

Connecting Campus to Countryside: An Evaluation of the Rural Scholars Program at Oklahoma State University

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Abstract

Rural communities face incredible challenges and emerging opportunities. Land-grant universities are well-positioned to assist by developing new approaches to inspire university students to become civically engaged, rural community members. With this aim, the Rural Scholars program at Oklahoma State University was developed as an opportunity for undergraduate and graduate students (Scholars). The program consists of a 16-week course followed by a 10-week immersive summer research and service experience in a rural community. This study sought to assess the program's impact on Scholars and the communities in which they lived and served. Findings revealed that Scholars appreciate the experience and find it beneficial to their growth as students. Some felt prepared for their service and research experiences, whereas others felt somewhat isolated. Community mentors felt Scholars' presence in communities was beneficial. Recommendations include improving communication and clarifying expectations. Future research should include perspectives from faculty research mentors.

Keywords: rural, service-learning, land-grant mission, community engagement, community-based participatory research



According to the United Nations (2018), the global rural population is nearly 3.4 billion, and in the United States, 20% of the national population resides in rural communities with less than 5,000 people (U.S. Census Bureau, 2022). Economic drivers within these rural communities often include agriculture, education, and health care (Davis et al., 2022). Although agriculture accounts for fewer jobs in rural America now than in previous decades, policy relating to the development of rural areas still largely revolves around agriculture (Freshwater, 2021). Meanwhile, globalization, climate change, and demographic changes are bringing new opportunities and challenges to rural communities (Garcilazo, 2021).

Rural communities rarely face one single challenge; rather, problems tend to be multidimensional and complex (Emery & Flora,

2006). Along with these challenges, rural communities also have assets and forms of capital that can be leveraged to address issues (King et al., 2022). Therefore, simultaneously addressing multiple facets of the well-being of rural residents can help communities prosper (Garcilazo, 2021). Engaging community members, assessing their needs, and developing a forward-thinking plan can be key components to such community development efforts (Bryant & Cooper, 2021). When rural communities partner with universities in these efforts, valuable resources such as students, faculty, technology, and research expertise become available to help address community needs (Bringle & Hatcher, 1996). Thus universities can play unique roles as they mobilize these resources to help strengthen rural economic development, contribute to the culture of communities, and address the

health and educational needs of the community (Dore, 1990). These roles are ideally suited to the mission and culture of land-grant universities.

Land-grant universities were created to broaden higher education accessibility for a state's citizens and to advance technological, civic, and economic development across the United States (Felten & Clayton, 2011). Federal legislation established three pillars to enhance the functionality of land-grant institutions: teaching, research, and extension. The 1862 Morrill Act endowed colleges in every state "to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life," prioritizing educational opportunities for all economic classes (First Morrill Act, 1862, sec. 4). The Hatch Act of 1887 established the research function of land-grant institutions through agricultural experiment stations to promote the conduct of original investigations and experiments (Croft, 2019). Finally, the Smith-Lever Act of 1914 established the Cooperative Extension System throughout the land-grant system nationwide to disseminate practical knowledge to citizens (Croft, 2019).

However, McDowell (2001) theorized that since the 1950s the efficacy of land-grant universities in helping people solve everyday problems with science-based knowledge and tools has declined. Extension's efforts to engage with the public have failed to acknowledge the changing nature of scientific information and societal needs (McDowell, 2001). The traditional model of education-based delivery used by Extension may create power imbalances between the information shared and consumed by experts and citizens, respectively (Buys & Bursnall, 2007). The imbalance in power enforces a view of citizens as people who need to be saved, and the "result has been further stratification of rural society and individual alienation from institutions designed to serve the public good" (Colasanti et al., 2009, p. 2). Thus, there is a need for land-grant universities to be more productively engaged within rural communities, focusing on creating a power balance through reciprocity and mutual respect (Kellogg Commission, 1999).

One way in which land-grant institutions can more productively partner with rural communities is by helping to prepare students to be civically engaged members of the community (McDowell, 2001). Encouraging students to put theory into

practice goes beyond educating to prepare them for careers; rather, it prepares them for life as responsible community members (Boyer, 1994). With this aim in mind, the Rural Scholars program at Oklahoma State University was created in 2019 to provide students the opportunity to make a positive difference in rural communities and become rural champions. The Rural Scholars program involves Oklahoma State University scientists being paired up with a student (i.e., Rural Scholar) to conduct research and service in a focus community identified by Oklahoma State University's Rural Renewal Initiative (RRI). Focus communities were chosen based on stressors classified by the USDA Economic Research Service (2015) county typology codes. These stressors included low education, low employment, persistent poverty, persistent child poverty, and persistent population decline. Oklahoma State University students were recruited and interviewed by RRI team members, and students with evident potential to succeed as Rural Scholars were selected. Once identified, the Rural Scholar (hereafter referred to as Scholar or Scholars) enrolled in a 16-week spring semester course to learn about focus communities' needs and the research that would be conducted to address the needs. During the course, emphasis is placed on helping Scholars learn about rural community engagement, research methods, data collection and analysis, and how to present and share research findings. Time is provided in the course to allow Scholars to develop a plan of work for their 10-week immersive summer experience in a rural community. The plan of study includes a timeline of research and service activities the Scholar will conduct during the 10-week internship.

Before moving into their rural communities, each Scholar is paired with a community mentor (hereafter referred to as mentor or mentors). Mentors are chosen based on faculty contact networks in the focus communities. Every mentor is someone who is well-known in the community and can help the Scholar acclimate. Mentors provide support to Scholars regarding living arrangements. They also introduce the Scholars to pertinent community citizens and leaders whom the Scholar may need to interview or interact with. Mentors also work with the Scholars to assist in the planning and delivery of service projects in the community. Mentors are instrumental to the success of the Rural Scholars program. Scholars are also paired with faculty research mentors

at Oklahoma State University who help guide the research process remotely from campus.

