

**Local Food from Farm to School:
Investigating the Skidmore Dining Hall's Local Partnerships**

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Abstract

The growing local food movement in the United States has carried into the educational system, affecting food programs in elementary schools and universities alike. The Skidmore College Dining Hall has joined this movement towards greater food sustainability by forming partnerships with nearby farmers, processors, and distributors. In this study, we investigate the history of these local partnerships, evaluate their effectiveness, and make recommendations on how to expand and improve them in the future. Through interviews with key stakeholders and a student survey, we gauge interest in these local partnerships, and identify the benefits and challenges of local food across multiple perspectives.

1. Introduction

1.1 The Historical Context of Agriculture in the United States

Over the past hundred years, the process of producing and distributing food in the United States has been significantly transformed. Before the Green Revolution of the mid 20th century, food production was based on small farms, labor-intensive practices, and closed-loop systems that recycled agricultural byproducts (Gopalan 2001). However, with the advent of chemical fertilizers and pesticides following World War II, this network of small farms was converted into a centralized, mechanized system of industrial agriculture that is still active today. Al (i) 0.2 eugh i(i) 0.2 ezt

allocation (Horrigan et al 2001). At its most basic level, sustainability is built upon the principle of meeting the needs of the present population without compromising the needs of future generations (Brundtland 1987). Consequently, the primary goal of sustainable agriculture is to foster healthy, interdependent communities of people, animals, plants and soil (Gopalan 2001). Sustainable agriculture doesn't just provide food, it also preserves biodiversity, maintains soil fertility and water purity, recycles natural resources, and ultimately produces diverse forms of high quality nourishment for a growing population (Gopalan 2001, Spiertz 2008).

1.2 The Challenges of Defining “Sustainable” Agriculture

The specific techniques that achieve the goals of sustainable agriculture are varied. Consequently, there is not a conclusive set of farming practices that constitute the concept of “sustainable” agriculture as a whole (Horrigan et al 2001). Rather, an agricultural process is considered sustainable when it is ecologically sound, economically viable, socially just, and culturally appropriate (Gopalan 2001). The definition of what is considered “sustainable” agriculture is site specific, and it varies by location, ecosystem, and community. There are, however, certain practices and techniques that tend to increase

1.3 Is Local Food Sustain%

systems, a lunchtime salad bar featuring local produce, and integrated classroom curricula focusing on agricultural, health, and nutrition (Graham et al 2004, Brillinger et al 2003). The results of the Farm to School Connection included improved student diet and enhanced communication between parents, teachers, and garden coordinators (Graham et al 2004).

Sustainable food initiatives in higher education have moved beyond a handful of pilot

property, extensive local food networks and educational opportunities. The strength of these initiatives comes from their ability to weave together an array of social economic and environmental issues and involve a diverse group of student constituencies (Bartlett 2011). As sustainable food programs gain traction among colleges and universities, collectively there is potential for these alternative food systems to be transformative on a national scale (Barlett 2011).

1.5 Local Agriculture at Skidmore College

As a school embedded in an agricultural region, Skidmore College is in a unique position to address issues of food sustainability through involvement with local agriculture. Although the number of farms in Saratoga County has fallen from 3,611 in 1910 to 650 presently (New York Census of Agriculture 2007), there is still a wide variety of food goods and other commodities produced throughout the county, including dairy products, meats, fruits, vegetables, tree nuts, berries and greenhouse products (New York Census of Agriculture 2007). Local partnerships already exist between Skidmore's Dining Services and nearby farmers, processors, and distributors, though the extent of these partnerships is not made visible to the student body. A few of these local partnerships are promoted at the Dining Hall through the use of signage, but the extent and effect of these local partnerships is largely unknown. On the Dining Services website, the only available information about these partners is their name, a link to their website (if available), and a brief rationale for the local partners program:

“Skidmore’s dining services has created several partnerships with local farms and vendors, which reduces CO2 emissions, enhances the bond between consumer and producer, increases local economic benefits while providing the freshest, tastiest and most nutritional food possible.”

The lack of accessible information about these local partnerships led us to the following research questions: 1) How are Skidmore Dining Hall's local partnerships established and maintained? and; 2) How can these local food partnerships be further promoted and expanded in the future?

