

Hungry Heartland: A Multidisciplinary, Multimedia, Service-Learning Class Project

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ABSTRACT

The Hungry Heartland project integrates service learning, media literacy, and multidisciplinary collaboration. It engages students from three disciplines to produce multimedia communication and raise public awareness about the lack of healthy food access in Kansas. Interviews and surveys were used to gather student feedback. Overall, students found the project a challenging learning experience, gained a sense of social responsibility, but remained conflicted about multidisciplinary collaboration. Lessons were drawn to inform future iterations of the project.

Keywords: community, food access, field trip, social media, film, photography

INTRODUCTION

Kansas is an agricultural state, the nation's seventh largest state for total agricultural production, and a leader in wheat, corn, and beef productions ("Kansas Economy," 2017). By all appearances, this is a state where putting food on the table should not be a concern. Yet ironically, inside this state are patches of food deserts, defined by the United States Department of Agriculture as regions that have "large proportions of households with low incomes, inadequate access to transportation, and a limited number of food retailers providing fresh produce and healthy groceries for affordable prices" (Dutko, Ver Ploeg, & Farrigan, 2012).

Food deserts are particularly common in small, rural Kansas communities where grocery stores and other food retailers are few and far between. Small neighborhood stores may exist, but their selection of nutritious food is

limited and their prices tend to be higher than those of larger retailers, which create barriers for low-income residents and residents who lack means of transportation (Ver Ploeg, 2010).

One example of regions in Kansas affected by food deserts is Riley County. Riley County has a population of 75,000, with 21% of this population living under the poverty line. Although the county has about 500 farms totaling over 200,000 acres of land, the vast majority of the farming focuses on grain crops, hay, and beef cattle, while fruit and vegetable production accounts for less than 5% (LaClair & Flint Hills Wellness Coalition, 2017). In 2015, six census tracts within Riley County met the definition of a food desert (LaClair & Flint Hills Wellness Coalition, 2017).

Although food deserts often develop in small, rural communities that have difficulty sustaining grocery stores, urban areas are not immune. A recent study shows that Topeka,

Kansas, the state capital, contains multiple low-income neighborhoods that lack access to healthy food (Miller, Middendorf, & Wood, 2015). Similarly, across the United States, areas of low-income and higher proportions of Black and Latino populations are more likely to lack access to healthy food (Beaulac, Kristjansson, & Cummins, 2009). These findings make it evident that food deserts are more than a geographical concept; rather, they are emblematic of social-economic, class, and racial disparities. Food deserts force low-income families to spend more on healthy food and lead to unhealthy dietary habits that contribute to health problems such as cardiovascular diseases and obesity (Beaulac et al., 2009).

Very little of this situation is known to Kansans residing in wealthier communities or to college-bound, middle-class young Kansans, let alone to people outside the state who take it for granted that Kansas is a food production center. To raise public awareness, educate Kansas's own students about food deserts, and promote institutional and grass-root changes, we launched a multidisciplinary, multimedia, service-learning class project titled *Hungry Heartland*. In this project, students from three disciplines worked together to produce social media, videos, and photographs about food deserts, their impact on Kansas communities, and potential solutions to increase healthy food access. In this article, we detail the implementation of this project, its pedagogical backgrounds, its outcomes and impact, and our lessons learned based on findings from a student survey and a focus group interview.

LITERATURE REVIEW

The *Hungry Heartland* project builds upon the concept of authentic learning, which originates from workplace apprenticeship learning. According to this concept, productive learning happens when students work on

tasks that resemble real-world activities, when their products are used outside the classroom, when projects have meaning to personal lives or needs, and when students actively construct knowledge by integrating previous and current experiences (Roach, Tilley, & Mitchell, 2018). Authentic learning, however, is more of a philosophy than a specific theory, and how it is implemented in different curricula will differ depending on intended learning outcomes (Roach et al., 2018). Given our curricular focus on media production, we draw upon the following theories that allow students to create media products for real people and exigencies and engage in tasks that resemble real-world processes.

