how to help rural schools increase opportunities for partnerships with colleges in their localities, particularly those with opportunities for K-12 and college students to interact one-on-one or in small groups.

Survey and Interviews

Surveys comprising both open-ended and multiple-choice questions were created using Qualtrics online survey software. The surveys were designed to be completed in about ten minutes, and included questions that focused on (1) describing the program or project that connects public school students and college students, (2) locations where the interactions occurred and obstacles to increasing the distance, (3) benefits and challenges of the project/program, (4) advice for public schools that are interested in initiating partnerships with colleges. Each survey allowed respondents to enter information for up to five partnerships. Two variations of the survey were created, tailored to each target group: one for K-12 faculty and one for college faculty. Content was consistent for both surveys; only wording and context were adjusted for relevancy to each audience.

A survey link was emailed with a cover letter describing the project and survey length, giving a two-week window for completion. Two reminders were sent to each group during this window. While the K-12 surveys were only sent to rural districts, the cover letter for the college survey indicated our interest was mainly in rural partnerships, with the intent that respondents would filter themselves in or out as appropriate. Additionally, both surveys' cover letters stated we were specifically interested in "projects and programs where college students (undergraduate and/or graduate) interact one-on-one or in small groups with K-12 students in NY." This was also to help respondents determine whether they had relevant information to contribute.

An interview guide was established to include questions consistent with those in the surveys, but designed to collect richer data by probing for relevant details. All interviewers underwent training to increase consistency and reduce personal bias while interviewing respondents. Survey respondents were key informants selected for convenience and known to have information on the topics of interest.

Sampling and Participants

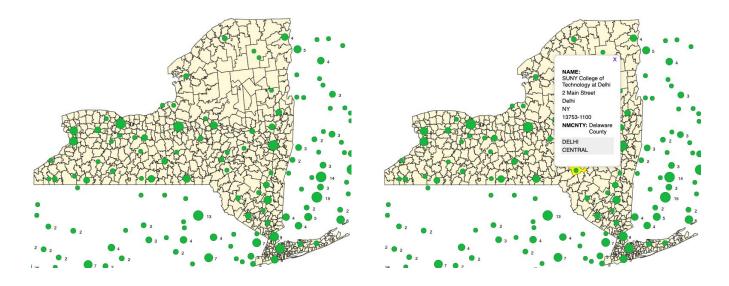
Not knowing how many or where partnerships might be happening between rural K-12 schools and colleges in New York, we relied on the Rural Schools Association of New York (RSA) to contact their member schools, which they believed to be nearly 90% of small and rural K-12 schools in the state. Thus we sent the K-12 survey to a list of 312 rural schools via the RSA's newsletter mailing list, which reaches 662 individuals.

To find colleges in New York, a database comprising all New York colleges and universities was generated with data from College Explorer, National Center for Education Statistics (Institute for Education Sciences, 2020). We generated a list of 229 public and private non-profit four-year colleges. From this list we excluded the City University of New York(CUNY) and other colleges in New York City and prioritized academic (non-theological) colleges. We found contact information for academic deans and/or provosts for the colleges on their websites. This resulted in a list of 82 people from 49 different colleges in New York to whom surveys were sent.

Five interviews were conducted with participants who had a program or project that brings public school students into contact with college/university students within the time period August 1, 2017 - present. One of the interviews was by request from a survey respondent that wanted to give more information than the survey allowed. All participants interviewed represent a convenience sample that the research team had easy access to and were known key informants possessing relevant information. Interviews were done to further develop context and gain details not available in the survey data, and to see if there were significant issues missed by the surveys.

Mapping

The purpose of this study is to inform rural K-12 schools how to initiate partnerships with colleges and universities near them. In order to help K-12 schools see all nearby options, we created a map of New York school district borders and pins for college locations throughout



New York and into nearby states. We found location data on school districts in New York State GIS Clearinghouse (2020) and mapped the points for all colleges (including two-year institutions) using data from Institute of Education Sciences, National Center for Education Statistics (2020). We also included colleges in contiguous states that were close to New York's borders. The map was processed using QGIS and the final interactive version allows clustering and detailed information of higher institutions and school districts to be displayed when the mouse is hovering above the dots or the areas.

