

Winter 2015

Implementing Sustainable Literacy in Grand Rapids, MI

Joe Neikirk
Grand Valley State University

Hannah Swanson
Grand Valley State University

Sam Blumer
Grand Valley State University

Follow this and additional works at: <https://scholarworks.gvsu.edu/wickedproblems>



Part of the [Agricultural Education Commons](#)

ScholarWorks Citation

Neikirk, Joe; Swanson, Hannah; and Blumer, Sam, "Implementing Sustainable Literacy in Grand Rapids, MI" (2015). *LIB 322: Wicked Problems of Sustainability*. 16.
<https://scholarworks.gvsu.edu/wickedproblems/16>

This Article is brought to you for free and open access by the Integrative, Religious, & Intercultural Studies at ScholarWorks@GVSU. It has been accepted for inclusion in LIB 322: Wicked Problems of Sustainability by an authorized administrator of ScholarWorks@GVSU. For more information, please contact scholarworks@gvsu.edu.

Implementing Sustainable Literacy in Grand Rapids, MI

**Joe Neikirk, Grand Valley State University
Hannah Swanson, Grand Valley State University
Sam Blumer, Grand Valley State University**

Grand Valley State University

4/4/2015

Abstract

Recognizing the dimensions and complexity of wicked problems, Phoenix Farms has decided to address the issue of sustainable illiteracy in Western Michigan. With a goal to work with local stakeholders, we have partnered with Sonder Farms in order to develop advertisements and classes aimed to raise awareness about, and interest in, sustainability. This partnership with Sonder Farms, a self-sustaining farm located in the Grand Rapids and Allendale communities, has given us the opportunity to put our skills, knowledge, and values to use in our local community. Sonder Farms practices conventional farming as well as aquaponics. Their hope is to target the community by countering issues such as environmental injustice, sustainable illiteracy, economics, education, health, and much more. They plan to offer classes to the community, covering subjects such as diet/nutrition, the environment, finances, sustainable agriculture and many more. Seeking to develop ideas of mutual benefit, we worked closely with Sonder Farms in order to co-create and implement compelling and relevant action-plans. For instance, we have developed promotional materials illustrating the dimensions of sustainable illiteracy, highlighting Sonder Farms mission, and detailing the research we have conducted about downtown Grand Rapids residents. We have sought to make sustainability education accessible in the greater Grand Rapids area along four dimensions, including (1) posters (2) guerrilla advertisements, (3) the development of monthly newsletters, and (4) a plan for increasing the accessibility of Sonder Farm classes. The following describes our ultimate efforts, the process by which we came to this work, and the challenges we confronted. Through detailing our work, we hope to engage people who are enthusiastic about environmental justice, thereby increasing the chances these efforts will lead to systemic, long-term change.

Keywords: Sustainability, Illiteracy, Wicked Problems, Grand Rapids, Accessibility, Food, Social Justice, Environmental Justice, Nonprofit, Community, Complex Issues, Campaign, Advertisements, Newsletters, Curriculum, and Education.

IMPLEMENTING SUSTAINABLE LITERACY INTO GRAND RAPIDS, MI

As an interdisciplinary team of undergraduate students at Grand Valley State University in the winter of 2015, we were tasked with not just studying wicked problems, but also trying to confront dimensions of these issues within our own local community. This work fell upon us through our enrollment in LIB 322: “Wicked Problems of Sustainability.” Problems categorized as wicked present society with issues so messy, they are ultimately indefinable and unsolvable. On top of that, we learned such problems confront us with extremely high stakes. “Wicked problems are categorized within the literature as dynamically complex and ill-structured, with no straight-forward causal chains to help us gain a clear and simple picture of the issue” (Lake, Fauvel, 2014, pg. 2). Given the messy, serious nature of these problems, we were instructed to think interdisciplinarily to consider how they are interconnected with other issues, and to integrate our own perspectives. For example, while we are studying sustainability, we also examined how sustainability connects to food, education, finances, health, oppression, and so much more.

