

Reflection on the Groceries to Graduate scholarship program at Missouri Southern State University

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Submitted February 2, 2023 / Revised May 24, July 10, and July 27, 2023 / Accepted July 29, 2023 /
Published online September 14, 2023

Citation: Bever, M. L., Carr, A. A., Colburn, K., Cullers, A. N., & Rutledge, J. P. (2023). Reflection on the Groceries to Graduate scholarship program at Missouri Southern State University. *Journal of Agriculture, Food Systems, and Community Development*, 12(4), 187–200. <https://doi.org/10.5304/jafscd.2023.124.016>

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Abstract

In recent years, myriad universities have sought measures to alleviate the burden of nutrition insecurity among undergraduate in order to improve

student health and academic success, as the prevalence of nutrition insecurity on college campuses has gained attention from researchers. At Missouri Southern State University (MSSU), faculty launched the Lion Co-op Center for Nutrition Security (LCCNS) in 2018, which focused on research and included a free food and personal hygiene pantry that all students, staff, and faculty were eligible to use. In 2020, the LCCNS piloted the Groceries to Graduate (G2G) scholarship program, which provides advanced undergraduate students (those who have earned 60+ credit hours) in good standing and with financial need with scholarship tokens that can be used as currency at the Webb City Farmers Market, located three miles north of campus. The objective of this program

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Funding Disclosure

This scholarship project is supported by grant funding from the W. Ra. Corley Memorial Trust and the Missouri Scholarship and Loan Foundation. The Lion Co-op Center for Nutrition Security operates through the Missouri Southern State University Foundation.

was to increase low-income undergraduate access to fresh produce and reduce their financial burden of purchasing high quality food, therefore improving academic outcomes. This reflective essay examines the preliminary findings we obtained about the first two years of the scholarship program. It assesses the methods of communicating with students about the scholarship program, token usage, availability of fresh produce, and student academic success. The initial findings suggest that while the model needs improvement, the scholarships are meeting student needs for access to nutritional food. This market-based solution gives students currency (tokens) so that they can buy directly from local merchants, a model that with some revision may provide a workable model for small universities to address nutritional insecurity among students.

Keywords

Groceries, Graduation Rates, Scholarship, Token, Farmers Market, Nutrition Security, Retention, Academic Success

Background

In August 2018, three professors at Missouri Southern State University networked with each other through the office of institutional effectiveness after all three became concerned about food insecurity on campus. According to surveys conducted in 2018 through MSSU's first-year orientation course (University Experience 100) and the department of kinesiology's Lifetime Wellness courses, 25% of MSSU undergraduates reported that sometimes or often in the past 12 months, "I worried whether our food would run out before we got money to buy more," 21.6% reported that sometimes or often in the past 12 months, "The food we bought just didn't last and we didn't have money to get more," and 30.6% reported that sometimes or often in the past 12 months, "We couldn't afford to eat balanced meals." These questions, taken from the U.S. Department of Agriculture (USDA) short-form survey for assessing food security (USDA Economic Research Service [ERS], 2012), indicate that approximately a quarter of the MSSU student population experiences low-to-moderate food insecurity.

During the fall 2018 semester, the professors launched the Lion Co-op, a food and personal hygiene pantry open to all students, faculty, and staff at MSSU. The professors designed the Co-op pantry to serve as a stop-gap measure for students and staff with immediate needs, many of whom live in local counties within the tri-state region (Missouri [MO], Kansas [KS], and Oklahoma [OK]). The population of Jasper County, MO, in which MSSU is located, is 13.3% food insecure (Bass et al., 2019), above the national average of 10.2% in 2021, or 12.5% for households with children (USDA ERS, 2022). Other local counties where MSSU students and staff are residents have a food-insecure population of over 10%: Barry, MO (13%), Bourbon, KS (12.8%), Cherokee, KS (13.4%), Craig, OK (15.9%), Crawford, KS (14.3%), Delaware, OK (15.6%), Jackson, MO (16.2%), Labette, KS (13.8%), Lawrence, MO (12.8%), Mayes, OK (15.4%), McDonald, MO (13.8%), Newton, MO (12%), and Ottawa, OK (16.5%) (Bass et al., 2019; Hake et al., 2022). In addition to the Co-op pantry, the founders established the Lion Co-op to focus on experiential learning, offering classes, internships, and student-faculty research to investigate more systemic solutions to food insecurity on university campuses and in the tri-state region. In spring 2022, the current faculty advisors renamed the pantry the MSSU Lion Co-op Center for Nutrition Security and moved it to its current location in Spiva Library, one of the central hubs of the campus.

