

Locally supported, values-based framework for a university foodservice program: Results of a Delphi study

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Abstract

Institutional foodservice programs provide food in kindergarten through twelfth-grade (K–12) school cafeterias, hospitals, prisons, and institutions of higher education. Values-based procurement prioritizes certain values or criteria in addition to price. Institutions where values-based procurement policies have been adopted have increased the

proportion of procurement dollars that go to local farms and are spent on products receiving third-party certifications for sustainability, farmworker justice, and animal welfare. Several programs exist to support institutions seeking to adopt and implement values-based procurement practices. However, there have been difficulties with implementing programs that have metrics that were not designed based on the local context where the institution is located, particularly for institutions of higher education. This study used the Delphi technique to identify expert consensus on values and metrics based on the local context that could be used as the foundation for a values-based framework for a university dining program. Our study identified eight core values and six categories

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of metrics that were supported by local and regional food systems stakeholders at the University of Florida and in the surrounding community. Other higher education institutions can apply and adapt these values and metrics to their local contexts or can use our consensus-building process as a model to develop a set of values and metrics for their institutional procurement program, tailored to their local context.

Keywords

Institutional Procurement, Foodservice, Higher Education, Values-Based Supply Chains, Local Food Systems, Farm-to-Institution, Delphi, Good Food Purchasing Program, Real Food Challenge, Sustainability, Social Justice, Transparency

Introduction

The institutional foodservice sector, which serves hospitals, K–12 schools, institutions of higher education, and prisons, represents a large market opportunity; it has been estimated to account for US\$200 billion in annual sales in the United States and is predicted to continue growing (Thottathil, 2019). Because of the scale of the institutional foodservices market, it has substantial buying power and thus can critically impact the food system (Louie, 2019; Thottathil, 2019). Values-based IFP prioritizes specific values or criteria in addition to economic indicators such as price (Farnsworth et al., 2019; Santo & Fitch, 2019; Thottathil, 2019).

Values-based IFP most commonly focuses on sourcing local and sustainable food to support the local economy and reduce the environmental impact of food production and distribution (Stevenson & Pirog, 2008). Local food procurement is often connected with health and nutrition by focusing on sourcing local fruits and vegetables to improve the nutritional quality of foods that are provided in institutional settings (Feenstra & Ohmart, 2012). There is an increasing interest in purchasing food from suppliers that adhere to fair labor standards and pay their workers a fair wage to support the equitable treatment of workers throughout the food system (Jones et al., 2019).

IFP is an opportunity for institutions to align their purchasing with their stated values and be transparent with consumers about their procure-

ment practices (Farnsworth et al., 2019). Many institutions have values or missions that relate to sustainability, social responsibility, or health. Devoting their purchasing dollars to vendors and products that foster those values is a tangible way to demonstrate their commitment to those goals and values (Farnsworth et al., 2019). Consumers are also increasingly demanding transparency, particularly via third-party certifications and monitoring of these aspects of IFP (Jones et al., 2019). There are several organizations that support values-based IFP programs by providing recommendations and guidance for adopting values-based procurement commitments and monitoring progress toward goals. Good Food Purchasing Program (GFPP) is the most well-known and well-established values-based procurement program. It primarily focuses on procurement in K–12 schools. Real Food Challenge (RFC) is a program that focuses specifically on food procurement efforts in higher education. For an overview of existing values-based IFP programs, including GFPP and RFC, see Campbell (2023).

While values-based IFP has the capacity to facilitate food systems change, there are general difficulties with implementing changes in this sector and specific difficulties associated with existing values-based IFP programs (Campbell, 2023). These problems include practical concerns about what is required to participate in these values-based IFP programs. For example, RFC has been criticized for not taking into account the viewpoints of people who work in the university foodservice program (Berger et al., 2022), GFPP requires substantial staff time to collect data to share with the Center for Good Food Purchasing and funding to pay for data analysis and institutional certification (Richbart, 2017). There are also problems with the specific metrics that the programs use. For example, there is an acknowledgement that many programs, including RFC and GFPP, have yet to fully incorporate metrics and goals in areas of diversity, equity, and inclusion (Berger et al., 2022; Stoscheck, 2016). RFC standards have frustrated stakeholders because of constraints that disqualified vendors because their food did not count as “real,” even though campus stakeholders wanted to support them (Cline et al., 2022). The problems

associated with implementation and metrics have been particularly acute for institutions of higher education due to their scale, complexity, and for-profit status.