2. Methods

2.1 Contextual Information

To familiarize ourselves with the history of the Dining Hall's Local Partnership program and local agriculture, we collected information from Skidmore alumnus Jonathan Greene (Class of 2007), American Farmland Trust, and the USDA 2007 Census of Agriculture for New York.

2.2 Needs Assessment Interviews

We conducted a series of open-ended, semi-structured interviews with individuals from Dining Services staff and current local partners (farmers, processors, and distributors) who do business with the Dining Hall. We used key informants as interviewees, identifying individuals with the most comprehensive understanding of the subjects in question (Tremblay 2009).

Interview questions were modeled after the Needs Assessment primer from Cornell University's Farm To School in the Northeast Toolkit, 2007, which offers guidelines and resources for institutions trying to start Farm to School programs (see Appendix 1-4). The qualitative information we gathered was analyzed to identify emergent patterns (Yin 1994) and prioritized based on emphasis during interviews and the frequency in which specific needs were expressed among different stakeholders.

2.3 Skidmore Student Survey

In addition to our Needs Assessment Interviews, we also conducted an online survey of Dining Hall patrons who are current Skidmore Students. The survey addressed students' knowledge of, interest in, and willingness to pay for local, organic, and fair trade food. The survey was conducted online using Survey Monkey software. Our survey questions were

mile radius of Skidmore College Campus: Denison Farm, Farmer John's Produce, Flying Pigs Farm, Garden of Spice Poultry, Ice Cream Man Inc, Kilpatrick Family Farm, Mac Brook Farms, Pleasant Valley Farms, Sap Bush Hollow Farms, Underwood's Shushan Valley Hydro-Farm, Wing Road Farm, and Winter Sun Farms/Farm2Table Copackers. These 13 partners were either suggested thro

(Northeast Organic Farmers' Association) Winter Conference in Saratoga Springs, NY. Finally, there was a recent opportunity for students to participate in a permaculture workshop on campus to benefit the Skidmore Garden, and the opportunity for a full-day field trip to Whole System /Cs1 cs 0 0 0 sc q

The Dining Services staff has complete control over the Dining Hall menu, within budgetary constraints. The main considerations for menu development are price, seasonality, cook type and time, sustainability, labor, and student preferences. The menu cycle is repeated every 4 weeks, and revised during Summer and Winter break for the upcoming academic semester. Student input from the “napkin comment board” is considered when changing the menu, and new recipes are sometimes offered during the weekends (when the Dining Hall is less busy) to hear feedback (Jim Rose, Mark Miller, and Bill Canney pers. comm. 2011).

The most commonly used fruits and vegetables in the Dining Hall are apples, bananas, oranges, cantaloupes, honeydew, lettuce, spinach, broccoli, potatoes, carrots, onions, zucchini, frozen corn, and frozen peas. The Dining H

Skidmore's ability to purchase local foods as food safety, cost, seasonality/menu diversity, delivery and transportation, increased labor for food preparation, and the difficulty of purchasing through multiple farmers.

To promote its current local partnerships, Skidmore provides some labeling on eggs and produce from the student garden. According to Dining Services staff (pers. comm. 2011), there also used to be signage for apples, milk, and bread. In addition, Dining Services has advertised its use of local foods at the tremendously successful Harvest Dinner, as well as at certain catering events.

Skidmore is fortunate to have the necessary labor and storage for the local food they currently buy. In terms of labor, the Dining Hall currently employs approximately 60 staff, 327 work-study employees, and 40 student supervisors. For storage, there are currently 3 large walk-in coolers and 2 walk-in freezers, though they are used nearly to capacity. The Dining Hall also owns a wide variety of specialty food preparation equipment, including woks, a tandoori oven, a rotisserie oven, and a pasta machine. Further equipment the Dining Hall is hoping to invest in includes a tilt skillet, a blast chiller, and compost equipment, though there are restraints on available space and funding (Jim Rose, Mark Miller, and Bill Canney pers. comm. 2011).