Working under the assumption that virtually every area of expertise has a valuable perspective to offer to issues within the realm of sustainability, we were placed in interdisciplinary teams on the first day of class. Our team consisted of a communication studies major, two liberal studies majors, an economics major and a public and nonprofit administration major. In order to gain a better understanding of ourselves and our team members, we began our collaborative efforts by discussing our interests, weaknesses, strengths, and MBTI personality assessments. Through coming to understand the differing expertise and values of each team member and our community partner, we ultimately defined ourselves as “Phoenix Farms.”

Guided by Professor Lake’s directions, we were also assigned a community partner working in Western Michigan to address issues related to sustainability. Our community partner, Sonder Farms, is a newly established, community collaborative farm on a mission to “create positive cultural change for healthier lives, livelihood, and the environment” (Business Plan 2015). They say they are “founded on the principle that you cannot place comparative values on all difficulties in life” (Business Plan 2015). Recognizing the role that our current agricultural practices play in the degradation of the environment, the American diet, and our subsequent health issues, they seek to develop a “collection of community partnerships.” They are currently focused on aquaponics as well as organic and sustainable farming practices so they can supply food to vendors within the local region (50 mile radius). Sonder farms also seeks to foster the community and educate through their community center. As a newly established non-profit, Sonder farms was facing a long list of issues with which they could use help.

As we researched wicked problems, considered our community partner’s problems, and reflected on our own values, we realized there was both a strong need for (and desire to help with) education and empowerment. The research led us to see that vastly different definitions of these issues meant that society was seeking out very different and often conflicting “solutions.” As Allen and Gould note, the way we choose to “explain the problem determines the scope of the search for the resolution.” Too often the “solution developed is a one shot operation with little or no chance to learn by direct trial and error” (Allen and Gould, 1986). We discovered that Phoenix Farms truly

believes that in order to counter a situation that our societies face, they must first be educated about it. Along with this, a wicked problem is not justly addressed until all those impacted by the problem have a chance to partake in the decisions intended to address it. How can everyone impacted get involved in ameliorating the problem when they are unaware of it in its full dimensions?

With these commitments in mind, we decided to focus on the wicked problem of sustainable illiteracy: the notion that people are not educated about nor they given the applicable resources to live environmentally conscientious lives. Each and every person's views are individualized. We have people that care an enormous amount about sustainability, and those that don't care at all. There seems to be the mindsets in our societies that "someone else will take care of it" or "it's too hard to face this issue" or "it's just easier if I don't partake in helping the planet." Simply put, sustainability affects each and every person living on the Earth immensely, whether they know it or not. For example, sustainability plays a huge role in our food system. If we think about the fast food restaurants that are almost everywhere, we can also take into account the amount of resources used to 1) create the building in order to sell the food, and 2) the actions used in order to make the food and sell it. We know that the exploitation of labor, the environment, and animals are put into practice every single day in order for people to get their food from fast food restaurants. This means the people who are supporting fast food restaurants by buying food from their businesses are directly connected to the exploitation of labor/resources/animals and they are also affecting their health by the consuming fast food. The resulting illnesses related to poor diet impact our health care system and the economy. Taking into account the vast prevalence of these practices (and the mindless habits behind them) as well as the interconnected nature of this problem with many other systemic, messy problems, it becomes clear that we need a different educational approach. Thus, we believe these practices can be modified through inspiring, different choices, and inspiring new practices can be done through education. Thus, our goal is to educate and transform mindsets so that we can inspire a significant amount of the Greater Grand Rapids community to care. Phoenix Farms is incredibly passionate about our work, and since our strengths include integrating creativity, community work, communication, and business operations, we believe that we can contribute to furthering healthy sustainability practices in Grand Rapids.