Once Scholars launch into their focus community, they work with their community mentors to integrate into the community and check in with faculty research mentors to track progress on their respective research projects. Scholars are given a mentor in the community and at the university to help balance power dynamics. Check-ins with research mentors, community mentors, and weekly meetings with the Rural Scholars coordinator allow Scholars opportunities to reflect on their experiences throughout the internship. After the 10-week internship is completed, Scholars work with their research mentors to analyze data and present their findings at RRI’s annual Rural Renewal Symposium. Scholars and community mentors also reflect on the overall experience with the Rural Scholars program during an in-person interview with the Rural Scholars coordinator after the completion of the Rural Renewal Symposium.

Each year, between eight and 11 students are selected to participate in the Rural Scholars program and between five and eight community members serve as mentors to assist Rural Scholars while they are living in rural communities. As of 2022, 24 Rural Scholars had completed the experience (see Table 1), two Rural Scholars repeated the experience, and 12 community mentors have engaged in the Rural Scholars program. Rural Scholars represented the College of Agriculture; Center for Health Sciences; College of Engineering, Architecture and Technology; and the College of Arts and Sciences.

Purpose and Objectives

The purpose of this study was to assess the Rural Scholars program and its impact on the Scholars and the focus communities in which they lived and served. The Rural Scholars program incorporates teaching, research, and extension, fundamental land-grant university pillars, in rural com-

munities. Evaluating the experiences of the Scholars and community members involved in the Rural Scholars program will aid in determining the program’s impact and success in embodying the land-grant mission. The following research questions guided the study:

1. What was the **experience** of Scholars **involved** in the Rural Scholars program?
2. What was the **experience** of community mentors **involved** in the **program**?
3. What are **rural community members’ perceptions** of the Rural Scholars program?

Literature Review

This study was based on experiential learning theory (Menaker et al., 2006). Experiential learning theory stems from pedagogical constructivism, which asserts that meaning is constructed through experiences, thereby providing context to information learned (Doolittle & Camp, 1999). Experiential learning revolves around the connection between education and personal experience. Two basic tenets frame the theory of experiential learning: (1) Learning occurs as individuals change their thinking based on lived experience, and (2) learning occurs by reflecting on experiences (Dewey, 1986).

As individuals acquire experiences, they revisit and modify their thinking based on their new experiences, creating a cycle of learning (Menaker et al., 2006). In Kolb’s (1984) experiential learning cycle, the most effective learning occurs as students cycle through four phases: (1) engaging in concrete experiences, (2) reflecting on observations from the experience, (3) forming abstract concepts and conclusions, and (4) using conclusions to test a hypothesis in new experiences. Morris (2020) expanded on what constitutes a concrete learning experience, revealing that students must be exposed to new experiences and play roles

Table 1. Rural Scholar Academic Classifications

Freshman	Sophomore	Junior	Senior	Graduate student
0	3	8	6	7

Note. Numbers do not double count the students who repeated the experience because their classifications did not change.

as active participants in the experience, knowledge should be applied to the specific place and time of the experience, students should be inquiring about real-world problems, and critical reflection will create a meaningful learning experience. Based on his systematic review of Kolb's learning cycle, Morris (2020) suggested revising the learning cycle to consist of "*contextually rich concrete experience, critical reflective observation, contextual-specific abstract conceptualization, and pragmatic active experimentation*" (p. 1064).

This learning cycle can occur over multiple experiences as learners deepen their understanding to inform correct meaning-making. Experiential learning environments encourage adaptive thinking through the learning cycle. Providing reflective experiences after learning experiences accelerates the development of adaptive thinking (Menaker et al., 2006). Among the various types of experiential learning activities, this study focused specifically on service-based experiences.

Service-Learning Experiences

Service-learning is a subset of experiential learning that connects education to civic engagement (Felten & Clayton, 2011). Service-learning can consist of advocacy efforts, interactive service projects, research projects, and broad issue projects (University of Central Arkansas, 2024). Reciprocity is a crucial element in connecting academic context with public issues. The interdependence between learning outcomes and community outcomes makes service-learning a powerful tool for education and social exchange. However, its implementation can be challenging. Because learning occurs within community organizations, not controlled laboratory spaces, students experience complex problem-solving challenges and unpredictable human interactions. Thus, in contrast to traditional classroom learning, service-learning simultaneously increases the stakes for students and communities (Felten & Clayton, 2011).

Student Experience

Service-learning allows students to apply concepts taught in the classroom to real-world situations (Cooke & Kemeny, 2014; Mason & Dunens, 2019). The opportunity for students to connect these experiences stimulates a deeper understanding of the world around them (Wawrzynski & Baldwin, 2014). Mason and Dunens found that engag-

ing students in a course before the service-learning experience allowed them to better understand and apply foundational concepts while working in communities. Service-learning benefits students' cognitive development and leads to a deeper understanding of social problems (Yorio & Feifei, 2012), and it positively impacts students' confidence in their ability to succeed (Bernadowski et al., 2013). Service-learning can enhance academic performance, increase student interest in the subject, teach problem-solving skills by meeting a community's needs, and introduce civic education to students (Bringle & Hatcher, 1996). Critical reflection is a key component of service-learning that generates and documents the learning process for students (Ash & Clayton, 2009).

Faculty Role

The quality of a service-learning experience reflects effective faculty involvement (Harris, 2004). When embarking on a service-learning opportunity, it is crucial to understand the context of the rural area in which the program will be conducted (Lapping, 1999). Faculty employing service-learning must support students in understanding the consequences of service, alongside the possibilities—the ways service can make a difference, as well as the ways it can perpetuate systems of inequality and reinforce an "us versus them" narrative (Mitchell, 2008). Many rural communities lack economic resources, so financial considerations such as student housing and compensation should be accounted for when developing rural service-learning opportunities (Knack, 1996).