In spring 2020, the professors participated in the Congressional Hunger Center's End Hunger in 30 Challenge through Universities Fighting World Hunger (Congressional Hunger Center, 2020). The 30-day online course highlighted the Houston Food Scholarship Program (HFSP), a partnership with Temple University's Hope Center, which provided grocery scholarships to students in the Houston Community College system (Goldrick-Rab et al., 2020). The HFSP report noted many complications with its pilot program: the supply of produce was unsteady, and participating students did not experience a decrease in food insecurity. Nevertheless, the concept of a grocery scholarship intrigued the MSSU professors because it offered an alternative to the food pantry model. A grocery

scholarship also allows the LCCNS the possibility of addressing one of the campus's target areas: low four- and six-year graduation rates, of approximately 20% and 33% respectively (MSSU Institutional Effectiveness, 2022). It was decided that a grocery scholarship that targeted advanced undergraduates could improve students' chances of finishing their degree.

Whereas the HFSP attempted to bring groceries to campus and tracked rates of food insecurity, the LCCNS Groceries to Graduate (G2G) program uses a token-based system, sending students to a permanent farmers market, and it measures their graduation rates. While not specifically targeting college students, Hunter College's New York City Food Policy Center has undertaken a similar grocery voucher project to handle food insecurity exacerbated by COVID-19. This project, Meals for Good, is similar to the G2G token scholarship model (Gallanter et al., 2022).

Literature Review

Many scholars have recently turned their attention to the problem of nutrition insecurity on college and university campuses. While there is substantial variation in numbers, studies conducted between 2009 and 2016 suggest that at least 10% and perhaps as many as 75% of college students (with an average of about 42%) face some level of food insecurity. These rates are approximately twice as high as the general population (Brito-Silva et al., 2022; Broton, 2020; Bruening et al., 2017; Watson et al., 2017). For Missouri, surveys conducted in the midst of the Covid-19 pandemic suggest that approximately 45% of college students in the state are food insecure (Chrisman et al., in press). While most studies rely on student answers to USDA survey questions to measure the status of campus food insecurity, a recent study asserts that looking beyond the USDA measures and including "factors like housing, time limitations, commuting needs, and the stigma surrounding poverty" (Peterson & Freidus, 2020, p. 125) would provide scholars with a more accurate understanding of the scope of nutrition insecurity on campuses.

The causes of food insecurity among college students vary. The Great Recession that began in 2008 appears to have prompted a rise in food inse-

curity, but factors specific to attending college, particularly the rapidly increasing costs of attendance coupled with inadequate financial aid, make students especially vulnerable. Independent students, commuter students, undocumented students, first-generation students, and international students are typically more likely to experience risk, especially during semester breaks when regular sources of food on campus can be less available (Bruening et al., 2017; Watson et al., 2017; Wolfson et al., 2021). Race and ethnicity are factors as well, with Black and Hispanic students having rates at least 1.5 times higher than white and Asian students and that can be as high as 3.5 times for Black students in the southeastern United States. Indigenous students are also at higher risk (Alexis et al., 2020; Fausto, 2022; Reeder et al., 2020). LGBTIA+ students also experience food insecurity at higher rates than their heterosexual or cisgender peers, and they more often lack family support to mitigate their financial troubles (Henry et al., 2023; Willis, 2019). Another complicating factor is that college students underutilize Supplemental Nutrition Assistance Program (SNAP) benefits, at least in part because there are specific criteria for students that may make them unaware of their eligibility. (Fausto, 2022).

College students may face additional risk factors and effects regarding nutrition security that are specific to their population. Many students commute and/or share living space with others, which leaves them with insufficient time or space to prepare nutritious meals (Peterson & Freidus, 2020; Watson et al., 2017). Students who live on their own (or with roommates) may also lack the life skills necessary to budget, purchase, and prepare nutritious foods (Knol et al., 2018). A study at a midsized university in southern Appalachia found that food insecurity could contribute to weight gain among college students, because they purchased cheaper, more processed foods, overate when food was available, and prioritized quantity of food over its nutrient contents (Huelskamp et al., 2019). Beyond the short- and long-term health consequences of nutrition insecurity, scholars also point out that enjoying food within a community promotes social cohesion for students, so that ensuring food security in ways that promote social inter-

action is important (Watson et al., 2017). Students who are food insecure risk becoming more isolated from their peers.

Perhaps unsurprisingly, food insecurity has deleterious effects on academic performance. Multiple studies have shown that nutrition insecurity is closely associated with lower grade-point averages for undergraduates; one study found that they are more likely to be in the lowest 10% of academic achievement (Weaver et al., 2019). At another university, “75% of students with a GPA equivalent grade of D/F were food insecure, compared to 42.4% of those with a GPA equivalent grade A” (DeBate et al., 2021, p. 570). Black, Hispanic, and first-generation students who are food insecure are at higher risk of underperforming academically (Camelo & Elliott, 2019; Weaver et al., 2019). A study has suggested that students with severe food insecurity are six times more likely to discontinue their studies than other students (Silva et al., 2017). For retaining students and ensuring they stay on track to graduate, a study conducted at Amarillo College concludes that community colleges and universities must address the obstacle of food insecurity (Lowery-Hart et al., 2020).