The Dining Services website currently advertises 24 local partnerships online:

- Antonucci's Produce
- Battenkill Valley Creamery
- Betterbee Farms
- Carioto Produce
- D. Brickman
- H. Childress & Sons
- Green Mountain Coffee
- John Boy's "Mt. View Farm"
- Lakeside Farm Cider Mill Inc.
- Mastroianni Brothers Bakery
- Miki Japanese
- Morning View Farms
- Oscar's Smokehouse
- Parillo Sausage

- “Pride of New York Program” through Quandt’s Foodservice
- Rutkowski Farms
- Saratoga Apple Orchards
- Saratoga Peanut Butter
- Sheldon Farms
- Stewart’s Shops
- Sunset Hill Farms
- Thomas Poultry
- Tillamook of NY
- Willow Marsh Farm

Of these partners, we found that two of the companies have either gone out of business or Skidmore no longer purchase from them (H. Childress and Sons and Willow Marsh Farm). Eight of the listed partners (Battenkill Valley, Betterbee Farms, Green Mountain Coffee, Lakeside Farm and Cider Mill, Miki Japanese, Oscar’s Smokehouse, Saratoga Peanut Butter, and Tillamook of NY) supply retail foods offered at the Atrium or Burgess Cafe (respectively, milk, honey, coffee, apple cider and cider donuts, sushi, deli meats, peanut butter, and beef jerky). In addition, six of the current local partners provide produce or products specifically for catering or special campus events: John Boy’s “Mt. View Farms” (chicken), Lakeside Farm and Cider Mill (apple cider and cider donuts), Morning View Farms (produce), Oscar’s Smokehouse (smoked

Oscar's Smokehouse	Processor	Warrensburg, NY	Smoked cheese and meat	Less than once a year
Parillo Sausage	Processor	Saratoga Springs, NY	Sausage	Every week

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the difficulty of transporting produce (a time-intensive activity for a full-time farmer), and the necessity of knowing food orders in advance (since farmers have to create their farm plan for the upcoming season far in advance).

Processors

The two local processors that currently supply Skidmore Dining Hall are Mastroianni Brothers Baker and Parillo Sausage, which supply bread and sausage, respectively. See Table 2 for details about these partnerships.

Table 2: Comparative Chart of Processors Currently Involved in the Partnership Program

Processor Name	Location	Products Supplied to Skidmore	Frequency of Delivery	Delivery Amount
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include Antonucci's Produce, Carioto Produce, D. Brickman, and Stewart's Shops. See Table 3 for details about these distributor partnerships.

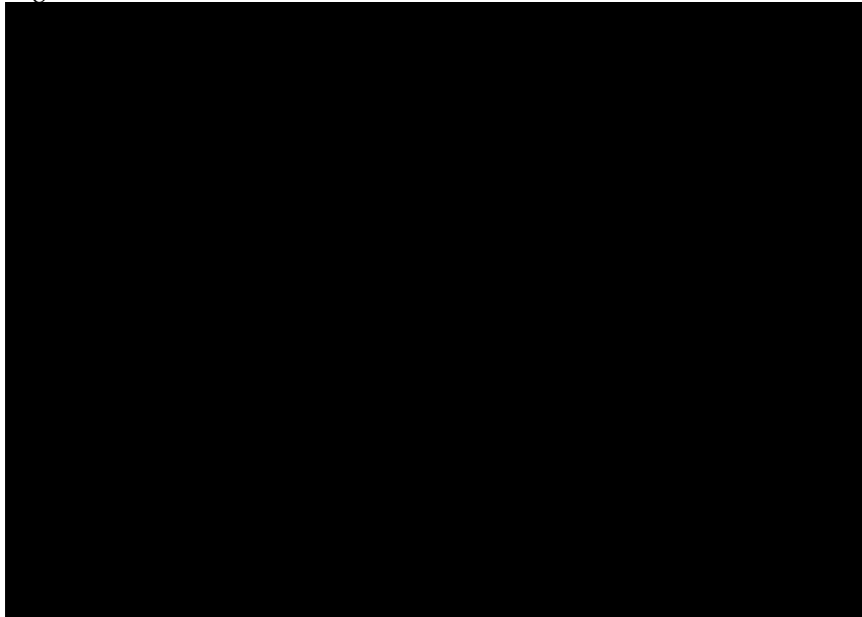
Table 3: Comparative Chart of Distributors Currently Involved in the Partnership Program

Plan, 12.4% had the Dining Bucks Plan, 2.5% had the Apartment Plan, 1.1% had the Commuter Plan, and 21.1% had no meal plan.