These complaints point to a general issue with these programs, namely, that there is a consistent tension between programs having standardized metrics across the United States to allow for “apples-to-apples” comparison and having programs that are targeted toward and applicable to local contexts, goals, and values (Berger et al., 2022; Cline et al., 2022). The critical role that social, political, economic, cultural, and biophysical processes play in food systems and agricultural practices highlights the importance of place-based approaches to policies and standards in IFP (Jablonski et al., 2020).

The tension regarding the applicability of standardized metrics has been identified with GFPP, as the metrics developed by stakeholders local to Los Angeles have been found not to fit naturally into other environmental contexts. This lack of fit has led some to reject generalizable sustainability standards and instead to call for place-based approaches that support local, democratic, outcome-oriented strategies (Jablonski et al., 2020). For example, USDA-certified organic is considered the highest-level criterion for sustainable purchases for GFPP. However, organic production often requires the use of tillage in lieu of herbicides. In drought-prone areas using production methods that require tillage can have negative environmental impacts—meaning that what was considered as the highest priority for sustainability for stakeholders in Los Angeles can yield negative environmental impacts for other areas and climates (Jablonski et al., 2020).

Therefore, a study was needed to develop values-based IFP policies and standards that take into account the unique social, political, economic, cultural, and biophysical processes in local food systems. These policies should also take into account the specific needs and perspectives of stakeholders across the food system who are involved in or affected by a large-scale university foodservice operation. While there is a substantial body of literature regarding the contextual values and the values and motivations of stakeholders

associated with farm-to-institution programs (Conner et al., 2014; Izumi et al., 2010; Rutz et al., 2018), the purpose of this study was more practical and forward-looking. The motivation for this study was that there have been difficulties with implementing existing values-based IFP frameworks at institutions of higher education. In addition, the nature of the agricultural sector in the Southeast United States is potentially incongruent with the specific metrics used by existing programs. The purpose of this study was to identify consensus from local food systems stakeholders on what values they think a university dining program in their community should support and what metrics could be used to monitor that support. In this article, we discuss the methodology and results of a community-engaged research study to identify core values and metrics that could be used to monitor a values-based university dining program in Florida. We conclude by discussing the results of our study, how they compare with existing programs, and potential avenues for application and adaptation of our results and methodology in other contexts.

Study Context

University of Florida (UF) is a large land-grant institution that is home to Florida’s Cooperative Extension Service. UF comprises 16 colleges and 90 research centers and has 94 undergraduate programs and 224 graduate programs (Institutional Planning and Research, n.d.). The university has a 2,000-acre campus, with more than 1,000 buildings (including 170 with classrooms and laboratories; Institutional Planning and Research, n.d.). UF has over 30,000 faculty and staff and roughly 61,000 enrolled students; UF residence halls on campus have a total capacity of more than 7,500 undergraduate students, and its four family housing villages accommodate more than 1,000 married students and graduate students (Institutional Planning and Research, 2023).

Aramark, one of the largest foodservice providers worldwide (Jones et al., 2019), had had the foodservice contract at UF from 1996 to 2022. Despite substantial efforts in the university and surrounding community to effect change in Aramark’s procurement practices over the years to support more local, sustainable purchasing, for

example, the program had seen little improvement. Some food systems advocates argued that the then upcoming change in contract was an opportunity to enshrine commitments from the foodservice provider in contractual policy (Prizzia, 2021). Beyond interests in local purchasing and sustainability, there were local protests and boycotts from food justice activists who objected to Aramark's alleged exploitation of workers (including the use of prison labor) and their general lack of transparency (Xiuhtecutli et al., 2021). Alachua County, where UF is located, had recently adopted GFPP for their public school system and jails, making that third-party certification framework a potential option for UF to consider in their new food and beverage services contract (Ivanov, 2021).