Even in cases where students struggling with nutrition insecurity perform satisfactorily in individual courses, studies suggest that the combination of nutrition insecurity and financial stress makes it more difficult for students to progress through their degree program and graduate. Students who have high levels of student loan debt—or even the perception that they have high levels of debt—are less likely to finish their degrees (Britt et al., 2017). Compounding this problem is the fact that students who receive financial aid, especially loans, are more likely to experience food insecurity (Adamovic et al., 2022). Universities that want to increase retention and graduation rates need to work toward solutions that increase financial aid and access to food that do not require repayment.

To increase access to food, many colleges and universities have attempted a variety of approaches, including establishing food pantries on campus. Students who live on campus and/or have lower food security are most likely to use pantries. However, a study conducted at Texas Woman’s Uni-

versity (Brito-Silva et al., 2022) suggests that even when campuses open pantries, students continue to face barriers in using the resources. Brito-Silva et al. found that pantries alone cannot adequately meet student needs because they have limited hours, uneven supply, and many students assume they do not qualify to use the pantry. They also found that the stigma attached to pantry usage inhibits students (Brito-Silva et al., 2022). Even when students are regularly using a pantry, the stock of groceries available is typically limited to shelf-stable items, so it is difficult for students to regularly get the fresh, healthy options they need (Brito-Silva et al., 2022). This problem is not unique to campus pantries; in general, pantries tend to stock shelf-stable, calorie-rich foods rather than focusing on nutrient-rich options (Huerbin et al., 2020).

Some colleges and universities have established campus farmers markets instead of or in addition to food pantries. Unlike food pantries, which primarily provide emergency relief for students facing acute hardships, campus farmers markets serve the primary function of connecting students with healthier choices. Campus markets have the most success at either private institutions or those with “strong agricultural ties” (Ward et al., 2014, p. 82). Farmers benefit from the campus “infrastructure to facilitate marketing and logistics” (p. 82) and students, faculty, and staff have the opportunity of “purchasing fresh food directly from farmers while contributing to small businesses in their community” (p. 82). Nevertheless, there are significant challenges with this model. A study conducted at East Tennessee State University found that the establishment of a student-led farmers market proved difficult to sustain due, in part, to timing restrictions caused by the academic calendar and a product liability coverage requirement that put a financial burden on vendors; students, as well, were sometimes unfamiliar with methods to prepare varieties of produce, such as beets, that were seasonally available (Ward et al., 2014).

Programs designed to make fresh foods available to students with identified food insecurity have not yet had unqualified success. A study conducted at a community college in Houston offered selected students a chance to choose up to 120

pounds of fresh food per month from a campus market. But the supply of the available foods varied weekly, less than half of the students who were eligible regularly participated, and there was no marked alleviation of food insecurity nor was there a notable change in diet (Hernandez et al., 2021). A similar program at Texas Woman's University offered students a food scholarship that provided pre-packaged totes of nutritious foods to scholarship recipients. In practice, the produce varied in availability and sometimes did not stay fresh long enough for students to eat it. The study noticed a difference in students' dietary intake over the ten-week duration of the study, but there was no significant change in student level of food insecurity (Alexis et al., 2022).

The literature demonstrates that nutrition insecurity is an immense problem on university campuses across the United States, effecting student well-being and academic success. It contributes to low retention and graduation rates and is immensely difficult to address at the campus level. One could reasonably question why MSSU undertook yet another small-scale scholarship program, when evidence suggests that it is hard to find a model that works. The answer is, in part, practical: MSSU needs to find ways to retain and graduate students, and the administration supports trying creative solutions; a grocery scholarship program is one possible solution, while working in tandem with others. Moreover, the Groceries to Graduate program does not simply replicate models that have not worked at other universities. Rather, it uses tokens that operate as currency to connect students with local merchants who sell nutrition-rich foods regularly (albeit seasonally). Because it uses an existing farmers market, it requires little cost to operate. The first two years suggest a small correlation between scholarship users and graduation. It could be that Groceries to Graduate can provide a model for other schools that are too small to host a market on campus but also need to find ways to increase financial aid to students and facilitate access to food.

Our Process

In fall 2020, faculty advisors with the MSSU Lion Co-op met with the university foundation, financial

aid and institutional effectiveness offices to develop a plan to pilot a program that would provide scholarship funds to advanced undergraduates with documented financial need. Because the HFSP report had indicated that bringing a temporary grocery store with fresh produce to campus could be a complicated model, Lion Co-op committed to finding a way to connect students to a more established source of fresh produce with a year-round, reliable selection of items. To this end, the Co-op partnered with the Webb City (WC) Farmers Market. The market is open weekly on Saturdays throughout the year as well as Tuesdays and Thursdays in the spring and summer months. The WC Farmers Market has a demonstrated commitment to facilitating food access by enabling Supplemental Nutrition Assistance Program (SNAP) and Women, Infants, and Children (WIC) participants to use a token currency system to buy fresh produce, dairy, and meat from its vendors, who must grow produce within 50 miles of the market (Webb City Farmers Market, 2023, p. 2). The WC Farmers Market agreed to partner with the Co-op by allowing G2G recipients to use special tokens as currency at its market and subsequently invoice MSSU the amount of the tokens spent at the market each month.