When we asked our respondents if Skidmore purchases any local food, 72.4% said yes, 2.1% said no, and 25.5% didn't know. When asked which foods specifically that Skidmore buys locally, the most common responses were apples, milk, eggs, bread, potatoes, some vegetables and some meat.

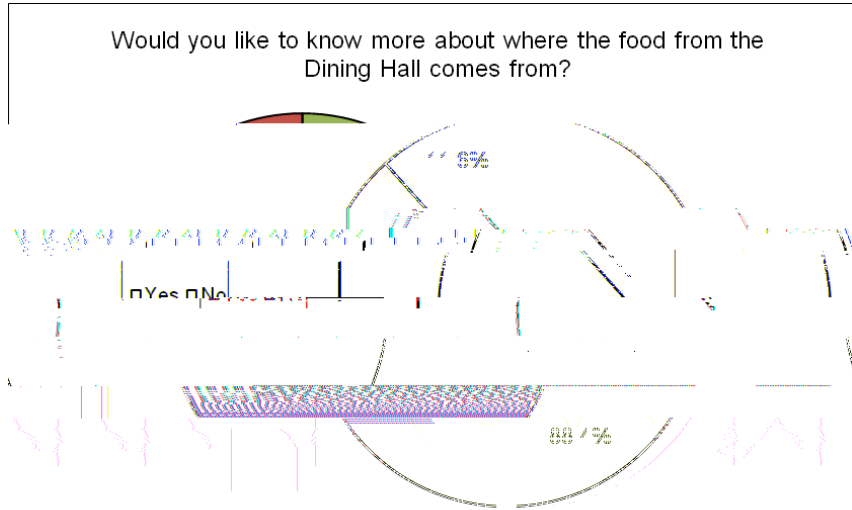
When asked if they thought that food ingredient origins were clearly labeled at the Dining Hall, the majority of respondents replied "not at all" or "very few items are labeled." Less than 2% thought that "most things are labeled" or "everything is labeled" (see Figure 1).

Figure 1



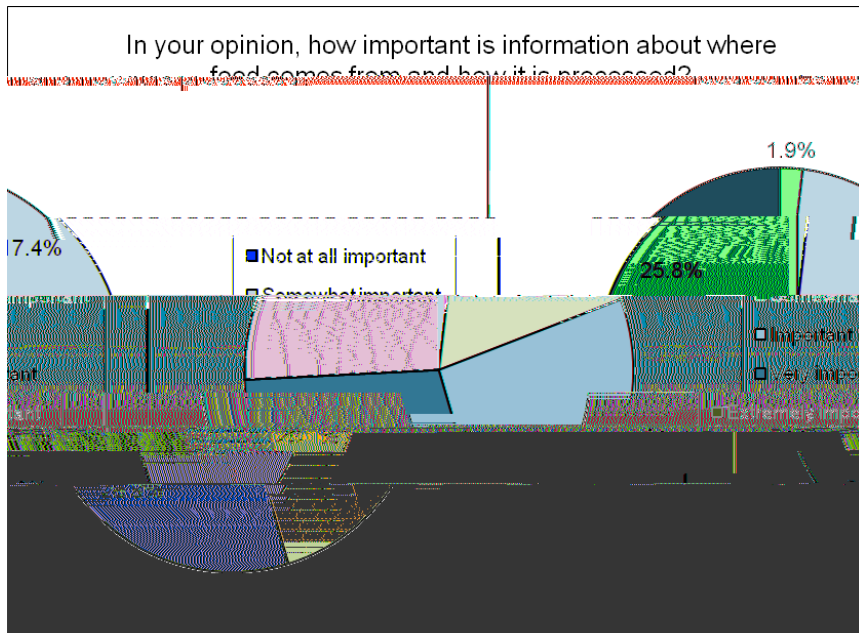
Though the majority of respondents did not think that food ingredient origins are currently well labeled at the Dining Hall, over 90% of our respondents expressed an interest in learning more about where their food comes from