Service Learning

Service learning is “a form of experiential education that gives students the opportunity to reflect on and use their academic training and hands-on learning experiences to meet real-world needs and develop their skills, attitudes and knowledge” (Shackelford & Griffis, 2006, p. 16). Studies in both secondary and postsecondary education and in various disciplines have found service learning to be an effective pedagogical approach. It enhances student engagement with course content, infuses in them a sense of civic and social responsibility, encourages critical reflection and self-discovery, and allows students to develop skillsets applicable to real-world and workplace needs (Whitfield & Coins, 2006; Blithe, Carrera, & Medaille, 2015; Shackelford & Griffis, 2006; Yu, 2011; Clark, 2013). These benefits are heightened when students produce multimedia communication products where the written, visual, and audio components work together to add to the depth of students' reflections and prompt them to consider the connection between their work and the lives of their community partners (Blithe et al., 2015).

In addition to benefiting learners, service learning is designed to benefit community

partners. “In *service*, students actively work to meet the identified needs of the local or extended community” (Shackelford & Griffis, 2006, p. 17). In previous service-learning projects similar to ours and involving students in creating multimedia products, students provided service by curating historical records for community partners, creating promotional materials for nonprofit organizations, and developing social awareness and fundraising opportunities for these partners and organizations (Blithe et al., 2015; Messner, Medina-Messner, & Guidry, 2016).

Media Literacy

In today’s technological and multimedia environment, media literacy is a crucial component of education. Students need to understand how media representation constructs our world and our understanding of the world and how media production perpetuates or challenges race, class, and other social inequalities and discrimination (Kellner & Share, 2005). To obtain this knowledge, students may be assigned to study the aesthetic qualities of media, to critically analyze media representations as social products, and to discuss media’s underlying connotations in addition to their apparent messages (Kellner & Share, 2005). Equally important, students may be given the means and opportunities to construct their own media products as “modes of self-expression and social activism” (Kellner & Share, 2005, p. 372). As Rheingold (2008) wrote, through the use of participatory media such as blogs, photo-video production, podcasts, and digital storytelling, students can engage in civic discourses through online dialogue. By studying, sharing, and distributing media over the Internet, students can bring the world into their classroom and vice versa. Depending on their desired learning outcomes, instructors can design class assignments that guide students to gain content knowledge, realize personal growth, develop career readiness, enhance

public knowledge, or incite the public to respond to media messages produced by students.

In previous studies, educators and scholars have experimented with media formats similar to those implemented in our project. For example, in Delello, McWhorter, and Camp (2015), students across disciplines (education, human resources, and marketing) used social media as a learning and reflection tool: creating Pinterest pinboards to curate pedagogical resources, analyzing companies’ Facebook media strategies, or using LinkedIn to create professional networks. Students from all three disciplines developed a heightened engagement with class content and formed communities within and beyond classrooms. Norton and Hathaway (2010) also found positive results in the use of video production as a classroom assignment and instructional strategy: video production motivated student learning and aided students in connecting with course content. While the use of video technology is not new to classroom learning, the development of digital media production tools such as smartphones has made its use much more accessible and affordable to students. Last, DeJean (2008) used photography to guide students to conceptualize social justice and its role in education. More so than words, photography allowed students to speak in metaphorical terms, which facilitated—and empowered—students to broach complex and difficult concepts (DeJean, 2008).

Multidisciplinary Collaboration

The ability to communicate and work with people from different backgrounds and disciplines is a desirable asset in the professional workplace, not to mention an important life skill in today’s closely integrated society. To cultivate this ability, teachers and program administrators have invested in developing multidisciplinary education. Such education can be described as “trading zones” where a

convergence of knowledge occurs (Scharoun, Peng, & Turner, 2016). Through these trading opportunities, scholars and students alike can seek advice, learn, and fill in their disciplinary short-comings with the help of their peers. Scharoun et al. (2016) designed a cross-national, multidisciplinary honors program based on these principles to increase students' employability while keeping them within the nurturing environment of the educational institution.

While formal programs such as that developed by Scharoun et al. (2016) are not practical at all educational institutions, the same transformational experience may be integrated into individual classes to help students realize personal growth and career development. For example, Norman and Frederick (2000) integrated English students into an engineering design course to work on an extended engineering project. Through this project, English students gained experience copyediting technical reports and working with subject matter experts, while engineering students had the opportunity to work with communication specialists and develop polished project documentation. Students from both disciplines applied classroom learning to solving practical problems and encountered challenges they will face in the workplace. Toward a similar goal, our project integrated students from English, Journalism and Mass Communications, and Art into one Hungry Heartland project.