Data Analysis

Three researchers independently cleaned separate copies of the survey data, then compared results for consistency. The team then each looked through survey responses for patterns, discrepancies and surprises. The team compared and discussed our individual findings, and settled on common understandings of the data. This was fairly straightforward and no significant disagreements occurred within the team. Data from the five interviews were analyzed in the context of the survey data to identify areas of agreement and disagree. In the end interview data largely confirmed survey data. If there had been one or two surveys or interviews that stood out as markedly different from the others, we would have done more work to figure out why (eg. are the just different programs, or was something missed in the surveys because we were not asking the right questions). Using thematic analysis, we generated a list of observations and recommendations for facilitating partnerships between rural K-12 schools and colleges. The team engaged in "peer debriefing" (Guba & Lincoln, 1989) to review the raw data with the team's conclusions to determine whether linkages were clear and logical, recommendations were tied to findings, and to explore other interpretations of the data.

Results

The college survey was sent to 82 individual faculty members at 49 institutions across New York. We received 10 responses detailing a total of 11 examples of partnerships. RSA sent the K-12 survey to 662 individuals at 312 rural school districts across New York. We received 12 responses containing 16 examples of partnerships. Upon closer examination, we found that one example was reported in both surveys, leaving a total of 26 unduplicated examples.

Results from College Surveys

College survey results indicated all programs reported were initiated by the college, and all but one involved one-on-one or small group interactions with college students. Eight out of the eleven programs reported by colleges involved rural schools. Eight programs also took place on the K-12 campus, the remaining three took place on college campuses. Types of programs included writing, art, communication, STEM, adolescent development, curriculum development, tutoring, and afterschool programs.

Colleges traveled up to 25 miles to participate in these. This was about the limit they said they could travel, though one said they could travel 40 miles, and another said they could travel 75 miles. When asked about obstacles to increasing distance, all said travel time was an obstacle, and nine out of ten responses said funding for travel was an obstacle. Additional obstacles included transportation logistics, space, and awareness of programming.

From the perspective of the colleges, college students benefited from hands-on and applied learning, broadened perspectives, and experience of local communities, including gaining appreciation for rural areas.

The biggest challenge cited by college partners was scheduling, as was mentioned by half of the respondents. Additional challenges included defunding of schools in general, overburdened K12 teachers, the time required for college students to travel & participate, misalignment of philosophies and practices between K12 & higher ed, and the need to negotiate who and how on-site guidance will be provided to the college students during their work with K-12s. When asked for advice on how rural schools might initiate a partnership with a college, answers were unanimous: just reach out to the faculty or department of interest.

Results from K-12 Surveys

K-12 surveys indicated six programs were initiated by the K-12; six indicated other/unknown; and four were initiated by the college partner. Eleven out of the sixteen partnerships involved one-on-one or small group interactions with college students. Eleven of the sixteen programs took place on the K-12 campus, and two additional programs took place on the K-12 campus AND at the college, or online (presumably on computers at the K-12 campus), and the remaining three took place on college campuses. Types of programs included student teachers or student social workers, college/career days or college tours, college level courses or early college programs, attending a performance at the college campus, Read Across America, outreach to families, media projects, mentoring, tutoring, and afterschool programs.

K-12 partners traveled an average of 25 miles to participate in these. Thirty miles was the average limit among those who provided a specific number of miles. One said they could travel an hour, another said there was no limit to how far they could travel, and one said they could travel throughout the county. When asked about obstacles to increasing distance, six indicated travel time was an obstacle, and five said funding for travel was an obstacle. No additional obstacles were identified, and two indicated there were no obstacles to increasing travel distance.

From the perspective of K-12 institutions, they benefited by having their own students exposed to college and gaining improved access to college. Partnerships also offered enrichment of students' experience and instruction. Establishing relationships between K-12 and college

students was cited as beneficial, as was enrichment for teaching staff and schools. This often came in the form of scouting out student teachers for potential employment, and improved thinking for teachers. K-12 respondents also recognized benefits to college students via hands-on and enriched experiences for them as well.