Action Plan

We sought to impact the issue of sustainability illiteracy by creating a public service advertising campaign that will bring sustainable education to the general public as well as advertise the classes that Sonder Farms will be offering. Part of Sonder Farms' mission is to provide classes with curriculum designed around sustainability best practices. Classes will be taught on Sonder Farms' grounds in the heart of Grand Rapids. By implementing a multi-media campaign using posters, newsletters and guerilla advertising and including information on Sonder Farms and their classes, we hope to expand knowledge about sustainability.¹

¹ The inclusion of Sonder Farms contact information (phone number, address, and an email) should increase access to their programs.

We intended to display the posters throughout the community, providing introductory information to passers-by on how to live more sustainably. We chose posters because they are easier to understand compared to other media platforms. According to Robert E. Bear's article, "The Value of Posters," "Posters have instructional value. Educators use posters as a teaching tool in Language Arts and the visual arts. Not only as a reference in glimpses of past vogues, but also from the standpoint of structuring effective, succinct communication." The posters would be placed around Grand Rapids where there is heavy traffic such as restaurants, outside on busy sidewalks as well as outside of establishments utilized by the community like libraries and hospitals. For example, the first poster details the steps to make your own compost pile to grow fruits and vegetables in (see fig 2.) Every two months a new poster will be put up that provides information on another topic of sustainability.

Another advertising avenue is being pursued through the publication of articles in the *Grand Rapids Press*. These newsletters can educate people about sustainability and Sonder Farms, likely impacting a different segment of the Grand Rapids community. By utilizing the *Grand Rapids Press* we can maximize the audience that will see our advertisements. According to a 2007 census conducted by *Burrelles and Luce*, the *Grand Rapids Press* circulates 133,107 papers daily. While newsletters are not as visually appealing, they can contain substantial information on sustainable education in a smaller space. Newsletters would be a good way to reach the older audience as they are the ones who still read newspapers. These newsletters would follow the same framework as our posters with information on how to make a healthy dish out of a certain vegetable or fruit (see fig 3.) For the newsletter we created, we provided a recipe for how to use an artichoke with chicken and cheese. By providing this kind of information, we hope that it will spark healthier eating choices in the Grand Rapids community as well as directing the community toward places to get those healthy eating options. We think that this will redirect focus for healthier food instead of continually eating at fast food restaurants, which will ultimately help people, animals, and the environment (refer to Appendix 3). Every Friday, a new newsletter can be printed in the Grand Rapids Press providing information on another area of sustainability. We want the community to get excited and look forward to the next newsletter to learn something new such as learning to cook a new dish to add to their healthy diets.

As an interdisciplinary team valuing interconnectedness, we also created an avenue for an interactive activity: "interconnected Grand Rapids." We believe that guerrilla advertising is a wonderful way to spread awareness in Grand Rapids. Guerilla advertising is a form of marketing that uses unconventional methods and tools such as flash mobs, graffiti, and sidewalk chalk. Guerilla ads are beneficial because they rely on imagination and creativity to get the message across which means that it would cost very little to produce a guerilla advertisement. Guerilla advertisements also allow the audience to participate in the message which our media platforms lack. These unique and out-of-the-ordinary forms of marketing will grab the attention and strike interest into the Grand Rapids community. These messages will be targeted to all ages because guerilla ads will be a fun way for kids and adults to participate in something creative as well as learn something important. The idea is to have a drawing of an artichoke (or any other vegetable or fruit) on the cement of Rosa Parks Circle, and vibrantly color it. However, we would leave a portion of the artichoke colorless to provide a more visceral

understanding for how much food waste. For example, if 40% of the total food produced was wasted in America in 2014, then we would color only 60% of the artichoke. Since so many people come to and pass by Rosa Parks Circle in the summer, the potential impact of this interactive educative activity is quite large. Such an activity can be combined with dialogue. Through posing questions like “What do you waste?” we can get people thinking about food waste (refer to Appendix 5). Our main goal for this platform of marketing is to become a familiar face in the community and to have them look forward to the next guerilla ad to learn from and participate in. This would be a great tool to get involved with the community on a personal level and build relationships with them.