Mason and Dunens (2019, p. 8) encouraged understanding best practices of community engagement and acknowledging the "power and privilege at play in university-community partnerships" as key to successful service-learning experience. Faculty help forge and maintain meaningful connections with communities and encourage student engagement, which is especially important in rural communities (Harris, 2004). Faculty involvement is critical to clearly define expectations and balance expected outcomes for both students and community members (Harris, 2004). When universities develop service-learning programs, community members and entities can help inform faculty and students about specific needs to better focus the program's service efforts. However, when the program includes research, it is essential to communicate that outcomes may be unexpected, and preferred

results are never guaranteed. When students engage in service-learning experiences in rural areas, both students and sponsoring agencies in the community should maximize students' involvement within the community to ensure a mutually beneficial experience for the community and the university. An ideal model for service-learning in rural areas consists of an involved team of faculty members working with a small group of invested students. When students work together, they acquire valuable communication and teamwork skills, which are enhanced further when students represent different disciplines (Harris, 2004). "Service-learning can make tangible contributions to the quality of rural life, thereby making these areas more attractive for residents who wish to stay" (Harris, 2004, p. 41).

Community Impact

It is important to understand community members' perceptions of service-learning programs (Chupp & Joseph, 2010; Stoecker & Tryon, 2009). Historically, service-learning has focused primarily on student experience and learning. Ferrari and Worrall (2000) discovered that community members tend to reflect positively on students' work skills and service involvement. However, Sandy and Holland (2006) found a disconnect between students' and community members' perceptions of student impact on communities. This observation may be particularly true when the students' work includes a research component, as opposed to community service only. Community members and community organizations may view research as disconnected from their reality, providing little benefit to the community and greater benefit to the researcher (Ahmed et al., 2004; Blouin & Perry, 2009). When faculty place students in communities without clearly communicating with community organizations about goals and objectives, the disconnect between the community and university widens (Blouin & Perry, 2009). Community members may view research as an invasion of privacy, secretive, and irrelevant to their needs (Ahmed et al., 2004).

Service-learning experiences focused on reciprocal relationships between students, faculty, and communities, along with engaging participants in critical reflection, help balance university-community power dynamics (Asghar & Rowe, 2017). Integrating service activities relevant to coursework can improve service-learning impacts for

students and community members, especially if the service activities are designed for sustainable change and not a one-time contribution. Just as reflection is important to enhancing students' service-learning experience, community members also should be included in the design, implementation, assessment, and reflection of service activities. For optimal community impact, it is essential for community members and organizations to be partners in the service-learning experience (Chupp & Joseph, 2010).

Methods

A mixed-methods approach was used to collect data for this study. Mixed-methods research allows for the collection of both qualitative and quantitative data to make decisions and address research questions (Creswell & Poth, 2018). Mixed-methods research is "superior to a single method as it is likely to provide rich insights into the research phenomena that cannot be fully understood by using only qualitative or quantitative methods" (Dawadi et al., 2021, p. 27). Specifically, this study relied on convergent parallel design, where the qualitative and quantitative data were collected independently and then were converged and mixed to triangulate the results (Creswell & Poth, 2018). Qualitative research was used to assess the experiences of Scholars and mentors through interviews, and quantitative research was used to assess the perceptions of residents living and working within the focus communities of the Rural Scholars program. Details of both approaches are described in more detail in the following sections. The study (20-375) was approved by Oklahoma State University's Institutional Review Board on August 27, 2020. Due to the COVID-19 pandemic and restrictions associated with government shutdowns, Rural Scholars in 2020 had a unique experience compared to Scholars in subsequent years. Rural Scholars were asked how COVID-19 impacted their summer experience. Unfortunately, due to the impact of the pandemic, incomplete data were collected from Rural Scholars in 2020, and no data were collected from community mentors in 2020. Therefore, data from 2020 were not included in this study. Scholars in 2021 and 2022 reported negligible impacts of the COVID-19 pandemic on their experience.

Qualitative

A census study was used to collect relevant,

information-rich data from all participants who played a specific role as Rural Scholars or community mentors in the 2021 and 2022 Rural Scholars program (Patton, 2002). Qualitative research methods produce detailed data with a more extensive comprehension of the subject (Flick, 2009). Scholars were undergraduate or graduate students enrolled at Oklahoma State University who participated in the Rural Scholars program. Community mentors were members within the focus communities who volunteered to partner with the RRI team to mentor Scholars during the summer experience. Each Scholar ($N = 18$) and community mentor ($N = 14$) who participated in the 2021 and 2022 Rural Scholar experiences was interviewed using a semistructured interview protocol. IRB approval was obtained before conducting interviews with Rural Scholars and community mentors. Semistructured interviews with open-ended questions were used to allow participants to express their viewpoints and share their experiences more openly without interference or bias from the research team (Creswell & Poth, 2018). Scholars were asked questions regarding the program's effectiveness, perceptions of the focus communities in which they lived and worked, the changes witnessed or still needed within the communities, improvements necessary for the Rural Scholars program, and their personal development because of having participated as a Scholar. Community mentors were asked about their experiences working with Scholars and their overall impression of the Rural Scholars program writ large, next steps for both the communities and the Scholars, perceptions of the Rural Scholars program's overall impact, and improvements that should be made for future iterations of the Rural Scholars program.

At the conclusion of the interview, statements by all parties were transcribed verbatim in Zoom, and member checks were conducted where participants confirmed the accuracy of the data by assessing the moderator's summary of the discussion (Creswell, 2012). Transcriptions and audio were generated automatically from Zoom after each interview and maintained on a password-protected cloud database. Internal consistency was addressed by comparing the interviewer's field notes with the participant's recorded responses. All identifying information of interviewees was removed. After reviewing transcripts, semantic codes were created based on verbal and underlying meanings

within participant responses (Flick, 2018). Glaser's (1965) constant comparative method was used for data analysis. Thematic analysis prompted the comparison of topics between interviews (Flick, 2009). Occurrences in each interview were coded and compared with incidents in other interviews (Glaser, 1965). Codes were used to label and compare data, which were then sorted into themes using MAXQDA software.