Where other research has attempted to measure changes in students' dietary intake and their degree of food insecurity, the G2G program research project is primarily concerned with whether receiving the scholarship has a positive effect on graduation rates, although alleviating nutrition insecurity of recipients is intertwined with the goal. Tracking graduation rates among scholarship recipients is a straightforward process, but there is no way to truly isolate the scholarship factor to definitively measure its effect on retention and graduation. Similarly, because the program is in its early stages, the number of students participating is relatively small, with seven recipients the first year and 34 the second, which makes extrapolating meaningful conclusions from the numbers difficult. As a result, and because one of the researchers is trained as a historian and is comfortable with textual analysis, the G2G project has relied on surveys and focus-group responses to analyze the effectiveness of the scholarship program.

The Pilot Year

The Lion Co-op piloted the G2G program during the 2020–2021 academic year with financial support from the W. R. Corley Memorial Trust grant and the Missouri Scholarship and Loan Foundation. Through institutional effectiveness and financial aid, the Co-op received names of 17 undergraduates with 90+ credits (senior standing), Pell Grant eligibility, and low Estimated Family Contribution (EFC). Both Pell-Grant eligibility and low EFC are indicators that students might also be food insecure. The credit hour indicator enabled the Co-op to target students who were close to graduation. After the 17 students were identified, the financial aid office and the Co-op sent them letters and followup emails explaining the new G2G Scholarship and notifying them that they were eligible to apply.

Seven students accepted the scholarship. During the pilot program, the financial aid office and the Co-op awarded the students with \$320¹ scholarships partitioned over three disbursements of tokens to be picked up from the MSSU bursar window. The Co-op asked students who participated in the program to complete short introductory and exit surveys to provide feedback on the G2G program. All recipients took the introductory survey, and while they overwhelmingly welcomed the scholarship opportunity, only three indicated that they had shopped at the WC Farmers Market before receiving the scholarship. Students indicated that the access to fresh produce was part of the appeal, stating that their regular grocery stores did not often have high quality produce. Other students suggested that the scholarship was welcomed because it alleviated part of the financial burden of buying groceries.

The disbursement process did not go successfully. Many students did not pick up all their disbursements from the bursar, and the WC Farmers

Market did not see many tokens in circulation at its weekly markets. Because most recipients did not complete the exit survey, it is impossible to know what prevented them from picking up and using the tokens. All seven recipients graduated successfully (100%), as seen in Table 1. But because so few picked up their entire disbursement, it is impossible to conclude that graduations were affected by the scholarships. It is possible that the amount of the scholarship, \$320, was too high, which would explain why the students did not pick up disbursements they did not need. Moreover, only 41% of the eligible students we identified expressed interest in the scholarships in the first place.

The Second Year

For the 2021–2022 academic year, the Lion Co-op received grant funding from the W.R. Corley Memorial Trust, the Church World Service CROP Walk, and the Boylan Foundation to fund multiple G2G scholarships. The financial aid office and the Co-op awarded each \$200 scholarship (a revised amount) in four, sequential, monthly \$50 token disbursements to be picked up at the bursar window. The financial aid office and the Co-op distributed the scholarships on a rolling basis, with applicants who met the qualifications being awarded the scholarship after they applied.

Because reaching out to students via letter and/or email had a low response rate during the pilot year, Lion Co-op printed fliers and targeted students during Priority Registration in the fall 2021 semester. We considered that the response rate had been low because students either ignore email and/or question the legitimacy of the scholarship offer. But Priority Registration is an MSSU program that gives preference to currently enrolled students (in order of class standing) to enable them to register early for the subsequent