The Hungry Heartland Project

The Hungry Heartland project involves three undergraduate classes from three departments: English, Journalism and Mass Communications, and Art. The classes were taught respectively by the three authors of this article. The classes and their basic information are as follows:

- English 510 Professional Writing: This class focuses on teaching professional

writing genres such as correspondence, proposals, blogs, and social media. Seventeen students were enrolled. About half were English majors, and half were Journalism and Mass Communications majors. Almost all students were either juniors or seniors.

- Mass Communication 471 Advanced Audio/Video Production: This class emphasizes aesthetics of audio and video writing, producing, directing, sound recording, lighting, camera work, editing, mixing, and distribution. Nine students were enrolled. Except for one English major, all were Journalism and Mass Communications juniors or seniors.
- Art 563 Intermediate Photography: This is an advanced course in photography in which students practice techniques including using medium and large-format camera systems and black-and-white film. Students apply these techniques to both studio-based and documentary subject matters. Six students were enrolled. Three were Architecture majors, and the others were Art majors.

While the three classes have respective learning outcomes and individual assignments, all of them engaged students in the Hungry Heartland project. In the professional writing class, students created blog posts and social media (Facebook and Twitter) posts based on the project topic; in the audio/video production class, students produced short, mini-documentaries based on the project topic; in the photography class, students produced gallery-quality photographs based on the project topic.

To prepare students for these project requirements, the three faculty members involved students in a series of learning activities. Students conducted secondary research about food deserts and healthy food access, listened to a panel of experts discussing the cause and effect of food deserts, wrote short research

papers on the topic, wrote proposals and planning documents for their media production, and, as the highlight of the project, participated in a 2-day field trip to gather first-hand materials.

For the field trip, students, led by the three faculty members, travelled to three counties in North-central Kansas that face food desert concerns: Republic County, Jewell County, and Cloud County. During the trip, students visited local grocery stores, farmers' markets, community gardens, family farms, area schools, and community centers that the faculty had previously contacted. At these venues, students interviewed and interacted with a range of community members: grocery store owners, farmers, school principals, Meals-on-Wheels volunteers, other community leaders, and local residents. Students made notes of their observations and interviews, took photographs, and shot video footage.

After the field trip, writing and audio/video students focused on creating meaningful stories out of the materials collected during the trip and from earlier research; photography students continued to make photographs by metaphorically relating their field experience or interpolating their research strategies to local subject matters.

At the end of the semester, the three faculty members organized a campus-wide premiere for students to present their respective media products. Students, faculty, and administrators from the three departments and across campus as well as community members attended the event. In addition, the Volland Store, an art gallery located in Alma, Kansas, exhibited the photography students' work and screened the video documentaries.

Throughout the project, students worked in teams both within and across classes. Each team focused on food deserts' impact on one of the following demographic groups: the elderly, college students, women

and children, farmers, and grocers. These teams were created to help students focus their media production and to promote collaboration at multiple levels. Within class, students on the same team worked together to create their media products, for example, a documentary on food deserts' impact on the elderly. Across classes, students who focused on the same demographic group brainstormed and discussed their common themes. Prior to the field trip, two co-located class sessions were held to facilitate these cross-class discussions. The field trip itself was an intensive collaborative effort where students worked together to gather project materials. For example, professional writing students helped audio/video production students during video shoots by conducting interviews or operating production equipment. Afterwards, collaboration continued in both virtual and physical environments. The video footage and photographs produced by the audio/video and photography students were uploaded to a media server accessible to students from all classes so they could cross reference and use each other's materials in their media production. Another co-located meeting was held to facilitate cross-class discussions on how to create meaningful stories out of the gathered materials. Student groups also met outside of class as their schedules permitted.

RESEARCH METHODS

A survey and a focus group interview were used to gather student feedback on the Hungry Heartland project. The IRB committee at the authors' institution approved both research methods.

Toward the end of the semester during which the project was implemented and after all three classes had completed their respective media production for the project, a Qualtrics online survey was used to gather students' perspectives on the project and its impact on their

learning. To promote candid feedback, we made the survey anonymous; no data can be connected to any individual student. A total of 27 students across the three classes completed the survey. The survey primarily used Likert-scale questions (see Appendix I) to solicit a broad range of quantitative information. Data were exported into Micro-soft Excel and analyzed both in Qualtrics and Excel.