In 2019, UF commissioned a foodservice master plan to overhaul its dining program to “provide a value-added experience to all campus constituents and support the overall university’s brand as it strives to become a top-5 public institution in the country” (Brailsford & Dunlavey, 2019). The master plan recognized that the then-upcoming contract change provided key opportunities. First, it provided an opportunity to better align the dining program with UF’s brand and values. It also provided the opportunity to increase value to students by improving the quality, variety, and service in the program. The plan also highlighted the opportunity to leverage the university’s many existing community, research, and academic resources to improve the program. The plan specifies, however, that these improvements in the dining program would need to be balanced with the cost of changes and the anticipated impact on the efficiency and operation of the program (Brailsford & Dunlavey, 2019). This balance is essential because the costs of the program are ultimately borne primarily by the students, as well as some faculty and staff who utilize the dining program (Brailsford & Dunlavey, 2019). Despite UF’s recently achieved status as a top-five public university, the UF student community still struggles with substantial levels of food insecurity (El Zein, Mathews, et al., 2018; El Zein, Shelnett, et al., 2019), making the affordability of the program a key consideration. Thus, the new dining contract provided a key opportunity to improve the quality of the dining program and to enshrine

in the contract institutional commitments for values-based purchasing to address concerns about ethical issues, support local agriculture, increase program satisfaction, and improve affordability.

In light of the above-discussed issues with existing programs and the call for standards embedded in local contexts, our research team saw the public awareness of this institutional food-service program and its associated tensions as a prime opportunity. We aimed to identify consensus on a locally supported, values-based framework for UF’s dining program that takes into account the diverse perspectives of students, university operations staff, university researchers, and members of the community at large.

Methods

The Delphi technique is used to reach consensus through a structured research methodology utilizing anonymous communication with a group of individuals who have expertise in a specific topic, with the goal of leveraging this consensus to guide policy or practice (Hsu & Sandford, 2007). While there are variations in format, the standard Delphi study consists of a purposive sampling technique, multiple rounds of structured anonymous communication between participants, and thematic analysis of data (Hsu & Sandford, 2007; Linstone & Turoff, 2002). Our study adhered to the standard format, utilizing three rounds of communication from the panel (Hsu & Sandford, 2007).

The Delphi panel was composed of a purposive sample (n=32) of individuals representing local perspectives on values and priorities for a values-based procurement program. Panelists were recruited to represent the topics that are a frequent focus of values-based IFP programs. Representing the interests of farms and agriculture were local farmers, state and regional Cooperative Extension agents, and research faculty at UF who specialize in agriculture, small farms, food safety, and supply chain engineering. Representing health and nutrition, the panel had registered dietitians and UF research faculty in community health and human nutrition. Individuals specializing in university operations including business services, recreational sports, the university athletic association, student affairs, disability resources, diversity, housing,

marketing, and sustainability were included on the panel. Because the campus dining program first and foremost serves the student body, the panel included representatives of campus organizations and members of the student community, including undergraduate and graduate students, with a focus on students who had prior knowledge and experience with sustainability, food systems, and/or the dining program. The panel also included individuals who were members of organizations supporting farmworker rights and social justice, as well as representatives of the City of Gainesville and Alachua County, Florida.

Data Collection and Analysis

Delphi panel participants were invited to participate in March of 2022. The first round of data collection occurred between March and April of 2022. In the first round, participants provided open responses about their perceptions of the core values that should be used to guide institutional food and beverages procurement practices. They also responded to questions about key metrics and measures that could be used to track adherence to and progress toward values-based institutional procurement goals. The research utilized a deductive and inductive thematic coding approach with two rounds of coding. First, the research team developed a codebook based on a review of the core topics and themes in values-based institutional procurement programs, including GFPP, Healthcare without Harm, RFC, and Menus of Change. The team used the codebook to deductively identify the following codes: sustainability, local economy, workforce, fairness/justice, cultural diversity, local community, animal welfare, nutrition, and food safety. For each topic there were two codes—one for value statements and one for metrics related to the topic. Inductive codes were applied to topics that were not anticipated in the codebook. Codes that were identified inductively were operational excellence, customer satisfaction, transparency, and third-party certifications.

In the first round, two members of the research team coded the data independently, with a third member of the research team reviewing both sets of codes. In the second round, codes were organized into themes, combining some of the

first-round codes into one theme, such as nutrition and food safety. The lead researcher used the coded data to create a list of the values and metrics that emerged from the first round of data. While the first round of data collection did not explicitly ask for third-party certifications, many participants included third-party certifications or programs in their responses, so third-party certifications were added to the list.