Our last goal was to increase the accessibility of Sonder Farms’ classes to be held to the Grand Rapids community. Since Sonder Farms’ class curriculum includes health education, finance education, sustainability education and more, we believe that as a whole, Grand Rapids would definitely benefit from this. There may be a lot of people who would want to take these classes, so in order for that to happen, we want several places where these classes can take place. In keeping within the idea of sustainability, we would also like to provide a carpool service or a company van that would pick up those who would otherwise be unable to attend the classes at Sonder Farms, and classes offered throughout Grand Rapids. This would increase attendees as well as limit carbon emissions.

Sustainable illiteracy negatively impacts the health of the community, economic well-being, political voice, and the overall condition of neighborhoods. We hope through our public education campaign to empower the community by giving them a voice to change policy that will positively impact this community and positively change dietary habits through the development of tools to discern healthier foods from cheaper unhealthy foods. We hope that our mission will empower the community to get involved with community gardening to cut down the costs on produce and get people back in touch with nature.

Process

Once a vision around sustainable illiteracy came into focus, we solidified a plan-of-action for moving forward. Keeping in mind our four main stakeholders—Professor Lake, Sonder Farms, Wege Competition, and the Grand Rapids community—we developed a plan that sought to integrate what our stakeholders needed with what we were willing and able to offer. For instance, we sought to (1) develop a project to educate and empower sustainable practices in Grand Rapids, (2) advocate for Sonder Farms, (3) produce a visually interesting and compelling visual representation of how to counter sustainable illiteracy, and (4) fulfill all of the objectives for our Wicked Problems of Sustainability course.

While it is always tempting to “divide and conquer” project-based teamwork, we began our project with a few collaborative meetings so we could develop a plan-of-action that genuinely represented our team’s values. As a main part of the collaborative work, we had one person keeping us organized, two that came up with the creative ideas, another one for the technical support, and another for the editing/revising while we all voiced our perspectives on one another’s work.

We first needed to figure out how to display and explain the sustainable illiteracy issue on our poster in an effective way. Through researching and summarizing statistics on food and well-being, we hoped it would grab our viewers’ attention in terms of

everyday food habits. We also provided a paragraph to explain sustainable illiteracy in our own words. Our goal was to provide information that would begin to transform living habits, and show how this problem is wicked as well as how it connects to the people in Grand Rapids directly.

Our next challenge was to display Sonder Farms in a compelling and visually attractive way that concisely demonstrated Sonder Farms targeting several different issues. We created a diagram and put a heart at the center of the diagram with arrows pointing toward issues they are trying to solve. We wanted to show that the heart of the farming is focused solely upon what they are trying to counter: health, education, community, sustainable agriculture, finances, and more. We needed to implement this information so that our viewers can understand what Sonder Farms is, why we are working with them, and why we are trying to advocate for them (see this section by referring to Appendix 1, our poster).

As a group, we collectively decided to go out into the Grand Rapids community to gather primary research. Our purpose for our efforts here was to gain a first-hand understanding of Grand Rapids residents' mindsets on food and sustainability. With this goal in mind we constructed six close-ended, survey questions.

1. "Sustainability is important. Agree or disagree?"
2. "Based off of the Grand Rapids community, rate how easily you can access the food you want to eat, whether it is organic, local, fast food, etc. One being very hard, and 10 being very easy."
3. "Do you feel that local, healthy food is available to you at an affordable cost? Yes or no?"
4. Do you agree or disagree that the food industry has a bad impact on the environment?"
5. Do you agree or disagree that accessible, sustainable education would be beneficial for Grand Rapids?"
6. "Out of the choices that I will provide you with, what do you think would be most beneficial in order to start educating the Grand Rapids community on sustainability? Guerrilla Advertisements, Posters, Classes or Newsletters?"