In addition, after the semester ended, a focus group interview with a total of five students from the three classes was conducted to solicit richer and more in-depth student feedback. The five student interviewees are as follows (all names are pseudonyms):

- Sarah: professional writing class, senior in English
- Aaron: professional writing class, senior in English
- Denise: audio/video production class, junior in English
- Brandon: audio/video production class, senior in Journalism and Mass Communications
- Jan: photography class, senior in Art

All three faculty members were present at the interview and took turns asking a pre-designed set of questions (see Appendix II). At the same time, the interviewers remained flexible during the interview and asked follow-up questions when students' responses pointed to productive lines of inquiry.

The interview was audio-recorded, transcribed, and then analyzed using the constant comparative method (Merriam, 2007); that is, notes were made on the transcript and compared to establish tentative common themes. These themes were then modified based on continuous comparisons of notes. The interview analysis is thus inductive and based on the authors' reflective interpretations of the data (Merriam, 2007).

Before reporting our findings, we also want to comment on our role in this study. In this study, we played the role of teacher researchers. Teacher research is a well established research approach but is not without limitations: namely, it is difficult, if not impossible, to investigate the events one is involved in free of presumptions and biases (Huberman, 1996). Most practically, there is the concern of students not willing to share honest feedback with teacher researchers because of the power imbalance between them.

While being aware of these limitations, we decided on this approach because teacher research has distinct advantages, especially in projects such as ours that aim to improve student learning. Namely, teachers have inside and intimate knowledge of students and classroom contexts and are best positioned to engage in critical reflections of their own practices that in turn generate new knowledge and enact change (Cochran-Smith & Lytle, 1999; Blakeslee, 2001). This inside knowledge is difficult, if not impossible, for an outsider to obtain. For example, we considered using an outsider to conduct the focus group interview but, after deliberation, decided against it. While an outsider can ask the prescribed questions we develop, he or she does not have the context (for example, the actual experience of the field trip) to ask meaningful follow-up questions where important data can emerge.

Having adopted the teacher research approach, we were mindful of our obligations to employ reliable methods, safeguard against obvious biases, and provide evidence. To do so, we designed the survey, as mentioned above, to be anonymous. With interview participants, we made it clear that their participation is voluntary and has no bearing on their performance in any classes they may take with us (Incidentally, three of the five participants were graduating that semester.). In data analysis, we stayed vigilant of our own presump-

tions and questioned each other's interpretation, and the following findings, we hope, demonstrate our effort to provide relevant evidence.

FINDINGS AND DISCUSSIONS

A Challenging Learning Experience

Learning about and *then* immediately applying different media production techniques in a high-stake project proved "challenging" and at times "overwhelming" for students. This was especially so for photography students who had to learn new camera systems and a hybrid photo production process. Time constraints also contributed to the challenge. Students found the project more time consuming than anticipated. The field trip itself took two days, which is a significant commitment to busy college students, many of whom study full time and work part time. Given the open-ended and complicated nature of the project, the post-trip media production was also more complicated and time consuming than students anticipated. As Denise commented, she and her team procured hours of footage while on the trip, and it was difficult to decide, later on, what they were going to use and how they were going to create a few minutes of meaningful stories out of the materials. This same challenge is echoed in previous reports of service-learning and media production projects (Whitfield & Conis, 2006; Blithe et al., 2015; Norton & Hathaway, 2010).

Students also found interacting with local residents during the field trip challenging. As Sarah said, "we were very much just dropped off at Cuba, Kansas.... And we had to really quickly make contacts with these people. I think that's one of the biggest things I learned... to approach people and take the initiative and let them talk... make connections in a polite and respectful way." As Sarah reflected, this kind of ability, "just thinking on

your feet right then and there," is not something a traditional class prepared her for.

Despite, or probably because of, these challenges, most students found the project a productive learning experience. Overall, 74% of the survey respondents indicated that the project allowed them to develop or refine useful skills (Figure 1), which echoed findings from previous service-learning and media production projects (Yu, 2011; Blithe et al., 2015).

Students indicated in the survey that they learned to "write effectively in different platforms in order to catch the reader's attention," create persuasive and relatable audiovisual stories, represent human subjects conscientiously, "make seemingly unimportant topics more visible and relatable," and "craft messages that would target specific groups of people." The survey showed that the learning experience in this project was multi-faceted and strengthened students' ability to think critically, conceptualize complex problems, and communicate effectively (Table 1).