Measures of Trustworthiness

Establishing measures of trustworthiness is critical when evaluating a research study's merit (Lincoln & Guba, 1985). In this study, validity was established through credibility, transferability, dependability, and confirmability. Faculty members with a background in qualitative research reviewed the interview for credibility, and a member check was conducted to ensure confidence in the accuracy of the study's findings (Creswell & Poth, 2018; Lincoln & Guba, 1985). In-depth details of the data collection methods and analysis are explained to allow for the transferability of the study's findings to other contexts (Lincoln & Guba, 1985). Auditing processes created documentation trails to ensure the results were consistent, traceable, and dependable (Flick, 2009; Lincoln & Guba, 1985). Specifically, a faculty member reviewed the audit trail, including interview notes and audio files from Zoom, to certify that the results represented participants' responses and not the researcher's bias, which confirmed the neutrality of the results (Lincoln & Guba, 1985). Confirmability was further established when credibility, transferability, and dependability were achieved (Lincoln & Guba, 1985).

Reflexivity Statement

It is important in qualitative research that the authors provide a reflexivity statement and share their backgrounds and any biases that may have influenced the way they analyzed the data. Therefore, this section is devoted to providing an overview of the author team. All coauthors are part of the leadership team of the Rural Renewal Initiative at Oklahoma State University. Three coauthors serve as codirectors of RRI, and the other is the initiative coordinator. Each has lived, or currently lives, in a rural community. Each grew up with an agrarian background. Two of the authors are originally from Oklahoma, and three are faculty members in the Ferguson College of Agriculture at Oklahoma State University. As an author team, we freely admit our ad-

miriation for rural people in rural places. We see a community's potential instead of its challenges, and we prioritize its assets over its deficiencies. Regarding the Rural Scholars program, it is a major component of our overall mission at RRI. From its inception, our team designed the Rural Scholars program as a core component of RRI. One of our authors teaches the course that prepares the Scholars for their internship, three of the authors have independently mentored a Scholar throughout the internship experience, and all authors provide general guidance to Scholars during their 10-week internship experience. Therefore, each member of our authorship team is deeply invested in the success of the Rural Scholars program. Understanding this mindset, we asked a third-party evaluator, who was not directly involved with the program, to conduct the interviews and collect the data necessary for this study. We also took measure to consider and limit our biases as we sifted through the qualitative data. Therefore, we believe the data collected are authentic and genuine and tell the full story of the program from the perspective of those who participated.

Quantitative

In addition to interviews, survey instruments were administered to citizens at community events to gain their perspectives on the program. Quantitative research allows researchers to ask specific questions using an instrument to obtain measurable and observable data. Convenience sampling was used by collecting data from community members who attended the Rural Scholars Showcase events at the end of the summer due to their accessibility and familiarity with and overall interest in the program (Creswell, 2012). The participants who provided quantitative data were community members who lived and worked in the geographic areas where the Rural Scholars were stationed during their internship. IRB approval was obtained before community member data were collected.

Because survey instruments have been deemed an effective way to research trends, such as community interests (Creswell, 2012), a cross-sectional survey design instrument was developed and used to collect data from participants at one point in time to examine individuals' attitudes and opinions toward the Rural Scholars program. A total of 61 survey instruments were completed by community members in 2021 and 2022. Responses from hard copy

survey instruments were later transferred into Qualtrics for archiving and analysis. Open-ended responses were analyzed using thematic analysis to compare written statements between survey instruments (Flick, 2009). Quantitative data were collected using a 5-point Likert-type scale and analyzed using descriptive statistics where 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree*.

A panel of experts assessed face and content validity of the survey instrument. In this study, validity was achieved when these experts determined that the instrument would identify what it was intended to measure (Creswell, 2012). Specifically, the panel of experts have all worked in rural communities and have experience with social science research studies and designing survey research tools.

Results

Research Question 1: What Was the Experience of Scholars Involved in the Rural Scholars Program?

To understand Scholars' experience within the Rural Scholars program, participants were asked to describe their experiences relating to research, community service, and living in their assigned rural community. The data yielded three major themes: (1) preparation and clear expectations are essential for success, (2) the people made the experience, and (3) new experiences led to personal development. The following sections describe each theme in detail.

Preparation and Clear Expectations Are Essential for Success

Preparation and expectations helped numerous Scholars enter rural communities ready to begin their projects, whereas a lack of preparation and clear expectations hindered other Scholars from feeling competent to conduct their projects. The level of preparation Scholars experienced going into communities varied depending on their research mentors and community service interests. When reflecting on service opportunities, one Scholar said, "I was very well prepared mostly because I had a game plan for what I wanted to do for my service, and people are always looking for volunteers for service." However, another Scholar stated that "More supervision and more accountability would have served our research projects better."

Regarding research projects, some Scholars

felt their ability to collect data was hindered by a lack of communication and clear expectations laid out by research mentors, which led to delayed data collection, creating a stressful push to collect data in the second half of summer. One Scholar said:

I feel like a lot of [students] . . . didn't start [collecting data] until mid-July, because they just didn't know where to start, or they didn't have good communication with their research mentor. So, I think that's something that could definitely be improved.

When research mentors remained actively involved throughout the 16-week course component of the program and the hands-on summer experience, preparation and expectations were less of a hurdle for Scholars. One Scholar reflected on their experience, saying:

The week that I moved to Frederick, we had a meeting on Zoom . . . and they were like, these are the dates that we're gonna do stuff, and before then this is what I expect of you. And so that was really nice, just having that structure. I think that prepared me well.