We collected 50 random participants' answers. We began by asking our participants our six questions at The Rapid Central Station, then we slowly approached the downtown area near Rosa Parks Circle. In general, most of the people we surveyed would agree that 1) sustainability is important, 2) the food industry has a bad impact on the environment and 3) that accessible, sustainable education would be beneficial to Grand Rapids. However, there were mixed views on the accessibility of the kind of food our participants want to eat, as well as mixed views on the cost of healthy food (see Appendix 6 for the specific details of our research). As we asked these questions, it was clear that a significant amount of people 1) did not fully understand what we were asking 2) were irritated at being approached for answering our questions and 3) if people were in groups of two or more, the rest of the group mostly agreed with whoever was the first to answer the questions (see appendix 1 for more information).

Our final, and biggest challenge, was to then create an idea that would easily educate the Grand Rapids community about sustainability as well as advocate for Sonder Farms. Our selections for doing so, as previously stated, were posters, guerrilla advertisements, newsletters, and creating more spaces in Grand Rapids to hold Sonder

Farms' classes. Through posters, we specified and focused on do-it-yourself composting and how easy it is. Our hope here was to have people rethink where they put their food leftover food and how that can affect the environment. Through newsletters, we wanted to provide information about fruits and vegetables that aren't used regularly so that our viewers would understand how to incorporate them into their meals. Through guerrilla advertisements, we really wanted to emphasize an interconnected activity that would bring the community together for sustainable, environmental education. And through the Sonder Farms' curriculum, we believe that they will help people in the Grand Rapids community transform their living habits. With these four avenues, our intentions are to spark excitement and engagement around sustainability in Grand Rapids and hopefully (See our appendices for more information).

Overall, we were able to gather an immense amount of helpful feedback from multiple people. Professor Lake, Dana Eardley, a GVSU computer worker, a Kendall student, the marketing person from Sonder Farms, and Thad, Sonder Farms' owner helped us develop our ideas and our project so that we could make something we are all incredibly proud of.

Results

Phoenix farms has jumped over tremendous hurdles since the beginning of this course. Over the semester, we went from a group of five, down to a group of three. Our workload increased, and we lost key members of our team who held strengths we felt we needed to succeed. By reaching out to others we were able to meet with an expert in visual design, and our poster came to life. While we lost two members of our team, we received support from our professor, teacher assistant, and help from different programs at the school. With this extra help, we were able to complete everything we hoped to achieve.

Another challenge we faced was getting ahold of key stakeholders whose information we felt to be extremely pivotal to the completion of our group work. Thankfully we had the connection with the President of Sonder Farms, Thad Cummings, who was able to put us in contact with the key holders we needed in order to understand the community we are trying to help.

We submitted our poster to the Wege competition, and sadly did not move on to the next level. This was hard on our group, knowing all of the hard work we had put in did not reap the results we were hoping for. On the other hand, knowing that all of our work was intended for the benefit of the greater Grand Rapids community, not simply for a competition, helped our group move past the disappointment. However, we want to make the important note that, despite all of the terrifying challenges we had to face (which was kind of a wicked issue in itself), we came together as a tremendous team and we delivered a beautiful project. By the end of the semester we were able to thoroughly explain the four main categories of our poster: 1. what a wicked issue is, 2. what Sonder Farms is, 3. the primary research we gathered, and 4. the ideas we created in order to make sustainability education accessible in the greater Grand Rapids area. Phoenix Farms is remarkably proud of the work we have accomplished and we cannot wait to see how it takes off.

Future Considerations

Our hope through our work this semester is to provide a means for other environmental justice enthusiasts to grasp our idea and expand on it. Our team would love to see advertisements take life, to see the Grand Rapids community have awareness of and access to the knowledge behind sustainability. We would love to see students in future classes take the ideas we have started, and expand on them. With our partnership through Sonders Farms, we hope other departments within GVSU will become involved. For instance, education majors at GVSU could gain further experience through teaching select courses in the Sonders Farms classroom. In addition, there are valuable internship and practicum opportunities at Sonders Farms. Finally, it would be valuable to pursue community partnerships between Sonders Farms and others (like Our Kitchen Table or Good Food Box) seeking change.²

² A special thanks to Danielle Lake who guided us during our entire project and helped us fine tune countless times, Dana Eardley who helped us numerous times with fine tuning our project, GVSU computer genius Justin, Laura (marketing person for Sonders Farms), and the Kendall student who drew our vine background.