As an example of their critical thinking and communication skills, students developed a keener and more critical rhetorical awareness. As interview participants recalled, very soon into the field trip, they realized that the term "food deserts" did not register with local residents. Despite students explaining the concept, residents found it unfamiliar and perhaps overly negative. Sensing the audience's resistance, students, on their own account, started to use the term "healthy food access" or "affordable food access," which the residents responded to much more warmly and readily. Similarly, in the survey, students indicated that the project taught them how to Portray food deserts and food insecurity "without showing your subject in a negative light."

On the whole, the project, as student interviewees summed up, was "an uncomfortable growing experience.

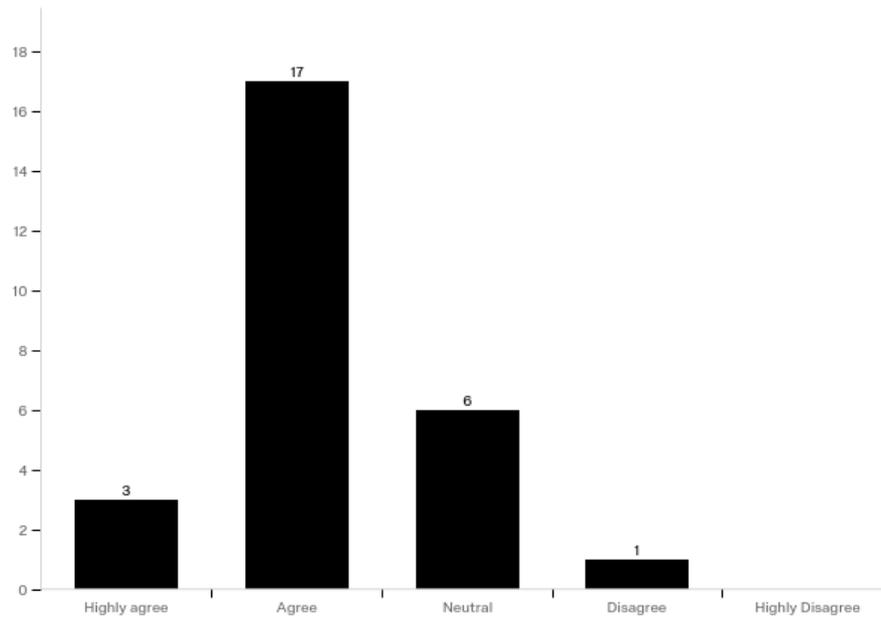


Figure 1. Overall, this project allowed me to develop or refine useful skills.

Table 1. This project strengthened my ability to think critically, conceptualize problems, and communicate.

	highly agree	agree	neutral	disagree	highly disagree
think critically	16.67% 5	22.03% 13	18.42% 7	25.00% 2	0.00% 0
conceptualize ideas for complex problems	13.33% 4	22.03% 13	21.05% 8	25.00% 2	0.00% 0
communicate/present information	20.00% 6	22.03% 13	18.42% 7	12.50% 1	0.00% 0

” It felt “uncomfortable” because students were “thrust out of [their] comfort zone.”

For that same reason, they experienced valuable growth; growth, as students came to acknowledge, is often uncomfortable.

Development of Social Responsibility

Aside from enhancing students’ media production and related skills, the project increased students’ knowledge of the world and sense of social responsibility (Figure 2). Students remarked in the survey that the Project and especially the field trip was an “eye opening” experience. As one wrote, “I never realized how serious of an issue this [healthy food access] was and that it impacted so many

people throughout the state of Kansas.” Another wrote that it “made me realize how fortunate I’ve grown up so I have decided to start volunteering at the bread-basket serving food for families in need.” Interview participants also commented that the field trip and interactions with rural residents were personally transformative and convinced them that their work is “real and necessary,” “incredibly rewarding,” and “inspiring and motivating.”