In the second round of data collection, the Delphi panelists were presented with the list of values, metrics, and third-party certifications that were developed from the round-one data collection. Panelists were asked to rate the importance of each of the value statements, metrics, and third-party certifications using a 5-point Likert-type scale (1 = *not at all important* and 5 = *very important* or 1 = *strongly disagree* and 5 = *strongly agree*) in an online survey (Qualtrics, Provo, UT). The second round of data collection occurred in July and August of 2022. An *a priori* definition of consensus as two-thirds of the expert panel selecting a 4 or 5 (important or very important, agree or strongly agree) was used for an item to be retained in the study. Items that two-thirds of the panel did not rate important or very important were removed, yielding the list of values and metrics that was distributed in the third round. The third and final round of data collection occurred in September of 2022. The panelists were presented with the shortened list of core values and metrics and again asked to rate the importance of each item.

Results and Discussion

The final results of the study found consensus around eight core values that should be used to guide university food and beverage services purchasing programs, with metrics and measures for six of those eight categories. None of the third-party certifications that were included in round two of data collection reached the two-thirds threshold of importance to be retained for the third round of data collection. The eight core values are excellence, integrity, and authenticity; fairness, justice, and workforce; environmental sustainability and stewardship; local economies; nutrition and food safety; cultural diversity; community connections and partnership; and animal welfare. The final list

Table 1. Summary of Values and Metrics for Each Round of the Delphi Study

Category	Initial List		After Round 2		Final Results	
	Values	Metrics	Values	Metrics	Values	Metrics
Excellence, Integrity, and Authenticity	12	8	11	7	11	5
Fairness, Justice, and Workforce	14	16	9	13	8	8
Environmental Sustainability and Stewardship	8	15	8	6	8	6
Local Economies	7	8	6	6	6	6
Nutrition and Food Safety	6	8	5	6	5	5
Cultural Diversity	4	6	4	6	4	5
Community Connections and Partnership	6	6	5	0	4	0
Animal Welfare	4	4	2	0	2	0
Third Party Certifications	n/a	22	n/a	0	n/a	0

included metrics and measures for only six of the eight categories of values. (See Table 1 and Appendices A and B.) While metrics were proposed in round 1 for animal welfare and community connections and partnership, no metrics were retained.

Excellence, Integrity, and Authenticity

As discussed in the introduction, transparency and accountability are important values and motivators for many of the values-based IFP programs and principles. In our analysis, we subsumed transparency and accountability under the theme of integrity and authenticity, because being transparent about program operations and providing documentation shows that the program is being operated with integrity and authenticity. Our Delphi panel believed a number of principles related to transparency and accountability should guide an institutional food and beverages services program: adoption of key performance indicators, transparency in program operations by generating publicly available verification reports for pledged metrics/benchmarks, oversight of the program in the form of an advisory board, and providing customers with increased access to information about the products purchased and sold through the dining program. In other programs, such as GFPP, transparency and accountability are considered to be the core motivation for adopting the program and the thread that runs throughout the program's values and metrics, rather than being a separate value with metrics of its own.

“Excellence,” or customer satisfaction, was not a value that was prevalent in most existing values-based IFP programs, such as GFPP or RFC. For our panel, program excellence was represented in the values of providing high customer satisfaction, a pleasant atmosphere, delicious and satisfying food options, and high-quality food and service. Given that UF's dining program is a for-profit program, it is understandable that the panel would see consumer satisfaction as a core value to guide its implementation. Price-consciousness was present in the values of not only supporting the economic viability of the program, but also providing fair and competitive pricing for meal plans and ensuring the affordability of food on campus.

Identified metrics to monitor program excellence included growth in gross sales, meal plan purchases, and number of diners utilizing the program. Monitoring the cost of meal plans and food options was also identified as a metric of program excellence. Finally, monitoring customer satisfaction was identified as a key metric, which parallels the recommendations of the dining program's 2019 master plan. This metric indicates a need to increase customer satisfaction with the dining program in order to be competitive with peer institutions.