Another Scholar felt research mentors should communicate anticipated end goals of research projects to help Scholars connect the research tasks to the community in which they are collecting data. The Scholar said:

I think there could be more clarity about what the end goal is. . . . This past summer I felt like there were just so much little bitty random projects, but I could never figure out how it was tying into the big picture about how what I was doing was going to eventually end up positively impacting the community I was in.

The People Made the Experience

Scholars appreciated the opportunities they had throughout the program to collaborate with other Scholars and members of the community and form authentic relationships and friendships along the way. One Scholar explained their time in the community, saying, "People make experiences, and this is one of my best job experiences

in college. A lot of that has to do with who I worked with, lived with, and talked to." One Scholar who participated in the program for two summers appreciated the opportunity to continue building relationships with community members they had met the previous summer. The Scholar said:

I had already built relationships with [the EMS team] from the summer before. It was nice to go back and further those relationships and go on ambulance rides with them. They treat me like family, and I learn a lot from them.

For some Scholars, going into an unfamiliar community, not knowing anyone, was intimidating coming into their summer experience. As the summer progressed, they were welcomed into the community. One Scholar reflected on this experience and said:

I kind of went in, knowing I'm going to a place I've never been before. I'm not going to know anybody. I kind of set low expectations just so that I wouldn't be surprised by how it was, and I feel like I made connections in the community, and I really enjoyed it.

The Rural Scholars program offered many Scholars a chance to develop communication skills and get out of their comfort zones. Scholars engaged with the community through service projects and learned how to communicate about their research projects in authentic ways to recruit research participants. One Scholar said:

[The best part of the experience] was meeting the people down there and making those connections down there and just really being part of the town. I think that's the most unique thing about this internship is you get to move to a town and truly be part of it. I thought it was the most enjoyable part of my experience.

Not only did the Scholars enjoy forming relationships with members of the community, they also enjoyed the community formed among the group of Scholars. Throughout the semester and into their summer experience, Scholars worked together and shared a unique experience living in a rural community. One Scholar said:

I think the best part was being in the community with the other Scholars and being a team and have each other. I really like how I got to know the Scholars that I was with and the connections that I was able to form.

New Experiences Led to New Perspectives and Personal Development

Exposure to new experiences and perspectives led Scholars to develop specific life skills and create different outlooks. Time invested living and working in rural communities helped the Scholars experience what life is like for community members, providing valuable insight for those who plan to work with rural populations in their future careers. One Scholar said, “[This experience] opened my eyes to the actual challenges faced in rural communities . . . that will help me as a public health provider, to step back and realize people get affected by these things in different ways.”

Scholars had a fresh perspective of rural America and rural residents after completing the program. Some Scholars experienced a new culture and way of life that starkly contrasted with their typical lifestyles. One Scholar detailed the foreign feeling of moving from a city to a rural community, saying:

I would say [the best part of this program was] the new perspective . . . having lived on my own in a place that I had never been to and basically a separate culture . . . that was extremely cool to be a part of because it wasn't just my job. That was my life for like three months. I think the research was great and the service is great, but thinking about what I did over the summer, that's what I remember most is just like living, existing there.

Even Scholars who grew up in rural communities felt they were seeing rural America with fresh eyes. Concepts taught in the spring class came to life as the Scholars spent the summer interacting in rural communities. One Scholar said, “I did feel like a lot of the principles that we talked about [in class] were true. And even though I had like grown up there, I didn't see it until we had talked about them in class.”

Experiencing residents' deep sense of community pride and determination to improve their town surprised some Scholars and inspired them to pursue careers in rural areas. One Scholar was inspired after experiencing community members' passion and drive, saying:

You see how much they care about their community and how much they're willing to put in the work to not just become a ghost town, and that's really inspiring to me. . . . I think it reinforced my passion for working in rural communities.

Scholars gained important interpersonal skills they will take forward with them into their professional and personal lives. Although new experiences made some Scholars uncomfortable, they all looked back on the challenging aspects and appreciated the skills they gained. Discussing new experiences, a Scholar said:

It definitely made me grow, and they pushed me out of my comfort zone, which I really appreciated. It wasn't always the easiest thing to do, but from it, I gained a lot of leadership skills, communication skills, and connecting with other people so overall it was really good.

Overall, the summer experience was uniquely impactful for Scholars. Through community service, research, and collaboration, Scholars experienced personal development and gained perspective by integrating into the communities. One Scholar said, “There's the sense of community that's very important for people everywhere in Tillman County, and it brings up a form of uniformity. . . . I think that's one of the things that I enjoyed about it.” They continued:

Being able to come out of the city life and just experience [rural life], I think that was something I needed in terms of my attitude in my life. After Rural Renewal, I started developing more of a work ethic and focusing more on what I want in my life. This experience has changed me in that I am able to set my goals and understand how to deal with people better . . . and I'm thankful that I got to have this experience.

Research Question 2: What Was the Experience of Community Mentors Involved in the Program?

To understand mentors' experiences working with the Rural Scholars program, mentors were asked to describe their experiences working with Scholars, the faculty involved in the program, and the impact Scholars had on the mentors and their communities. The data yielded three major themes: (1) Scholar involvement in the community is critical for the success of the program, (2) clear communication and expectations were essential for success, and (3) the program had a positive impact.

Scholar Involvement in the Community Is Critical for the Success of the Program

Mentors emphasized the importance of getting Scholars actively involved in the communities. Scholars' level of community involvement was often correlated with their impact and success within the community, according to mentors. One mentor described the success of a Scholar who went out of their way to engage in community events and meetings, interacting with any community member they could. The mentor said, "He was not shy at all. He would jump right into a city council meeting." Advising future Scholars, the same mentor said, "Just jump in here. Teach us, learn from us."