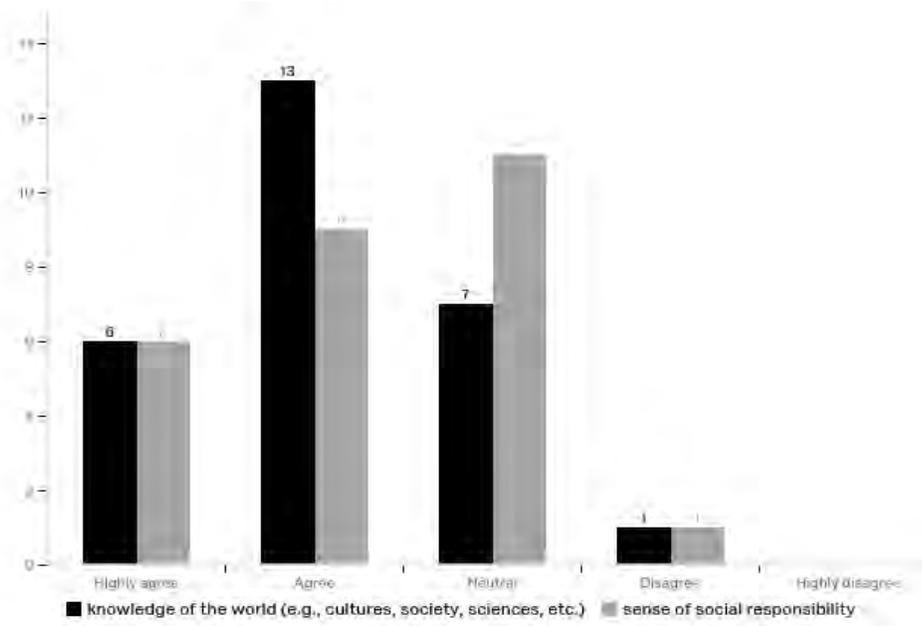


Figure 2. This project enhanced my knowledge of the world and sense of social responsibility.

The Hungry Heartland project, by having students produce media products as part of service learning, “opened the possibility for students to see their work in the media as a form of media activism” (Clark, 2013, p. 887). Our students found that they could relate to rural Kansans because they had grown up in such communities or have families and friends who live in those communities. They found it empowering that they were doing something to raise social awareness about life in isolated, economically disadvantaged small towns. In particular, as students conducted research into

food access, understood the scope of the issue in Kansas, and started creating content to raise public awareness, many realized the efficacy and power of media products. As one student remarked in the survey, “I did not quite realize the scope that social media could play when it comes to social issues. I think learning about the impact social media can have is one of the more valuable experiences of this project.” In the words of Kellner and Share (2005), our project allowed students to recognize that media products not only inform or entertain, they

can also be used to gain profit and power (Kellner & Share, 2005).

Collaboration as a Product and a Process

Not surprisingly, students voiced some typical complaints about the collaborative nature of the project. Several mentioned during the interview that, given students' different schedules, it was difficult for groups to find time to meet outside of class. Similarly, given students' different work habits and levels of motivation, working together on an extended project can be trying at times. Finally, given the creative nature of media production, students also struggled with compromising their own visions while working with others.

At the same time, students acknowledged that collaboration is a reality of the professional workplace and media production work and agreed that the project prepared them for that reality. The field trip, in particular, felt like a concerted effort where everyone was helping out with collecting materials. Sarah, for example, recounted that on the field trip, she interviewed several local residents. The interviews not only gave inspiration to her own blog posts for her writing class but were shot by the audio/video students and cut into their documentary. "The interview that appeared a lot [in the documentary] was Steve, and that's the one conducted by myself.... So that's the moment I really appreciated [collaboration] and where I can see I actively made a way into this documentary."

Not all students had this appreciation. In fact, some were confused about the nature and purpose of cross-class, multidisciplinary collaboration. Since the three classes worked on different media products, some students struggled to see the "point" of cross-class collaboration. To them, collaboration should center around creating tangible products. Meeting and discussing thought processes, inspirations, and research findings do not directly lead to

products and, as such, do not warrant collaboration to some students.

To us as faculty, this feedback was pedagogically enlightening. While students were well aware that media production is a process that involves planning, producing, and editing, they did not fully see collaboration as a process, a work habit, or a mindset that goes beyond the final product. Students from each discipline bring to the project their tacit knowledge about planning, producing, and editing (for example, what counts as effective storytelling and appropriate aesthetics); collaborating throughout the process would allow them to see beyond their disciplinary horizon and engage in trading opportunities (Scharoun et al., 2016). This had been our vision as we designed this multidisciplinary project, but looking back, we did not adequately emphasize this process-oriented concept of collaboration to students. Reflective of this situation, in the survey, the majority of the students agreed that the project strengthened their ability to work with diverse groups of people and within a team (Table 2), but still, many were ambivalent about whether the collaborative nature of the project enhanced their personal learning (Figure 3).