Fairness, Justice, and Workforce

The core values in the fairness, justice, and workforce theme focus not only on workers along the food supply chain but also on the treatment of employees working in the campus dining program.

Our panel's inclusion of values and metrics related to employees of the dining program differs from GFPP and RFC. Because those programs are about *food procurement*, they focus on the treatment of workers in relation to the food that is purchased by the institution, that is, farm workers. Those programs do not focus on the treatment of workers in the foodservice program itself, which is a matter of business operations rather than procurement. Our panel agreed on the importance of dignified, safe, and socially just working conditions for workers throughout the food supply chain, including people who work in the dining program on campus. For campus employees, core values included providing a competitive wage scale, supporting professional growth and advancement, and ensuring worker safety. The values also included improving job security, increasing employment opportunities for students, and supporting grievance filing and redressing protocols. Another core value under the theme of fairness was supporting food security and food access on campus.

Metrics in this category included percentage of procurement dollars paid to producers or paid for products that meet third-party standards for fair labor practices. Adherence to several of the metrics in this category is legally required, including monitoring to ensure that program meets health department requirements, tracking the number of worker safety incidents or non-compliance events, and meeting Department of Labor requirements, as well as employee pay and time monitoring. Worker satisfaction was also recognized as important, including collecting employee feedback on worker satisfaction, providing worker benefits, and establishing a living wage benchmark for employees.

Environmental Sustainability and Stewardship

The Delphi panel supported a number of sustainability values, including reducing the program's carbon footprint, use of natural resources, and waste, while increasing the purchases of more sustainable products or the proportion of purchases from vendors using environmentally sustainable practices. The panel thought it was important for a values-based IFP to align itself with the sustainability goals of the institution and

to have honest marketing and communication about environmental sustainability. In the open responses in the first round of the study, a number of panelists mentioned the importance of not "greenwashing" the program by making false or misleading claims about sustainability of products or practices.

Metrics for monitoring the sustainability of the program included year-over-year improvement in standardized sustainability metrics. The panel recommended monitoring food waste, including reduction in total waste and waste-to-purchase ratios in addition to tracking food waste in pounds and creating an annual carbon footprint report. Parallel to our panel's focus on worker conditions across the entire food supply chain, tracking the above sustainability metrics requires more active internal monitoring of the operation of foodservices than GFPP and RFC require. The sustainability metrics for GFPP and RFC rely more on third-party certifications of products that are purchased by foodservice operations, such the percentage of products that are USDA-certified organic, American Grassfed Association–Certified Grassfed, Marine Stewardship Council Certified, and Animal Welfare Approved.

Local Economies

For local economies, panelists thought that having seasonal menus based on food availability in Florida was an important value, as well as supporting small-scale, family, or cooperatively-owned farms and increasing purchases of Florida-grown food items. The panel also identified core values that would reduce IFP program barriers that typically limit opportunities for small farms and food businesses. These included establishing relationships with and collecting input from local producers to identify and address salient challenges; supporting infrastructure for local procurement, such as cold storage, distribution services, meat processing facilities, and stop-gap insurance; and reducing administrative burden for local farms and food businesses.

The metrics for the local economies theme were some of the most straightforward and had the most consistent support from the panel (See table 1). These metrics included tracking the percentage

of menu items featuring in-season produce, tracking food miles from the farm to the service destination, monitoring purchasing from local farms and food businesses for year-over-year increases, and tracking the percentage of procurement dollars spent on Florida-grown products, food produced from local farms, and products from local food businesses. We also asked the panel to rate the importance of specific geographic measures for purchases. The panel agreed that sourcing food from within institution's county or adjacent counties, within a 250-mile radius, and grown within the state was important. The panel did not think that Georgia-grown, grown in the southeast US, or domestically grown were important priorities for a values-based IFP program. GFPP and RFC local food purchasing programs include requirements related to farm ownership, gross sales limits for farm operations, and local-sourcing of ingredients (Campbell, 2023). While our panel supported a value statement about small and/or cooperatively owned farms, they did not identify those characteristics as being salient for the metric of a product being considered "local." Our panel had a more inclusive definition of local, including food businesses, not just farms, as well as farms of all sizes, ownership structures, and production methods. This perspective on local farms may have been seen to coincide with the nature of the agricultural sectors in Florida and the volume requirements to sell to an institution like UF, which serves 25,000 meals a day.