Figure 2



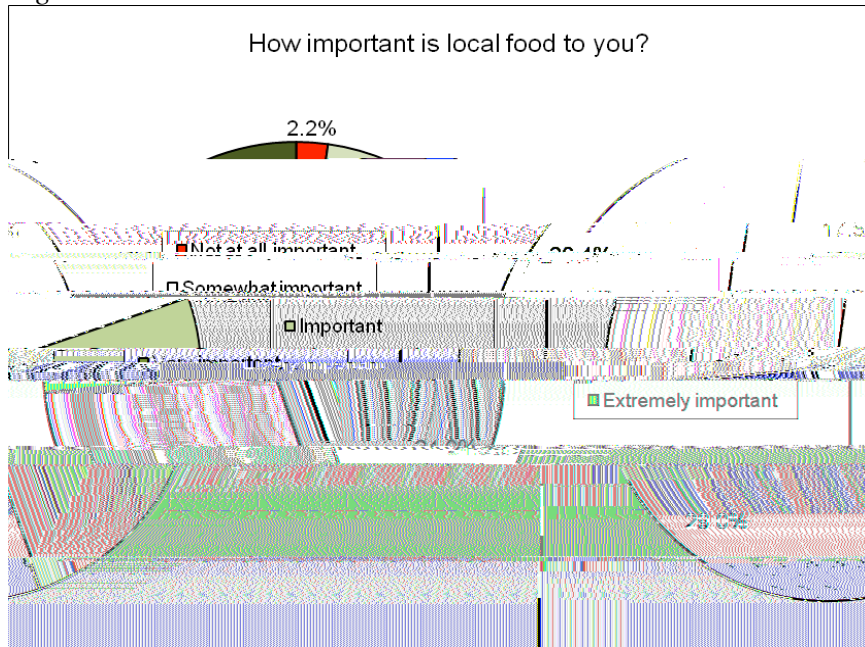
In addition, over 75% of our respondents thought that information about where food comes from and how it is processed is either “extremely important,” “very important,” or “important.” Less than 2% thought that this information was “not at all important” (see Figure 3).

Figure 3



Similarly, over 75% of our respondents expressed that local food was either “extremely important,” “very important,” or “important.” Only 2.2% thought that local food was “not at all important” (see Figure 4).

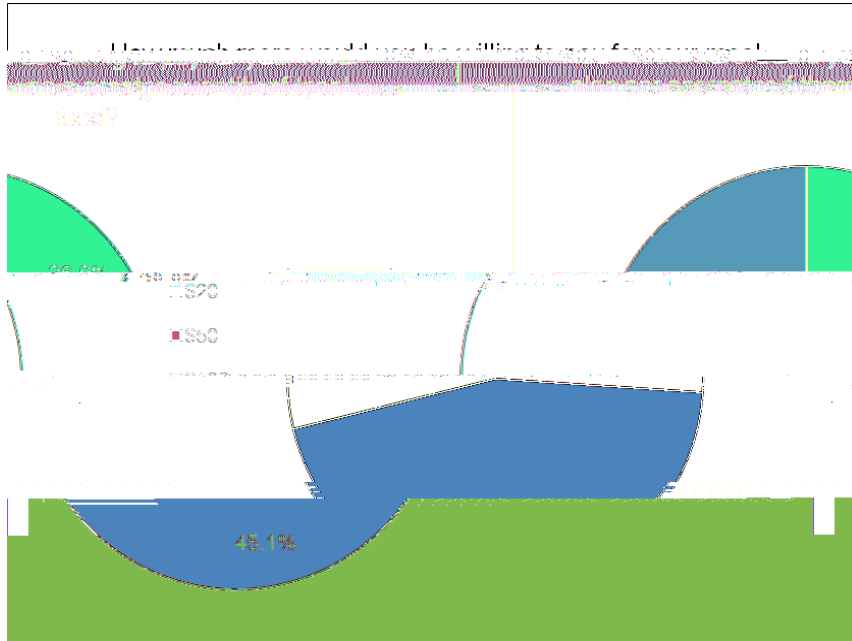
Figure 4



When asked how much more they would be willing to spend for their meal plan per semester if there was a greater quantity of local food offered at the Dining Hall, almost half of our respondents replied that they would spend \$50. About 25% each suggested that they would be willing to spend \$20 or \$100 per semester for more local food at the Dining Hall (see Figure 5).