The student interviewee who came the closest to seeing collaboration as a process is Jan from the photography class. As she explained, while on the field trip, she took photographs not only of the local environment and residents, but of students from other classes interacting with the local environment and residents. And not only did she take photographs of those interactions, she gained artistic inspirations from those interactions. In her words, "[students from other classes] deserve a lot of credits for my work because a lot of the photographs came from following along their projects. With the interviews, that's where I learned the most about food insecurity. And the stories that people were going through.... they were really important to my work."

Table 2. This project strengthened my ability to interact with people and work within a team.

	highly agree		Agree		Neutral		disagree		highly disagree	
interact with diverse groups of people	20.00%	6	15.25%	9	26.32%	10	25.00%	2	0.00%	0
work within a team	30.00%	9	18.64%	11	15.79%	6	12.50%	1	0.00%	0

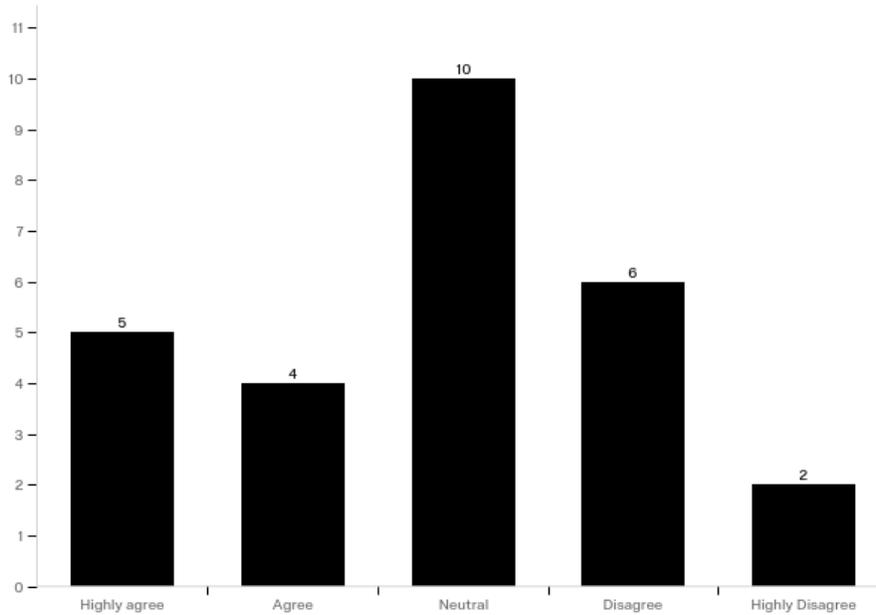


Figure 3. The collaborative nature of the project enriched my personal learning.

Scaffolded Learning

While service learning has an explicit focus on field experience and learning, class preparation, according to the focus group interview, was essential for students’ success on the Hungry Heartland project. Audio/video production students commented that learning the basics of documentaries, watching documentary examples, and developing a planning packet allowed them to understand how to develop video stories and what footage to shoot while on the field trip. Professional writing

students commented that learning about different social media platforms, deliberating their do’s and don’ts, and listening to industry professionals discuss the strategies of social media marketing helped them to fine-tune their media creation. Photography students spent the majority of their classwork in the beginning of the semester learning new camera systems and hybrid processes to make images, which they then applied to the project. Students from all classes also commented on the benefits of participating in the food desert

panel and conducting secondary research, which gave them the necessary perspectives to create media products.

Technology Infrastructure

As described earlier, a shared-file server was made available where all photographs and video footage students gathered on the field trip were stored for use by all three classes. This technology allowed post-field-trip collaboration and information sharing where, for example, professional writing students could use art students' photographs to create social media posts.