The most frequently mentioned challenges by K-12 partners were scheduling between K-12 and college partners, and transportation (time, distance, and funding). Other challenges included general funding, funding for food, restrictive rules hindering accommodation of programming, and capacity limitations that include faculty time, college instructional time, and whether K-12 students could keep up with the faster pace of the work within the partnerships.

When asked for advice for how other rural schools might initiate a partnership with a college, a couple respondents recommended spending time planning up front, and perhaps dedicating one person to organize the partnership. Other comments were general expressions of satisfaction with the partnerships.

Results from Interviews

Interview data was generally consistent with survey data. Interviews were conducted with faculty from both K-12 and colleges as well as program coordinators facilitating this connection, providing us with diverse perspectives. Types of programs interviewees were involved with included tutoring, advising, college preparation (e.g. college courses for credit, SAT prep, events at colleges), career development, and summer programs. Benefits to K-12 students included increased opportunities to interact with mentors one-on-one, college prep, career development, improved critical thinking and introspection. Benefits to college students included opportunities for civic engagement, community building (including K-12 students networking with alumni from their own school who had gone to college), service learning, and enriched experiences. Challenges included transportation, time spent planning to manage conflicting schedules, and funding.

Aggregate Results

Together, the surveys generated 27 examples of partnerships between colleges and K-12 schools. One example from each survey was about the same partnership, meaning both the K-12 partner and the college partner for the same project responded to their respective surveys. This resulted in a total of 26 unique examples from all survey results.

The colleges cited from both surveys – meaning those already working with rural schools in NY – included:

*Adelphi University – Education Department

Bard College – multiple departments

Binghamton University College of Community & Public Affairs

Cayuga Community College – English Department

Clarkson University – multiple departments

Cornell University – multiple departments

Hamilton College – Music Department

Houghton College – Education Department

Ithaca College – Department of Mathematics

Niagara University – Education Department

Siena College – Writing Center

SUNY Adirondack – Advanced Manufacturing Department

SUNY Brockport – Education Department

SUNY Cortland – Education Department

SUNY Fredonia – Education Department

SUNY Geneseo – Education Department

SUNY Oneonta – Education Department

Among the 26 unique partnerships, six were initiated by K-12, six initiations were of unknown/other origin, and fourteen were initiated by colleges. Twenty-one of the 26 program examples included one-on-one or small group interactions between K-12 and college students. Eighteen of the programs took place exclusively on the K-12 campus, with two of the programs having a combination of programming at the K-12 and either online (presumably from the K-12 campus) or at the college campus. Only six of the 26 took place exclusively at the college campuses.

Colleges and K-12 institutions both cited time and funding for transportation as the biggest challenges. Often, college students had to find their own transportation. Interview data detailed the difficulty of transporting K-12 students in school busses, especially in districts where busses and bus drivers had to be back to the K-12 in order to transport children home from school in the afternoon. For these reasons, travel distance/time often had upper limits of about 25 miles for both K-12 and colleges, although there were a couple willing to travel up to 40 miles, and one that said 75 miles was the limit. Similarly, obstacles to increasing distance were travel time and funding. For both, when they did travel, they traveled about fifteen miles or less; only one traveled thirty miles.

^{*} Was not sure whether they reached rural schools.

An additional challenge cited on both surveys was conflicts between college schedules and K-12 schedules. Interview data indicated that field trips for K-12 need to occur during the school day in between morning and afternoon bus runs, so typically 8:00am-2:00pm. College field trips however, need to occur outside of regularly scheduled class time, since typical ninety-minute classes are not long enough to include a field trip, which means available times tend to largely be after 3:00pm. It is also known that K-12 class periods are generally around forty minutes long, while college classes range from fifty minutes to three hours long.

Benefits noted by both groups of respondents revolved around enriched learning opportunities and college readiness/preparation for K-12 students, and valuable teaching and community exposure experience for college students.

Discussion

The purpose of this study was to explore how rural schools might initiate partnerships with colleges, especially those where K-12 students can form personal relationships with college students. Also, we explored the process of K-12 initiated partnerships, perceived benefits and challenges from K-12 and college perspectives, and lessons learned for how K-12 might successfully initiate these in the future.