Table 1. Graduation Numbers for 2020–2021 Groceries to Graduate (G2G) Recipients

Fall 2020	Spring 2021	Fall 2021	Spring 2022
3	0	1	3

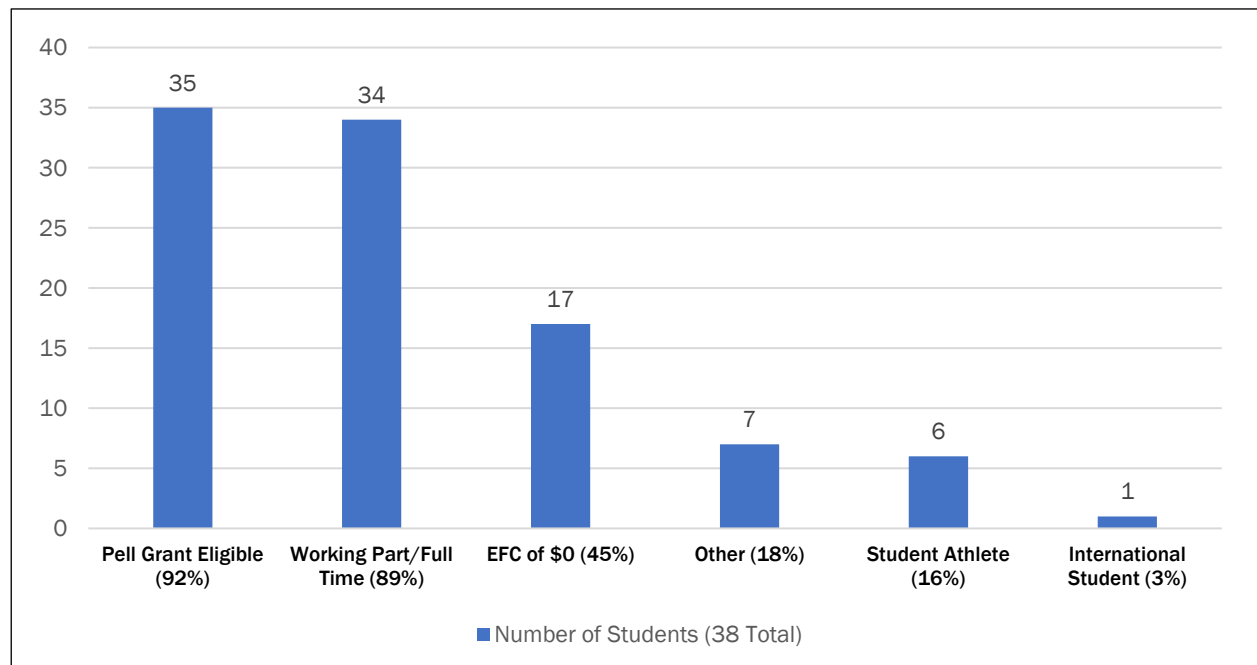
¹ All currencies are in U.S. dollars.

semester. Students are encouraged to meet with their academic advisors before registering to ensure that they are making progress toward their degree. These meetings allow advisors, who typically have an established relationship with students, to reach out with information about the G2G scholarship. The Co-op perceived that students would be more receptive to information from a trusted academic advisor, whereas they typically do not closely read email and written communication from the university. The Lion Co-op provided printed fliers to the departments of kinesiology, psychology, social work, and social sciences, all of which work closely with the Co-op, and gave fliers to students advised by Project Stay and the Advising, Counseling, and Testing program. Project Stay advisors work specifically with first-generation college students, a group at risk for food insecurity. Advising, Counseling, and Testing advises undecided students, general studies majors, and regularly sees students who are experiencing stress or crises. The Co-op also sent electronic fliers to

faculty advisors via email and notified other students through their Blackboard course sites. The Co-op invited interested students to apply for the G2G scholarship through a Microsoft Form, in which students self-reported their enrollment status, earned credit hours, and whether they fit into any of the following categories: Pell Grant eligible, EFC of \$0, international student, student athlete,² working part/full time, and any other factor they believed would make them eligible for the scholarship. In the last category, students remarked that they lived alone, participated in Project Stay, or were a stay-at-home parent. The results are recorded in Figure 1.

Of the students who applied for the scholarship, the Co-op only turned down those whose enrollment could not be confirmed or who had not earned at least 60 credit hours (changing eligibility from 90+ credits to 60 allowed us to increase our pool of eligible students to include those with junior standing). Over the academic year, the Lion Co-op awarded 37 G2G scholarships at \$200 each.³

Figure 1. Student Population Qualities (Self-Reported)



² MSSU is a Division II school with many athletes on partial scholarships. They are more likely than other students to live on campus and are more likely to be living on campus when dining services are unavailable. They have been frequent users of the Lion Co-op's food pantry, so recording whether they also apply for the G2G scholarship is helpful.

³ Not all scholarship recipients picked up all four of their \$50 token disbursements. Three recipients picked up no disbursements, four

The recipients who completed an exit survey mostly identified as women (76%), and the vast majority lived off campus (90.9%). This cohort of scholarship recipients is more racially diverse (20% American Indian, 10% African American, 10% white, Hispanic) than the rest of campus, and is diverse in sexual orientation, 36.4% identifying as homosexual, asexual, or bisexual.⁴ The data also reveal that recipients are much more likely to be Pell Grant-eligible (95%) than the campus as a whole (56%) (MSSU Institutional Effectiveness, 2022).

After students received the scholarship and had an opportunity to use tokens, they were asked to participate voluntarily in an exit survey with the USDA questions about food insecurity. These questions, which are used nationally as well as at MSSU, help the Co-op to gauge what level of food insecurity recipients of G2G scholarships are experiencing relative to their peers. Eleven of 34 students responded, and their answers show a moderate level of food insecurity. Most salient, the students expressed worry about running out of food and making decisions to purchase cheap food and

unbalanced meals (Figures 2–4) despite doing most of their shopping at grocery stores or superstores rather than relying heavily on convenience and discount stores. In other words, nutrition insecurity served as a motivating factor for students who applied to participate in the scholarship program.