In addition, a few respondents clarified that they would be willing to pay more depending on the quality of the food. A few others expressed the opinion that the cost of the meal plan is already

Figure 5



3.4 Identifying Potential Partners

Of the 13 potential partners we contacted, eight responded and seven indicated that they would be interested in developing a business relationship with Skidmore College Dining Services. Common concerns and considerations for developing a partnership with Skidmore included the following:

Wholesale and Pricing

Scale was a primary concern for farms selling meat products. Two of the beef and pork farms contacted do not raise a large number of animals, and those customers buying in bulk (usually restaurants) tend to order a half slab or beef or pork rather than large quantities of a single cut. Beyond the high cost, this represents logistical issues for cafeteria style food. Dining Services faces limitations with uniformity of food, preparation time and storage.

Small fruit and vegetable farms expressed similar concerns with scale. Some small farms have the opportunity to sell at one or several farmers' markets throughout the year, which allow farmers to sell goods at a premium retail price. Because these farms have access to a strong market with a large customer base, selling wholesale to an institution like Skidmore is not appealing. Premium meat, fruit and vegetable products may, however, have a place as part of themed dinners and catering events where menus and budgets are more flexible.

There are local farms that operate at a wholesale scale and can offer substantial quantities of vegetables. Pricing was expressed as concern for these farms, despite higher production these farms still cannot compete with large scale distributors and conventional growers.

Farm to Table Co-Packers is a sister business of Winter Sun Farms and has processing capacities for meat, fruit and vegetable value added products. They are not a distributor but can offer a network of locally sourced and processed goods and the opportunity for the school to process its own products. Ice Cream Man is a local ice cream processor and retail business that has the capacity to sell both wholesale and retail. Retail options at campus venues were appealing to many of the small scale farms selling processed or packaged goods.

Seasonality

While production decreases at many farms during the winter, almost all respondents produced winter greens and root vegetables and other hearty species between November and March. Some farms use greenhouses which allow for year round production of a variety of fruits and vegetables. Winter Sun Farms is a cooperative that sources local produce and freezes and packages fruits and vegetables on site. This business is uniquely able to supply wholesale

quantities of local produce year round. Currently, Winter Sun Farms provides frozen vegetables to Vassar Collage through a CSA system and directly to Dining Services at SUNY New Paltz.

Consistency, communication and maintaining relationships

Farms are interested in establishing business partners which will provide a steady source of income. Inconsistent purchasing was a concern voiced by both current and potential partners. Some farms are interested in selling to Skidmore, but would only enter an arrangement if purchases were made on a regular basis. A partnership with these farms would entail bi-monthly to weekly purchases of consistent quantities.

Transportation

Most of the farms and business are within Albany County and transportation was not expressed as a primary concern. Many potential partners offer delivery services or have established sites for distribution in Saratoga Springs.

4. Discussion

4.1 Areas for Improvement Within Skidmore's Local Partnership Program

Skidmore has accomplished much in terms of buying and promoting local and sustainable foods. From direct local partnerships with small-scale farms, to the yearly Harvest Dinner event, to agricultural field trips and experiential learning at the Skidmore Student Garden, the College has pursued multiple avenues and initiatives that support local agriculture. As John Batch, the current Kitchen Supervisor and past Dining Services Director of the Dining Hall expresses, "Sustainability is on the agenda. We're all on the same path, it's just figuring out how we get

there together” (pers. comm. 2011). Our research has documented the College’s current use of, interest in, and capacity for local foods.

Through our interviews and surveys with key stakeholders involved in Skidmore’s Local Partnership Program, we have identified the following major areas for improvement:

Greater Strength of “Partnerships”

Some of the current partners we spoke with expressed that Skidmore only orders from them once a semester or once a year. While these purchases do still support local food, we believe that true “partnerships” should demonstrate greater commitment in terms of purchasing frequency and volume. Many of the current partnerships also expressed they had never visited

food comes from and how it is processed. This discrepancy suggests that the Dining Hall could use more labeling and promotional materials to highlight their use of local foods. Another finding from our survey that further demonstrates the need for increased or improved labeling and promotional material is the fact that over 25% of our survey respondents did not know if Skidmore sourced local food, and 2% thought that we didn't buy any local food at all.