At the same time, the server technology did not work nearly as smoothly as we envisioned. As students reported, when used over the Internet, the server ran very slowly: Downloading a single high-resolution photograph, let alone a few minutes' worth of footage, took "forever." This slow speed essentially rendered the server impossible to use remotely. While students do have physical access to the server through a media lab, it is not realistic or convenient for them to stay for long hours in the lab (where other classes would be held) to work on their projects. Technically, students can also transfer the media files to a mobile drive and take the files with them, but English and Art students are not used to carrying external hard drives and the files are too large for most of their USB drives.

LESSONS LEARNED FOR FUTURE PROJECT IMPLEMENTATION

Limit Points of Focus

Designed to integrate multidisciplinary learning, multimedia production, and service learning, the Hungry Heartland project is ambitious in scope and goals. However, some students found it overwhelming to have to learn new media production equipment and production methods while participating in the project.

In future iterations of the project, we will consciously limit our points of focus without sacrificing the intended learning outcomes. For example, photography students will be engaged in the project using the tools they have already mastered.

Teach Collaboration as a Process

In future iterations of the Hungry Heartland project, we plan to teach students that collaboration, as media production itself, is a process. It involves not only group members working on the same physical product but brainstorming about the same communication context and exigency, reflecting on the needs of shared audiences, and exchanging research findings and raw materials. Modeling after positive student collaboration experiences, we will purpose-fully foster opportunities where students' creative paths cross. For example, each professional writing student will be required to conduct at least one interview during the field trip while their group members from the audio/video production class shoot the interview. The interview footage may or may not make it into the final documentary but represents a concrete instance of collaboration during the process of media production. In addition, to help students appreciate the cross-talks between their work, we will host a website where different media products—the textual, the visual, and the audio—are curated together. This central location would not only reinforce the notion of collaboration among students but help attract more viewers and serve the project's goal to raise social awareness about food deserts in Kansas. With these changes, we hope to see improvement in students' understanding of and competency in multidisciplinary teamwork in future iterations of the project.

Consider Low-Tech Infrastructure

In future iterations of the project, in

addition to a remote server, we plan to issue each student team, for the duration of the project, a high-capacity USB drive or external hard drive in case students don't already own such a device. This device would allow students to transfer photographs and footage from the server for off-site use. In addition, students will be encouraged to use their own mobile devices or cameras to capture lower-resolution images and footage on the trip. At times, these low-tech arrangements may be more practically useful than high-tech infrastructures for multimedia collaboration projects, especially for students who are less familiar with shared-file technologies.

CONCLUSION

The Hungry Heartland project was a challenge for our students; designing and implementing it was equally challenging for us as faculty. Compared with traditional assignments, it is significantly more time consuming and pedagogically complicated. We spent considerable time and effort conceptualizing the project, planning cross-class collaboration, making contacts with local communities, and arranging travel and lodging. We were pleased with the impact this project had on our students and the local community and are committed to refining it. The lessons learned through this iteration will be invaluable in our future implementation of the project.

APPENDIX I SURVEY QUESTIONS

1. Which class are you in?
2. What is your major?
3. Please indicate your level of agreement (highly agree, agree, neutral, disagree, highly disagree) with the following statements regarding the Hungry Heartland project.
 - Overall, this project is a productive learning experience for me.
 - Overall, this project allowed me to develop or refine useful skills.
 - This project strengthened my ability to think critically.
 - This project strengthened my ability to conceptualize ideas for complex problems.
 - This project strengthened my ability to communicate/present information.
 - This project enhanced my knowledge of the world.
 - This project enhanced my sense of social responsibility.
 - This project strengthened my ability to interact with diverse groups of people.
 - This project strengthened my ability to work within a team.
 - The collaborative nature of the project enriched my personal learning.
4. What did you learn about the impact of food deserts?
5. What did you learn about the influence of media production?
6. What are some of the ways we can modify the project in future semesters to improve student learning?

APPENDIX II FOCUS GROUP INTERVIEW QUESTIONS

1. Overall, how do you feel about the Hungry Heartland project?
2. What aspects of this project and/or its instruction would you identify as most helpful to your learning? How did these aspects help you to learn?
3. What were some of the best moments you experienced during this project? Why?
4. What were some of the worst moments you experienced? Why?
5. Do you feel the challenges presented in this project were appropriate for the course level? How so?
6. How do you feel about the collaborative nature of the project?
7. What are some of the ways we can modify the project in future semesters to improve student learning? Why do you believe these changes would improve your learning?

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