Figure 3. Responses to question “To what extent do your meals include cheap foods because you are running out of money to buy food?” (N=11)

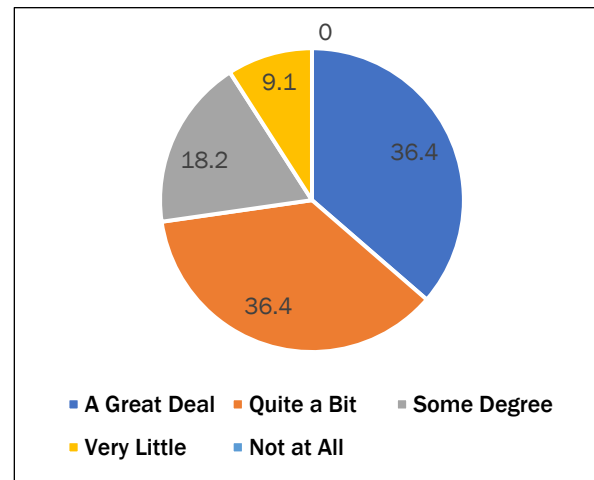


Figure 2. Responses to question “To what degree have you worried that food at home would run out before you got money to buy more?” (N=11)

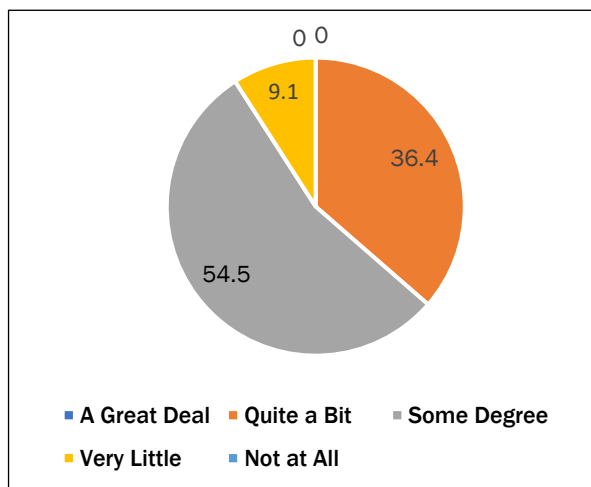
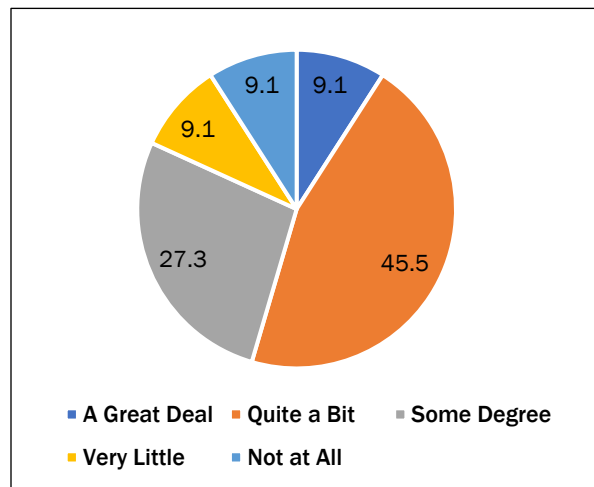


Figure 4. Responses to question “How often were you not able to eat a balanced meal because you didn't have enough money?” (N=11)



picked up only one disbursement, three picked up two disbursements, eight picked up three disbursements. Total token disbursements were \$5,500, which equals about 27.5 scholarships.

⁴ MSSU’s student population is approximately 26% BIPOC, according to data from 2021; 18.5% of the students identify as either Hispanic, Native American, or Black/African American, and 61% identify as women. MSSU does not report student sexual orientation or gender identity.

Monthly token usage at the WC Farmers Market for 2021–2022 was more reliable than token usage during the pilot year. A majority of the recipients who completed the survey reported that they had personal transportation that allowed them to get to the market (81.8%). While 63.6% of them had shopped at the market before, 36.4% of the students added the market to their options for buying groceries. Multiple students pointed out that the disbursements did not last all month. The vast majority of recipients who responded to the survey emphasized that the scholarships provided access to “healthier filling foods,” “healthy groceries,” and “fresh vegetables instead of canned ones” (72.7% included words like “healthy,” “fresh,” or “balanced” in their discursive responses). Essentially, for students who have the skills and the desire to prepare meals using fresh ingredients and locally sourced protein, the scholarship gave them the opportunity to do that. However, students did note the seasonal shifts in the market. One survey respondent pointed out, “I’ve only been able to go once since it’s only open one day out of the week and due to the season, there aren’t many fresh

items in season. The variety isn’t great to choose from.” While this was only one response, it does suggest that there are limitations to shopping at a farmers market.