Nutrition and Food Safety

As a core value, panelists thought a values-based IFP program should contribute to the overall health of students and customers by providing products of high nutritional quality while supporting diverse dietary patterns and consumer preferences. Food safety was also identified as a core value, with conducting food safety monitoring and ensuring vendors comply with food safety standards as measures. It is worth noting that many food safety policies and the monitoring thereof are required by the Department of Health, and, thus, could arguably be thought of as legal requirements rather than optional, values-based policies for institutions to adopt.

The panel also thought nutrition awareness and knowledge was an important value. Interestingly, despite early inclusion of metrics related to increasing awareness and education about nutrition as a part of the program, there was no consensus around the importance of any metrics associated with increasing nutrition awareness or knowledge. However, there was consensus on the importance of tracking the nutrition content of foods, as well as tracking the percentage of menu items providing nutrition content information and the percentage of procurement dollars spent on fresh produce and nutrient-dense foods. Unlike our panel or GFPP, RFC does not include nutrition or food safety in their standards. While our panel did have nutrition and food safety as a value with associated metrics, our panel had some differences in focus as compared with GFPP. Unlike GFPP, our panel did not focus on level of processing, that is, reducing the proportion of processed foods, but instead focused on increasing nutrient-dense foods. Under their nutrition priorities, GFPP includes "health equity," which concerns expanding food access to low-income residents or communities of color. In our study, there was early inclusion of the value of expanding access to food in the broader Gainesville community, but it did not reach the level of support required to be included in the final results.

Culturally Diverse

Key values in the theme of cultural diversity focused on the types of food products that are available in the program as well as where the products are sourced from, including supporting culturally sensitive food options. This value also focused on increasing sourcing from diverse vendors, farms, and food businesses, specifically focusing on women- and minority-owned farms and food businesses. Some of the key values in the culturally diverse category go beyond procurement practices and include internal program operations, such as adopting and strengthening diversity, equity, and inclusion protocols, supporting a culturally diverse workforce, and establishing goals for supervisor diversity to represent staff diversity.

Important metrics for cultural diversity are tracking both the percentage of procurement dollars on purchases from minority-owned farms and

food businesses as well as the number of those farms and food businesses from which the program sources products. Other metrics for diversity include tracking the number of food alternatives available for both cultural or religious food restrictions, such as kosher or halal, as well as alternatives available for voluntary diets or food restrictions, such as paleo or keto diets. GFPP and RFC have been criticized for not including metrics related to equity and diversity, making the articulation of these values and metrics from our panel an important contribution to the values-based IFP landscape.

Community Connections and Partnership

For community connections, the panel thought that it was important that the program align with the institution's stated goals and values. They also thought an important value was to maintain internal institutional partnerships with colleges, centers, and institutes and to serve both the student community and the local community external to the institution. As mentioned above, the panel thought that community connections and partnership were important values to underpin a values-based IFP program, but there was no consensus around metrics for that value.

Animal Welfare

Animal welfare was identified as a core value for a values-based IFP program, specifically with the value of supporting humane or cruelty-free offerings and increasing purchases of products and from suppliers with third-party animal welfare certifications; however, there was no consensus on metrics associated with this value. There were metrics in round two, such as tracking the number or percentage of menu items that were meat-free or the percentage of products that had a third-party animal welfare certification, but these metrics did not receive the support necessary for their inclusion in the final list of metrics. In addition, the lack of metrics for both community connections and animal welfare introduces the question of whether those items are harder to measure, whether there is less consensus about the right way to measure them, or whether panelists simply view those as important values but do not think it is important to

measure or monitor any specific metrics in order to ensure that those values are supported in a values-based IFP.

Third-Party Certifications

Despite the interest in transparency and the inclusion of third-party certifications in people's open responses, none were retained after the second round in the Delphi study. This finding is perhaps the most salient difference between our results and GFPP and RFC, which rely heavily on third-party certifications. RFC has four categories of standards, and three rely on third-party certifications. GFPP has five categories of standards and rely on third-party certifications for three areas. These programs use third-party certifications to identify products that support animal welfare, environmental sustainability, and fair treatment of workers.