While the majority of the data pointed to colleges initiating partnerships with K-12 schools, from the college perspective rural schools can initiate partnerships by simply reaching out to the college departments of interest. Further, it is common for colleges to have "engagement" offices or public service centers that are designed to help facilitate partnerships where college students can be involved in communities off-campus. These college offices often know who to connect with that might have an interest in any project a K-12 might propose.

One of the goals of this research was to look more closely at the interpersonal relationships that might form between college and rural K-12 students, mainly as a means to expose rural students to different people and cultures in a low-stress environment. While our survey did ask for information that would lead to increased understanding of this dynamic, it did not elicit enough detail to understand to what extent this was happening. Some survey responses did mention that it was nice to see K-12 students and college students interacting, and that this did allow K-12 students to meet people from different backgrounds, and allowed them to learn about "content, culture, and higher education." However, the survey instrument was not sensitive enough to allow more in-depth understanding of what types of partnerships facilitate this learning, and the impacts of this learning on rural K-12 students. Interviews also did not tend to tap into this aspect well. One interview made a specific attempt to gain perspectives from a K-12 school on whether they saw value in interpersonal connections between K-12 students and college students. This

respondent did acknowledge that rural students are often underprepared socially and emotionally for the transition to college, and interpersonal interactions could help with that.

While partnerships between K-12 schools and colleges provide many benefits for all parties involved, one of the notable limitations of these opportunities is the lack of psychosocial education or support for K-12 students entering college, as many of these programs primarily revolve around tutoring and academic college preparation. While rural students graduate high school at a higher rate than urban students, they are less likely to attend college right away and more likely to drop out. Academic and social shock are common for rural students who excelled in their small home school, but are surrounded with hundreds of classmates who also excelled often in much larger and better-resourced schools (Nadworney & Marcus, 2018). Add this to the usual difficulties all college students manage: anxiety, depression, and stress (LeViness, Bershad, Gorman, Braun & Murray, 2018). As mental health presents a growing concern, it is paramount to provide students with psychosocial preparation for college early on. Future models integrating a social and emotional advising component into these programs are explorable options in order to more adequately prepare students for the mentally- and emotionally-taxing aspects of college and facilitate an easier transition to higher education on a more holistic scale.

A final argument for integrating interpersonal interactions into partnerships between K-12 and college students is that exposure to people who are different from us, benefits us in many ways. Van De Vyver & Crisp (2019) explain,

When people are exposed to a more diverse group of people, their brains are forced to process complex and unexpected information. The more people do this, the better they become at producing complex and unexpected information themselves. This trains us to look more easily look [sic] beyond the obvious - precisely the hallmark of creative thinking (para. 17-20).

While there are many ways to do this, college students often bring a range of diversity to rural K-12 classrooms, since they hail from a broader geographic area, increasing likelihood of diversity among racial, ethnic, religious, cultural, and other elements. Being intentional about building in interpersonal interactions between K-12 and college students can increase partnership benefits in many ways.

Once a partner is identified, it is clear that significant time up front is needed to coordinate between the partners for scheduling, transportation, and funding in order for the partnership to be successful. K-12 schedules tend to run in 40-minute blocks from around 8am - 3pm; while college classes tend to be anywhere from 50 minutes to three hours long, and are most commonly scheduled between 9am and 4pm. Building in time and means for travel within these

schedules is tricky. As a result, most partnerships keep travel to around 15 miles, though many said they would be able to double that distance. These issues: scheduling, transportation, and funding were the top challenges identified by both college and K-12 data.

Benefits were worth the challenges, however. K-12 students benefited from experiences, material, and instruction that they may not otherwise experience. They were able to travel to college campuses, interact with college students, and get a taste of collegiate culture that may not otherwise happen. Interview data indicated that these experiences and opportunities made college attendance more likely and accessible for rural K-12 students overall.

Benefits for college students included exposure to rural communities, to understand and discover the unique qualities and issues therein. College students were also able to solidify their learning by applying lessons in real life and through hands-on opportunities. They participated in civic engagement and leadership development as well. Importantly, one of the benefits cited in the college survey was that college students participating in partnerships with rural K-12 schools do see the opportunities and benefits of living and working in a rural community and come to consider this as an option for themselves.