Periodic token usage reports from the WC Farmers Market demonstrate that scholarship recipients during the second year shopped at the market with much greater frequency than during the pilot year. However, while usage patterns, as seen in Table 2, suggest that students were able to get more products at the market in the summer and fall than in the winter months, they also indicate that some recipients may save their tokens for times when the market stocks produce and meats that suit their needs best (the tokens do not expire once they have been disbursed). The source of data to track usage are the invoices, which come irregularly from the WC Farmers Market. In the first two years, there was no mechanism for tracking which students always picked up disbursements and then used them regularly, although we have subsequently been able to ascertain that 38 token disbursements were not picked up (totaling \$1,900).⁵ In addition to indicating that the market is better

Table 2. 2021–2022 Token Usage at Webb City Farmers Market

1/23/21– 7/31/21	9/11/21– 11/06/21	11/20/21– 12/24/21	1/8/22– 1/29/22	2/5/22– 3/5/22	3/12/22– 4/30/22	5/7/22– 7/30/22
Leftover Disbursements from AY 2020-21	5 scholarship students + leftover disbursements	19 scholarship students receiving 36 disbursements during the invoice period	15 scholarship students	18 scholarship students	14 scholarship students receiving 21 disbursements during the invoice period	8 scholarship students receiving 15 disbursements during the invoice period
2,240 tokens disbursed by MSSU	250 tokens disbursed by MSSU (2265 in circulation)	1,700 tokens disbursed by MSSU (3639 in circulation)	750 tokens disbursed by MSSU (3626 in circulation)	900 tokens disbursed by MSSU (4267 in circulation)	1,050 tokens disbursed by MSSU (5079 in circulation)	750 tokens disbursed by MSSU (4854 in circulation)
225 tokens used (10%)	326 tokens used (14%)	763 tokens used (21%)	259 tokens used (7%)	238 tokens used (5.5%)	975 tokens used (19%)	1,420 tokens used (29%)
~8 tokens used/week	~36 tokens used/week ~7 tokens used/student/week	~127 tokens used/week ~7 tokens used/student/week	~65 tokens used/week ~4 tokens used/student/week	~47 tokens used/week ~3 tokens used/student/week	~122 tokens used/week ~9 tokens used/student/week	~109 tokens used/week ~14 tokens used/student/week

AY = Academic Year
 Invoice periods note: Each token is worth US\$1.00

⁵ Because of this limitation in the first two years, we have started working with the bursar in our current, third year, to track which students are not picking up their tokens. Still, our only mechanism for tracking usage will be the invoices we receive from the market.

stocked in the fall than in the winter, this table also suggests that the students who reached out about the scholarships early in the semester were more committed to using the tokens than those who found out about the scholarships during registration appointments with their advisors.

In April and May 2022, the Co-op invited all students who received a G2G scholarship during the 2021–2022 academic year to participate in one of two focus groups which were held over Zoom. Overall, six students participated. The Co-op asked the students a series of questions:

- How has the process of picking up tokens worked? What could be improved?
- Has communication from the Co-op been clear? What could be improved?
- How convenient is it to use the WC Farmers Market?
- Are you able to get items you need at the WC Farmers Market?
- To what extent do you think your grocery buying has changed because of the scholarship?
- Have you been able to devote more time to your studies this year?
- What challenges have you faced using the tokens?
- Other thoughts?

Overall, the students reported adequate communication and a clear process of receiving the token disbursements (although a student with young children did note that stopping twice on campus—once at the Co-op and once at the bursar—necessitated unloading children two times). The students voiced satisfaction with the WC Farmers Market but pointed out that the supply of produce varied significantly during the winter months and when the weather was bad (rainy or snowy). This year, protein was less reliable than vegetables. While the scholarship disbursements of

\$50 did help offset some cost, all students continued to rely on a grocery store, especially late in the month. One participant said that with a big family the tokens lasted about two weeks, and then the family used a grocery store for the rest of the month. One student commented that they used the market for meat and produce and used Aldi and Walmart for their other groceries. Two students commented that they used the market items as the base of meal preparation and used items from Food 4 Less or other grocery stores to complement their market purchases.

Students reported in the focus groups that their scholarly progress toward their degrees remained steady, ranging from “great” to “OK.” While the scholarship is a small amount, one student noted that “it’s a help; not a huge help, but every little bit helps.” While it does alleviate some financial strain, one student pointed out that it takes additional time to travel to the market in addition to a grocery store. Another student suggested that her family had found a way to work around the time constraints: unlike the Lion Co-op’s food pantry, which requires a student ID to use, the tokens require an ID only at disbursement. They can subsequently be used by any family member at the market. This student’s parents used her tokens to buy food on Saturday mornings while the student stayed at home and studied.

Graduation rates for the entire 2021–2022 G2G scholarship cohort cannot be determined yet. So far, 20 scholarship recipients have graduated out of 41 recipients, a percentage of 48.8 (Table 3). This suggests a positive correlation between receiving the scholarship and graduating successfully, as compared to the MSSU student population.

Conclusions

In the first two years, the Groceries to Graduate scholarship program served a small number of undergraduate students at MSSU, but the initial feedback from the program suggests that students

Table 3. Graduation Numbers for 2021–2022 G2G Recipients

Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024
1	10	3	6		

who receive the scholarship are likely to increase their access to nutrition-rich foods and to graduate successfully. That the students self-select by choosing to apply for the scholarship most certainly affects these results. It could be that students proactively working toward graduation also purposefully seek out scholarship opportunities; perhaps they would have graduated without the scholarship. It is also clear from survey and focus group responses that the students who chose to apply for the scholarship prefer nutrition-rich produce and meats and have the skills to prepare them. According to the WC Farmers Market manager, the “market has loved the energy the college students bring with them to the market. They are curious about some of our less known [*sic*] vegetables, like luffa, and excited to learn how to prepare them at home (WC Market Manager, personal communication, July 26, 2022). Nevertheless, the early data suggest that the scholarship can alleviate some hardship for advanced students working to finish their degrees, and it does so in a way that does not require students to choose between eating healthy foods and accruing more student debt.