Summary

This study was designed to identify core values and metrics for a values-based IFP program that were rooted in the local context of the University of Florida, taking into account its large scale, operational needs, its status as a land-grant university, and the agricultural sector in the community and around the state. Additionally, bringing together the perspectives of students, food systems advocates, farmers, elected officials, managers, and others yielded a unique perspective to the resulting list of values and metrics. The list represents the ideals and values of the community as well as the business and administrative realities for a program of the scale of UF's dining program. Despite the representation from business-minded panelists, values and metrics related to justice for farm workers and wages for workers were still deemed to be important, providing evidence that the university supports some of the values that motivated the local protests leading up to the adoption of a new contract.

There are inherent limitations with using the Delphi technique. Even though we sought to have experts from all aspects of the university community on the panel, because these data are based on expert consensus, the results are not necessarily reflective of the broader university community's viewpoint. Indeed, some could argue that for mat-

ters of value in food systems, consulting only food systems experts and food systems advocates would be more appropriate than seeking perspectives of people who run the program or the students who utilize it. However, our understanding of the purpose and mission of the program, as well as our understanding of the realities of adopting and implementing policies and goals for the program, required taking into account the perspectives of the people who would be overseeing and implementing the policies and the end-users who would ultimately utilize the dining program.

While this study sought to identify metrics that could be the basis for a values-based IFP program, it is worth noting that many of the metrics are somewhat vague and still require interpretation or more specificity before they could be utilized to track the performance of a program. This level of generality may be beneficial, however, for the process of adapting these metrics and measures to other universities within the state or elsewhere. As discussed previously, highly specific metrics developed in one place may be inapplicable to other local contexts due to the social, cultural, political, and biophysical factors affecting local food systems. Thus, because these values and metrics are less specific, they may be useful for other institutions to use as the basis for a values-based procurement program that can be adapted to their local context.

A university dining program, unlike K–12 schools, has profitability and consumer preference and satisfaction as administrative mandates for its operation. It is our hope that this framework, which deeply considers the complexity and competing values inherent in a university dining program can be helpful for other universities or entities that similarly have market- and consumer-based constraints and goals in their operations. In addition, while our framework can be adapted to different local contexts, some practitioners who are

involved with IFP or community food systems development may choose to follow the methodology used in this study to develop their own set of values and metrics that are rooted in the social, cultural, political, and biophysical context of their institution and community. Future research to gain a deeper understanding of the findings of this study would be beneficial, including additional qualitative research to elicit feedback from panel members on the values and metrics related to their areas of expertise. A quantitative survey could be used to assess the student body's priorities for the values and metrics identified by the Delphi panel.

Conclusions

Because of its scale and buying power, a values-based IFP provides a great opportunity for creating food systems change. However, the principles and forces that govern most IFP programs make it difficult to adopt purchasing decisions that account for non-monetary values, and institutional inertia and a rigid policy environment can make it especially difficult to create change. While change is difficult, there is increasing awareness on the part of IFP operators of the importance of using institutional dollars to support the values the organizations claim to support. In addition, due to efforts of organizations like GFPP, RFC, Healthcare without Harm, and Menus of Change, consumers and institutions alike are not only aware of the ways in which their purchases affect farmworkers, local economies, the environment, health, nutrition, and more, but they are more cognizant of the opportunities for improvement and potential metrics to track their efforts and progress. Thus, the results of this study can be leveraged by Cooperative Extension and advocacy groups as a tool to educate institutions and help them to establish goals, priorities, and opportunities for their programs to support their customers, local communities, and food system. 

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Appendix A. Core Values to Guide University Food and Beverage Services Programs

Excellence, Integrity, and Authenticity

- Adoption and emphasis on Key Performance Indicators (KPIs)
 - Transparency: Generate publicly available reports for pledged metrics and benchmarks
 - Oversight: Create advisory board to review program performance
 - High customer satisfaction
 - Increased customer access to product information
 - Pleasant atmosphere for students, staff, and visitors
 - High-quality, delicious, and satisfying food options
 - High-quality service
 - Food affordability for students and university community members
 - Meal plan pricing at fair and competitive rate
 - Economic viability of the program
-