Another mentor experienced the opposite, appreciating the program but feeling the Scholars in their community did not commit to getting involved in the community. The mentor said:

I would like to see a little bit more involvement with our community. . . . We really didn't see a lot of [community service]. If we could see more of that, I think that would really be a big buy-in for anybody's community. More community service involvement, more participation with our community, I think that would have probably sealed the deal.

Many mentors found the Scholars they worked with quickly became involved, showing initiative and investing in the community. One mentor recalled their Scholars' involvement, saying:

[The Scholars were] a great match for us. . . . They were really involved in the community, and they also volunteered at a food bank in

another community, and when there was extra food, they would bring it here and put it out for people to pick up. I appreciated their investment.

Community involvement was a key focus of the mentors when discussing the program's impact. When asked about the length of the 10-week experience, one mentor said, "I think any shorter time, and they wouldn't be able to even really get involved in the community." Another mentor recalled their experience of Scholars finding new ways to get involved in the communities. The mentor said:

We had several [Scholars] that would come on a weekly basis and volunteer when we were open and help serve the community. . . . They always ask questions about the [service] and how we operate. We had a shipment of turnips come in, and one of the students was able to take some of those turnips to another town in the county and help the FFA get [them] started in their gardens to raise.

They continued, advising, "Be involved in our community as much as possible. Attend activities or anything that's going on. Just be with the public . . . make [Scholars'] presence known."

Clear Communication and Expectations Were Essential for Success

Mentors needed clear expectations and communication from Scholars and from faculty facilitators at Oklahoma State University. One mentor recalled scrambling to help a Scholar find research participants once the mentor had learned about their study. The mentor said, "If we had known all the details of that program, we could have maybe drummed up some more [community participation]." Another mentor had a similar issue, not knowing how to help Scholars prepare for their research projects because the details and end goals were never shared. The mentor said:

I knew when [the Scholars] first came, kind of a broad overview of what their project was, but I didn't really know how they were going to achieve it, and I didn't get feedback going through. . . . Just knowing some of that more in-depth, like here's what we're

going to do, here's what we see and how we're going to achieve it. So, we as a community can ask them along the way, how's it going . . . so that maybe we could even help them broaden their research.

When sending Scholars into a community, mentors stressed the importance of communicating the purpose of the Rural Scholars program and creating realistic expectations within the community to avoid confusion and frustration from residents. Describing the community's first year working with the Rural Scholars program, one mentor said, "There was some misconceptions that Oklahoma State University was bringing money to town and was going to invest money into doing projects in town, and that's not really what it's about. It's about research."

During their second year participating in the Rural Scholars program, expectations became clearer. The mentor continued, saying, "The second year and on, I think expectations were set. Everybody kind of knew what was going on. After the first year, I think it's been great. I think that the expectations have been perfect."

Mentors emphasized the Scholars were going out into the community representing the Extension office and representing the university. Keeping steady communication between mentors and Scholars would help set expectations for the Scholars throughout the summer. One mentor said, "Come ready to be a professional. If [Scholars] come in the morning and connect with us, then we can say, okay, they are serious about what they're doing. We know what's going on."

One mentor felt their expectations were never communicated to them, which led to a disconnect between the mentor and Scholar. Aside from helping the Scholar collect research data, the mentor felt they did not play a role in the Scholar's experience. The mentor said, "I didn't feel like I knew what was expected of me. As far as mentoring goes, we didn't do anything because we didn't know what to do."

The Program Had a Positive Impact

Although Scholars joined the program to learn, mentors and community members appreciated the opportunity to learn from Scholars as well. One mentor said, "It's a

two-way relationship, you know. It's for [Scholars] to learn, to help the community, but it's also for community members to learn as well."

Mentors appreciated when Scholars would add their new perspectives on community issues. When describing community members' reactions to Scholars' presence in the community, one mentor said, "We got to know [the Scholars] and felt like they were part of the community. They offered advice on things. It was nice to get an outsider's perspective on different projects." Another mentor said, "[The best part of this experience] was the interaction with different people with different views. They had different political views, social views, and views from different parts of the country."

One area of improvement for the program is communication between the RRI and community members. Mentors and community members would like to see the work of the Scholars promoted throughout the community. One mentor said, "If [Scholars] all wrote one thing [in the newspaper] about themselves and what their project is . . . it would help the community realize what they are here for and what they were doing for the community."

One mentor recalled a Rural Scholar's work repairing the house in which they were living. Originally, the mentor's office agreed to pay utilities for the Scholars all summer, but when the town's mayor saw the work that the Scholar did to the house, the bill was covered. The mentor said:

When it came time to get that [utilities] bill at the end of the summer, [the mayor] said, "No, we're not charging anything. [The Scholar] did so many improvements, she did great things for us. . . ." That was really nice, and that spoke volumes, because our mayor's not easy to please, and she was highly pleased with [the Scholar]. When our mayor came in and told me that, I thought, okay. It has to be a good experience. . . . I mean it, she really was impressed.

Another mentor felt strongly about the positive implications the program has for rural communities, noting the impact observed through the Scholars over the summer. The mentor said:

I've enjoyed [all the Scholars] that have been with us and everybody I've met. I hope they continue this program. . . . I think it's a benefit for [the Scholars]. I think it's a benefit for all the communities involved. You know . . . they have an opportunity to make a difference in somebody's life just by talking to them. And I think it needs to continue. I support it fully, and we're happy that we have [the Rural Scholars Program]. It's been a positive thing for us as well.

Research Question 3: What Are Rural Community Members' Perceptions of the Rural Scholars Program?