Almost 90% of our survey respondents wanted to know more about where the food from the Dining Hall comes from. This interest could be addressed through a variety of ways, from panels or workshops with the farmers who sell directly to Skidmore, to site visits to the distribution centers, to classes based on local agriculture. Most students who responded to our survey believe that local food is important, and they would be willing to pay more for it.

Improved Pre-Planning and Ordering

Buying food directly from local farmers and vendors requires the College to be in close contact with the grower or producer. Farmers cannot provide the same flexibility as a large-scale distributor, and they need to know orders far in advance to plan their season of planting, growing, and harvesting.

4.2 Our Recommendations

projects could be implemented by student groups, while others are larger systemic changes which will require institutional support, input and funding.

Seasonal Menus

Seasonality is perceived as one of the largest limitations by dining services, current partners and potential partners. In the Northeastern United States, peak residency at colleges

Consumer Education in the Dining Hall

Possibilities for consumer education about local food and specifically Skidmore's Local Food Partnerships include posters, pamphlets, tabling, and taste tests or demos by local farmers. One possibility is a "Meet Your Farmer" Poster Campaign that showcases the farms and farmers who sell directly to Skidmore.

Updated Dining Services Website

The current partners list on the Dining Services website should be updated with expanded content to more accurately reflect the partnerships. A greater amount of information on purchasing and program policy would be a valuable resource for students. Other changes might include partner profiles that list location, farm/business history, products supplied to Skidmore, a description of growing practices, and the frequency and volume of delivery to Skidmore.

Site Visits and Volunteer Programs

Skidmore already provides opportunities to visit and volunteer with farms, the next step for this initiative is to specifically visit the farms and businesses that supply the Skidmore Dining Hall. Encouraging student volunteers at these farms is a possibility as well.

Workshops, Lectures, Panels, Film Series, and Academic Classes

Over 60% of our survey respondents expressed that they would be interested in taking a class or attending a workshop about agriculture. Therefore, to disperse information about Skidmore's local partnerships and about local/sustainable food in general, we recommend more

workshops, lectures, panel discussions, films, and academic courses concerning food and agricultural issues.

Expansion and Integration of the Skidmore Student Garden

In order to engage a broader audience and encourage more students to support the local food initiatives, we encourage the expansion of the student garden and the development of more visible agricultural areas on campus, such as fruit trees or a section of edible forest in the North

Beyond this mission statement little to no information is given about the growing and processing practices of our partners, the extent of the relationship and most importantly the criteria used to select partners. What does a sustainable local partnership mean to Skidmore College?

To improve the legitimacy of this program it is necessary to define the parameters of a sustainable local partnership and the purchasing policy that informs the way we obtain goods from these partners. A practice can be considered sustainable if it can be continued indefinitely without degrading the systems and resources upon which it relies. It is important to remember that a product that is produced locally is not always produced sustainably, and it is necessary to have an understanding of these two terms in order to make educated purchasing decisions.

Local: The definition of “local” will vary depending on location and what is available.

Institutions often define “local” as sourced from within 200 miles (YSFP 2010). Fixed definitions using state borders, county borders and mileage limits can be arbitrary. The most important point to consider when thinking about local purchasing is minimizing transportation distance and associated fuel emissions from the source of the food to the school.

Sustainable: Sustainable agriculture refers to the ability of a farm to produce food indefinitely, without causing irreversible damage to the health of the ecosystem. Sustainable agriculture practices may be regenerative, improving long-term health of the soil and surrounding native biota. Organic certification is often used as a blanket standard for institutions, though there are other options. Farmers may use sustainable or regenerative growing practices even if they are not organic certified. Oppositely, some certified organic growers may implement the bare minimum required to obtain organic certification.