Fairness, Justice, and Workforce

- Support food security and food access on campus
 - Dignified, safe, and socially just working conditions for workers throughout the food supply chain (from farm to consumer)
 - Competitive wage scale for employees
 - Professional growth and advancement for workers
 - Ensure safety of employees by adhering to established health and safety monitoring practices
 - Increase permanent and full-time employment offerings
 - Increase secure employment opportunities for students
 - Support grievance filing and redressing protocols
-

Environmental Sustainability and Stewardship

- Reduce carbon footprint
 - Reduce use of natural resources
 - Reduce waste
 - Increase purchases from vendors or producers using environmentally sustainable practices
 - Increase purchases of environmentally sustainable products or foods
 - Increase availability of sustainable menus and menu items
 - Align with institutional sustainability goals
 - Authentic marketing and communication about environmental sustainability
-

Local Economies

- Seasonal menus based on food availability in Florida
 - Support small-scale and/or family or cooperatively owned farms
 - Increase purchasing of Florida-grown food items
 - Establish relationships with and collect input from local producers to identify and/or address salient challenges
 - Support needed infrastructure for local procurement
 - Reduce administrative burden for local farms and food businesses
-

Nutrition and Food Safety

- Contribute to overall health of students and customers
 - Provide products of high nutritional quality
 - Support diverse dietary patterns and consumer preferences
 - Ensure food safety
 - Increase nutrition awareness and knowledge
-

Continued

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Culturally Diverse

- Adopt and strengthen Diversity, Equity, and Inclusion (DEI) protocols
 - Support culturally sensitive food options
 - Support culturally diverse workforce
 - Increase sourcing from diverse vendors, farms, and food businesses including women- and minority-owned businesses
-

Community Connections and Partnership

- Align with institution's stated goals and values
 - Serve the student community
 - Support internal institutional partnerships with colleges, centers, and institutes
 - Support local community (external to the institution)
-

Animal Welfare

- Support humane/cruelty-free offerings
 - Increase purchases of products and from suppliers with third-party animal welfare certifications
-

Appendix B. Metrics and Measures to Assess a Values-based University Food and Beverage Services Program

Excellence, Integrity, and Authenticity

- Monitor total number of diners utilizing the program
 - Monitor program revenue growth (e.g., growth in meal plans sold)
 - Year-over-year increase in sales (in dollars) by location
 - Monitor costs of meal plans and food options (as compared to peer institutions)
 - Year-over-year increases in customer satisfaction as measured by standardized procedures
-

Fairness, Justice, and Workforce

- Monitor to ensure that program meets health department requirements
 - Percentage of procurement dollars paid to producers (or paid on products) that meet third-party standards for fair labor practices
 - Tracking number of worker safety incidents or non-compliance events
 - Workforce pay/labor time monitoring
 - Ensure that program meets Department of Labor requirements
 - Collect employee feedback on worker satisfaction
 - Establish a living wage benchmark for employees
 - Provide worker benefits
-

Environmental Sustainability and Stewardship

- Year-over-year improvement in standardized sustainability metrics
 - Percentage of waste avoidance (reduction in total waste)
 - Monitor waste-to-purchase ratios
 - Annual tracking of food waste (in lbs.)
 - Annual carbon footprint report
-

Local Economies

- Percentage of menu items featuring in-season produce
 - Track food miles (distance from vendor/producer to service destination)
 - Measure and monitor local farm and food business purchasing for year-over-year increases
 - Percentage of procurement dollars spent on Florida-grown products
 - Percentage of procurement dollars spent on food produced from local farms
 - Percentage of procurement dollars spent on products from local food businesses
-

Nutrition and Food Safety

- Track nutrition content of foods offered
 - Percentage of menu items providing nutrition content information
 - Percentage of procurement dollars spent on healthy, nutrient-dense foods
 - Percentage of procurement dollars spent on fresh produce
 - Conduct food safety monitoring
 - Ensure all vendors comply with food safety standards
-

Culturally Diverse

- Establish goals for supervisor diversity to represent staff diversity
 - Percentage of procurement dollars spent on purchases from minority-owned farms and food businesses
 - Track the total number of minority-owned farms and food businesses from which the program sources products
 - Number of food alternatives for cultural or religious food restrictions
 - Number of food alternatives for voluntary diets or food restrictions
-