At the end of the Scholars' experience, students presented their summer's work at an event open to the community. A questionnaire was passed out to community members asking about the Scholars' impact on the community. When asked if supporting the Rural Scholars program was a good investment in the community, responses were rated on a five-point Likert-type scale, with 1 = *strongly disagree* to 5 = *strongly agree*. One participant's response to this question failed to record. Of 60 responses, the average rating was 4.95, indicating community members strongly agreed the program was a good investment in the community. When asked whether members of their community were working with Oklahoma State University faculty and students to find solutions for rural communities, responses were rated on the same five-point scale. Two participants' responses to this question failed to record. Of 59 responses, the average rating was 4.83, indicating members strongly agreed the faculty and Scholars involved in the program were working with community members to find solutions.

Community members also responded to open-response questions. One question asked, "What new insights or ideas have you gained from tonight or through your interactions with the RRI?" One community member said, "I've got hope that there are smart youth out there that care about a town like ours." Multiple residents noted the program helps community members address issues they may become blind to as they live in the community. One member said, "There are problems in rural Oklahoma State that we overlook simply by living here. With the help of RRI, they can be pointed

out and possibly fixed." Some community members did not know about the program before the end-of-summer presentation event. One resident said, "I didn't know this program existed and I can see the tremendous effect on the community." Members felt the Scholars were knowledgeable about their research projects and the needs of the community. Residents felt excited seeing young people work together with community members to invest in rural communities. One resident said, "Together, we are making progress."

Another open-response question asked, "What is RRI doing that is helpful for your community?" Mentors perceived that research specifically focused on rural development was crucial, and the Rural Scholars program allowed research to be approached with fresh eyes and new perspectives. One respondent said, "RRI's research and openness are the thing I think are most helpful." Residents also appreciated the opportunities for social interaction and focus on community interaction. One member said, "They have encouraged the town's people." Another said, "[The Rural Renewal Initiative is] stimulating public awareness to improve." Community members also noticed the specific research and community service projects the Scholars conducted. Some projects mentioned included the creation of town gardens, beautification projects, telemedicine research, and water quality testing.

The last open-response question asked, "What could RRI do to be more effective in engaging with your community?" Members want the Rural Scholars program to return and continue getting involved in the community. One member said, "Keep coming back, keep spreading the word, and help us [find] solutions." Another said, "Continued presence each year will help build a relationship with the program and community. They have done a great job integrating." Residents appreciated the interaction and also felt that more communication, both during the summer while Scholars are in the communities and after, was needed to continue the interaction. One community member said, "Keep us posted on what is going on year around. Let us know what projects you all need help with. We would like to help." Another resident said, "Make this even more publicized to better represent the effort that is being expanded to help find solutions for our community." Last, community members appreciated the interaction

with students and faculty at Oklahoma State University and the attention the program brought to the everyday issues they face. One respondent said, "It's a great feeling to know we are not alone in the fight to survive."

Conclusions and Recommendations

Scholars, mentors, and residents in the communities generally had positive experiences with the Rural Scholars program. Scholars benefited from high-impact experiential learning, and they felt their time spent living and working in rural communities provided context for material learned in the course, connecting education and personal experience. Scholars adapted their thinking and perceptions based on lived experiences and reflection on those experiences (Menaker et al., 2006). These experiences and reflections facilitate the learning cycle (Morris, 2020). Scholars engaged in a contextually rich, concrete learning experience as they lived and worked in rural communities. They engaged in reflective observation; however, the frequency and depth of observation varied based on frequency of contact with research and community mentors. Scholars were able to form context-specific conclusions based on their experiences in rural Oklahoma State and engage in practical experimentation through their community-based research projects.

Scholars reported they gained new skills, ideas, and opportunities during their summer experience, particularly with problem-solving and social interactions. The Rural Scholars program demonstrates how service-learning provides high-impact learning opportunities for undergraduate and graduate students (Felten & Clayton, 2011).

Living in rural communities led to a deeper understanding of issues rural communities face, as Scholars experienced them firsthand. Perceptions of rural residents changed for many Scholars during the summer experience when they learned how community pride drove residents to work toward a better future for their towns. As students provide context for their knowledge through experiences, the connection stimulates a deeper understanding of the world (Wawrzynski & Baldwin, 2014). Many Scholars felt their experience through the Rural Scholars program set them up for success academically, professionally, and personally. This service-learning experience allowed Scholars to

enhance important life skills, and further research should explore any subsequent improvements in their academic performance (Bringle & Hatcher, 1996).

Scholars also felt they formed valuable relationships through interacting with other Scholars. They all participated in a unique program and bonded over the shared experience. The program brought students from different departments together to learn about research and rural community development, providing them an opportunity to consider different perspectives. Such opportunities encourage the development of communication and teamwork skills, which are further enhanced when students come from diverse disciplines and backgrounds (Harris, 2004).

The Rural Scholars program embodies the elements of service-learning by distributing power equally between communities and university affiliates, developing lasting and authentic relationships, and working toward changing social perspectives (Mitchell, 2008). Although community mentors did not mention an imbalance of power between the community and university, they did note a disconnect in communications and expectations. Students felt developing authentic relationships was the best part of their experience, and community members appreciated the level of involvement Scholars maintained throughout the summer. Individuals and groups of individuals within communities worked with Rural Scholars; however, there were few partnerships between community organizations and Rural Scholars.

Rural communities with declining populations often struggle to maintain viable community organizations that have the capacity to work with Rural Scholars. Notable exceptions were one local food bank and one community health clinic in the focus communities, which worked closely with Scholars. Community members appreciated the outside perspective from students and faculty members because residents often become blind to the daily issues impacting their towns. Together, both parties collaborated to address community issues. Instead of focusing solely on the Scholars' learning experience, the Rural Scholars program is also designed to address rural issues by addressing their root causes, inspiring students to become social change agents who actively engage communities (Mitchell, 2008).