Some unexpected benefits for faculty included access for K-12 faculty to new materials and teaching strategies from the colleges. Through student teachers, K-12 schools are able to "test out" potential new hires, as well as showcase to them the benefits of teaching at rural schools. Alternatively, college faculty have a conduit via these partnerships to gain understanding of how their research and teaching plays out in the field, and adjust accordingly. New ideas for research also can emerge from these field experiences.

One of the most worrying trends for rural communities is population loss, particularly young high school graduates, due to the lack of academic and economic opportunities (Kumar, 2018). The consequences of this outmigration includes dwindling tax revenue and government spending cuts, resulting in business and school closures (Kumar, 2018). Schools have also been forced to cut programming and teaching staff. This leads to a vicious cycle that drives more people (including teachers) packing for the cities and leads to the demise of rural communities and teaching staff. The establishment of more connections between K-12 and college students increases the academic opportunities that rural students have access to, helping to make up for some of the losses. Moreover, college students are exposed to the teaching opportunities and community assets that exist in rural areas, which can result in attracting college students back to these communities post-graduation. These opportunities present a piece of the solution for incentivizing youth to stay in rural communities. This marks a potential first step in building prospering economies and thriving rural communities.

Recommendations

The data we collected was rich with individual ideas for programming, myriad mutual benefits, ways to manage timing and travel, and enthusiasm for these partnerships. Overall, there were some main lessons to consider for future partnerships between K-12 and colleges, especially for rural K-12 partnerships:

- 1. Initiation: While colleges have initiated most of the programs we learned about here, they tell us that K-12 schools can just "reach out" to them to initiate partnerships as well. Finding a specific department that is most relevant is one way to reach out (e.g. the English Department for a writing project), but most colleges have public service centers where they match college-based resources to community needs/requests. Also many colleges now have engaged learning offices, where faculty are encouraged to create learning experiences in collaboration with communities. Public service offices and engaged learning offices on college campuses often know where to look to find support for your partnership.
- 2. Relationships/SEL: The literature indicates that rural students are more likely to drop out of college, and that reasons for this include academic and social culture shock. We also know that college visits increase the likelihood of enrollment (Birch & Rosenman, 2019). Further, exposure to people different from ourselves can better position us to work through complex and new situations (Van De Vyver & Crisp, 2019). This suggests that partnerships that bring K-12 students to campus, and/or those that allow for personal interactions between K-12 and college students have more benefits than the explicit goals of the partnership would suggest, and may help increase college attendance and persistence, as well as academic, career, and social success later on. Partnerships should thus make intentional efforts to build in these aspects wherever possible.
- 3. Planning: Allow ample time to align issues of differing philosophies, approaches, workloads, scheduling, and needs of K-12 students and of college students during these projects. One suggestion from a survey mentioned assigning a person to be responsible for this, emphasizing the complexity and importance of the planning process.
- 4. Remote programming: Rural schools, by definition, are more remote and thus more difficult to access for these partnerships. As we have seen with this study, colleges and rural K-12s are finding ways to overcome this. One option deserving further consideration, particularly in this era of COVID-19, is online programming. Whether fully online, or a blend of online and in-person, online programming can solve issues of funding, transportation, scheduling, and access

- for rural K-12s. This could include online tutoring/mentoring with volunteers, student teaching, and even one-on-one or small group projects.
- 5. Further research: While the data for this project was largely collected prior to NY's COVID-19 stay-at-home orders, many of these programs did make the switch to online at that point. Reconnecting with the respondents of this study could help illuminate some early ideas, challenges and lessons learned for online college K-12 partnerships.

As a final thought, it bears noting that our data set was very small, and we cannot explain this. Because our surveys explained what we were looking for, inviting people to take them IF they had a qualifying program, we do not know how many people chose NOT to take the survey because they either 1) did not have a partnership, or 2) had a partnership but did not think it was of interest to this project. Thus, it may be that our data represents the totality of partnerships between rural K-12 schools and colleges at this time, or that our methods to collect information on these partnerships was flawed. Thus, these lessons may not be comprehensive, or even representative, of partnerships state-wide. However, the findings do give us ideas for how to proceed with future partnerships, and what we can expect with benefits and struggles so that future partnerships may be stronger and more impactful.

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