Partnerships:

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institutions and Skidmore specific criteria. The purchasing policy for local farmers, processors, and distributors should include clear expectations for all aspects of food production, including growing practices, packaging, food safety, insurance, transportation

efficiency of the program. Interns would work with Dining Services and the Sustainability Coordinator, local farmers, processors and distributors to broaden our local food supply, maintain existing local relations and contact potential partners. In the long-term, we recommend the creation of a permanent Local Foods Manager position to procure local foods and work with other staff to make ensure the continuation of the program.

Identifying More Potential Partners

We have identified and contacted 13 potential partners, but there are hundreds more within Saratoga County and within New York State. More research is needed to identify and contact more potential partners of all three types: farm, processor, and distributor. Ideally, these could be compiled into a local partner directory, webstie, or other document. Information could also be gathered about the various types of produce readily available by location and season. The following resources can be used to identify more potential partners: localharvest.com, Cornell Cooperative Extension Saratoga and Washington County Buyers' Guide 2010.

Capital Investment

To accommodate a larger volume of local food and processing capacity, additional infrastructure may be necessary at the Dining Hall, such as greater freezer space, etc. More research needs to be done on the feasibility and cost of the needed equipment. These are large scale projects that would involve significant investments. Alternatively, there are local options for small to medium scale processing and freezing.

4.3 Project Continuity

In a College with an average four-year student turnover rate, information may not transfer between successive graduating classes, and awareness of past local food initiatives can easily disappear. Alumnus Jonathan Greene suggests (pers. comm. 2011) that the momentum of the initial local food movement at Skidmore was lost due to a lack of institutional longevity and student leadership. There have been a number of local food and food sustainability projects in the past years, but many are not pursued in subsequent years. For example, Greene conducted and conducted a local farm survey in 2005, similar to the potential partner survey we included in our research. Greene was compiling information about local farmer's capacity and interest in selling to Skidmore College. Greene's survey, however, was neither used by Dining Services nor properly archived, so the information was mostly lost over time.

In order for the Dining Services Local Partners Program to be successful and grow, there must be a formal commitment on the part of both institutional policy, administration, Dining Services staff, and the student body. For students, this means integration of local food initiatives into permanent student groups like the Environmental Action Club and the Ecomit

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Yin, Robert K.

Appendix 1
Interview Questions for Dining Services Administration

Basic Information:

Would it be possible to put together a calendar of foods used over the course of the academic year, and their quantities?

Local Food Practices

Which foods does the Dining Hall currently purchase any food from local sources?

Approximately what quantity per year (pounds) is locally sourced?

How do you determine this?

What percentage is this of the Dining Hall's total annual food purchases?

Appendix 2

Interview Questions for Current Local Partners: Farm

What size is your farm?

What are the primary foods that your farm produces?

Which foods do you supply specifically to Skidmore?

Approximately what quantity of these foods do you supply to Skidmore?

How often do you make a delivery?

How do you determine your price for these foods?

Appendix 3

Interview Questions for Current Local Partners: Distributor

Approximately what percentage of the food that you distribute is locally produced? (And how do you define local?)

Approximately what volume of local foods do you work with every month?

Which foods specifically do you purchase locally?

Appendix 4

Interview Questions for Current Partners: Processor

What are the primary food products that your business produces?

Approximately what volume of these products do you produce annually?

Appendix 5
Student Survey Questions

Would you be willing to pay more for your meal plan if there was a greater quantity of fair trade food?

(No, Yes, Maybe)

If so, how much? (\$20, \$50, \$100, other)

In addition to your meal plan at the Dining Hall, how much food do you buy each semester? (Not much,

A little bit, Quite a bit, A lot)

Approximately how many meals is this per semester?

In addition to your meal plan at the Dining Hall, how much money would you say you spend each semester on food?

Farming Practices

Meat and Poultry

First Tier (ranked in order of preference)

- Hudson valley free-range/pasture-fed
- New York free-range/pasture-fed
- New York organic
- Regional free-range/pasture-fed
- Regional organic
- Regional conventional (small-scale operation)

Second Tier (ranked in order of preference)

- U.S. free-range/pasture fed
- U.S. organic (small/medium scale operation)
- Conventional (small/medium-scale operation)
- U.S. organic (large-scale operation)