The G2G scholarship program has also allowed the Lion Co-op to attempt to meet the needs of a different student population than that the organization serves at the Lion Co-op pantry. In fact, at least one recipient was unfamiliar with the Co-op’s pantry, although other recipients noted that they were combining shelf-stable items from the pantry with produce and meat purchased with market tokens. But the pantry tends to carry items that are microwavable or otherwise easily prepared (especially in dormitories), and its inventory varies based on what is available through donations and our suppliers. The scholarships connect students to fresh foods that allow off-campus students to cook in kitchens. The scholarship program empowers recipients to make personal choices about the groceries they purchase from the market, which is less common for food insecure people who regularly have little choice in the assistance they receive. Conversely, “the MSSU students ... [thank] the farmers and beekeepers they purchase things from. The few I [the market manager] have talked to have mentioned that this program has introduced them to what farmers markets are, and they love

shopping with local producers” (WC Market Manager, personal communication, July 26, 2022). Scholarship tokens go directly to local producers and back into the local community. As Joe Palmer of Fairhaven Farm explains, “The program is a win for everyone. It brings new shoppers to the market, so farmers win. It brings fresh food to students who don’t have any, the kids win” (WC Market Manager, quoted in personal communication, July 26, 2022).

And yet the low usage rates of the tokens suggest that scholarship recipients still face significant barriers when trying to use the tokens at the market. Recipients generally have their own transportation, so that is not a significant barrier. However, picking up the tokens from the bursar’s window and then planning time to shop at the market in addition to other grocery trips potentially limits student access to the market, according to focus group responses. Removing these barriers to token usage continues to be our focus, and we have expanded our exit survey for the third cycle of the scholarships, asking for questions about accessibility to better understand the impediments. Likewise, the Co-op is considering other local producers/vendors who might be willing to partner with it on similar token systems, voucher systems, or weekly/monthly produce subscriptions. These types of expansion could increase both access and usability of the scholarships.

In addition to increasing usage among scholarship recipients, the Co-op continues to work to improve its ability to recruit applicants. The current model, which relies on academic advisors to recruit students to apply, works more efficiently than emails or letters from financial aid, which students seem to ignore most of the time because the volume is so overwhelming. Building trusting relationships with students through academic advisors seems to be key to the success of the scholarships (and most certainly crucial to student retention and graduation). Expanding these recruitment/informational conversations to all departments on campus is one of the goals of the Co-op’s scholarship program over the next five years. We also directly speak to students about the scholarships during outreach events like MSSU’s Campus Involvement Day and through announcements on

campus social media. Likewise, research at other universities suggests that we need to work with other offices on campus, such as the deans of students and admissions, to determine where MSSU's specific retention issues arise. While a study conducted in southern Florida suggests that students in their third and fourth years of undergraduate study are at greater risk of food insecurity (DeBate et al., 2021), a study from a western university found that students struggled earlier in their path toward their degrees (Camelo & Elliott, 2019). It could be that MSSU needs to revise its eligibility to include those who have made less progress toward their degrees.

In addition to increasing access, securing financial sustainability continues to be a long-term goal of the project. The small grants are annually available, and they allowed us to launch the program. In April 2022, we hosted an Empty Bowls fundraiser on campus to raise funds for the scholarships. We plan to host this fundraiser annually as it was well-supported by local businesses and well-attended (we sold approximately 125 tickets both years). The Co-op is also in the early stages of securing larger funding sources, including grants, that would enable the organization to increase the number or dollar amount of the scholarships.

Overall, the Groceries to Graduate scholarship

program remains a small project focused on increasing access to nutrition-rich foods for advanced undergraduate students in a region where levels of food insecurity are higher than the national averages. We believe that our model may prove useful for other small universities working to alleviate nutrition insecurity among their students. While we observe that our model shows promise at helping students on an individual level, we find ourselves in agreement with other scholars who have called for more robust studies of the effectiveness of interventions on college campuses (Davis et al., 2021), and we are committed to continuing to study and revise our model to ensure that it fosters student well-being and academic success.

Acknowledgments

The authors would like to acknowledge individuals at MSSU for their assistance with this program: Becca Diskin, director of financial aid; Alicia Hughes, bursar; Elizabeth Ebert, foundation business manager; Josie Welsh, former director of institutional effectiveness; Associate Vice-President Kevin Greim; deans Marsi Archer and Lorinda Hackett, and Lisa Toms, provost. Rachael Lynch, market manager at Webb City Farmers Market, has facilitated the scholarship program's token usage.

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