Mentors and Scholars alike perceived that increased communication and clearer expectations would benefit the program. This observation is in keeping with previous research that found faculty involvement affects the quality of service-learning experiences, and it is crucial to define clear expectations and outcomes for students and communities (Harris, 2004). Many Scholars and mentors mentioned a lack of clearly defined expectations, which affected research and service projects throughout the summer. Mentors felt that when the RRI engages with a new community, they should clearly define the role of research in the program to ensure that community members do not misconstrue the program's objectives and get frustrated due to miscommunication. We recommend future projects heed the advice of community members and articulate the expectations and purpose of the program and specific research projects.

Community members felt continued communication after each summer would benefit residents, deepening relationships and allowing them to see research results and continue momentum within their community. As research mentors have some consistency from one year to the next, they should maintain meaningful connections with communities, which is especially important in rural communities (Harris, 2004). Reflection is an important element in maximizing impact for community members (Chupp & Joseph, 2010), and this is an area the Rural Scholars program could improve on. Scholars and mentors reflected on their experiences with the program in interviews, but there were limited opportunities for collaborative reflections so they could learn from one another's experiences. Moreover, research scientists from Oklahoma State University also should be consulted on their perspectives and reflections on the process.

Residents perceived the program as a valuable contribution to the community, which is consistent with previous research (Ferrari & Worrall, 2000). Many community members in this study appreciated the future potential of the research projects being conducted in their communities. However, when some community members were unclear about the program's objectives and expected a more tangible outcome, they were disappointed in research results. This outcome aligns with previous work showing that when research is incorporated in service-learning opportunities, it is essential for faculty to clearly

communicate the unpredictable nature of research results (Harris, 2004). This experience suggests that community members' perceptions of research largely revolve around the communications and expectations set at the start of the program.

No community members reported feeling patronized or isolated when interacting with the program, which may indicate the Rural Scholars program successfully shared decision-making power with community members (Mitchell, 2008). To maximize impact for residents, they should be involved in planning, implementing, and assessing activities (Chupp & Joseph, 2010). Community members were involved in planning and implementing service and research projects; however, mentors wanted to be involved earlier in the planning stage to contribute to projects more effectively.

The Rural Scholars program encourages community members to play an active role in projects, working alongside students and faculty in conducting research and completing service projects to improve communities. This type of reciprocity in the service-learning experience is essential to connect academic context to public issues (Felten & Clayton, 2011). The program focuses on student learning, serving communities, and leaving community members better equipped at the end of the experience, three tenets that serve to reify the three principles of service-learning as articulated by Sigmon (1979).

Service-learning opportunities like the Rural Scholars program at Oklahoma State University are a valuable way to establish relationships between academic institutions and rural communities. The Rural Scholars program provides faculty and students a unique opportunity to engage in community outreach and work with community members to address relevant issues and learn new perspectives. By establishing stronger bonds between land-grant institutions and Oklahoma communities through place-based service-learning programs, research can become more relevant and applicable to community residents.

Students participating in service-learning opportunities should focus on engaging with the communities in which they work (Harris, 2004). Successful students took the initiative, communicated with community members, and maintained consistent involvement in the community throughout the experience. When participating in experien-

tial learning, these types of interaction with the environment start the learning cycle (Menaker et al., 2006). Students also should make sure they begin a service-learning experience with a plan in place for executing projects, connecting with relevant individuals or organizations, and integrating into the community. Mentors and Scholars had the opportunity to reflect on their experiences during interviews; however, providing an opportunity for collaborative reflection could enhance the impacts of the program and provide more clarity for mentors and Scholars.

Faculty members involved in service-learning opportunities at land-grant institutions should ensure that the opportunity is designed to work *with* communities, not *on* communities. When instructing students prior to the service experience, heavy emphasis should be placed on how the students can form relationships with community members. Service-learning experiences can have negative impacts on students and communities when implemented incorrectly, further perpetuating an us-them dichotomy and reinforcing hierarchical structures (Pompa, 2002). Moreover, faculty members should maintain open lines of communication with community mentors and students during the experience, so that expectations are clear, and all parties feel confident and supported in their projects. If faculty members do not prioritize balancing university-community dynamics and forming relationships with community members, Scholars may have a less impactful service-learning experience, and existing community relationships may suffer.

Faculty involvement in the research mentor process is a critical element of student success in the Rural Scholars program. If faculty are not accessible to students or community mentors over the summer while research is being conducted, it negatively impacts community dynamics, student experience, and quality of research output. In the future, additional effort should be devoted to opening lines of communication year-round to deepen the relationship between the university and the community and share the impacts and practical implications of the projects conducted during the summer experience. An orien-

tation program or best practices guide for community mentors would also be beneficial in laying out expectations, timelines, how to work and connect with Scholars, and resources available to mentors through the RRI leadership team.

Community mentors should maintain an open mind when participating with students and faculty. As service-learning experiences become established, community members can spread the word to residents and surrounding communities to help reach populations that other communication methods may miss. Encouraging community participation from residents helps ensure that the engagement efforts from university parties are not one-sided. Participation in planning, implementing, and reflecting on projects maximizes impact for community members (Chupp & Joseph, 2010). Just as students should focus on actively engaging in communities, residents should be intentional about interacting with students.

Future research should explore how to efficiently foster communication between communities and universities during service-learning opportunities. One possible avenue would be elaborating on best practices for communication throughout the planning and implementation processes of research and service projects. Identifying and addressing the specific communication needs of research mentors, mentors, and Rural Scholars could elevate the effectiveness of the program. Community members' perceptions of service-learning experiences should continue to be explored more deeply (Stoecker & Tryon, 2009). Research could compare residents' perceived impacts of the program at intervals to evaluate whether the community perceives more impact with longer participation in the program. The correlation between involvement in service-learning opportunities and community resilience perceptions should be investigated to determine whether participating in the Rural Scholars program impacts community members' perceptions of their community's well-being. Future research should also assess the effectiveness of the program from a faculty perspective.



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