References

- Allen, G. M. & Gould, E. M. (1986). Complexity, Wickedness, and Public Forests. *Journal of Forestry*, 84, 1-5.
- Bear, Robert E. (2007). The Value of Posters. *Johns Hopkins School of Education*. 1, 1. Retrieved from: <http://education.jhu.edu/PD/newhorizons/strategies/topics/literacy/articles/the-value-of-posters/>
- Business Plan. (2015). Business Plan Sonder Farms Inc.: Renewing Tomorrow, Today. 1, 1-19.
- Burrelles Luce. (2007). *Top 100 US Daily Newspapers*. [Data Set]. Retrieved from http://www.burrellesluce.com/top100/2007_Top_100List.pdf
- Cummings, Thad. (2015, January 12). *Sonder Farms*. Wicked Problems in Sustainability. Address at the Wicked Problems in Sustainability course, Grand Valley State University, Grand Rapids, MI.
- Lake, D. & Fauvel, A. M. (2014). Tackling Wicked Food Issues: Applying the Wicked Problems Approach in Higher Education to Promote Healthy Eating Habits in American School Children. *Food Studies: An Interdisciplinary Journal*, 4, 2.

Appendix 1

Phosnic Farms' Inspiration: "A thing is right when it tends to preserve the stability, integrity, and beauty of the biotic community. It is wrong when it trends otherwise"
 - Aldo Leopold

The Wicked Issue: Sustainable Illiteracy

Sustainable Illiteracy is the notion that people are not given the applicable resources in order to understand how to live environmentally friendly in terms of living habits, consumption, energy usage, and more. Sustainable illiteracy negatively affects the community physically, economically, politically and environmentally. All of these factors contribute to the complexity of a wicked issue and it is one that cannot be solved by just one person, but given the necessary resources, change can begin to happen.

On average, adult Americans consume 11.3 percent of their disposable incomes on fast food

On average, 852 Million Overweight + 2.5 Billion Diet Deficient = 2 Billion

1/3 of food is lost in the food production cycle

Partnering with Sonder Farms
 A local Grand Rapids nonprofit farm targeting:

- Health
- Community
- Economy
- Employment
- Diet/Nutrition
- Housing
- Sustainable Agriculture
- Education (Most Important)

Advocates for the Circular Economy

Map of Grand Rapids

Our Mission:
 To make sustainability education accessible to the general public of Grand Rapids through advertisements such as posters, news letters and guerrilla advertising with simple information on how to live more sustainably. We additionally hope to connect the community to resources provided by Sonder Farms, Curiosity Sonder Farms is in the midst of creating sustainability classes at their headquarters. We love this idea, so we decided to make these classes more accessible to the greater Grand Rapids area. Our hope is to hold these classes in various places throughout Grand Rapids, and to team with Grand Valley undergraduate students to teach them more information below. By making this kind of education accessible, we hope to provide Grand Rapids with the right resources in order for the area to become more sustainable as a whole.

- As a requirement will be provided for students interested in classes (transportation to and from Sonder Farms).
- Classes will be made by Grand Valley State University students to gain career and practical experience; class credit students will be encouraged to spend their sustainable knowledge in their communities.

Local Grand Rapids Research (From 50 Random Participants)

Figure 1: Do you feel that local, healthy food is available to you at an affordable cost? (Yes 26, No 20, Neutral 4)

Figure 2: Based off of the Grand Rapids area, rate how easily you can access the food you want to eat whether its organic, local, fast food, etc. (1 being very hard, 10 being very easy)

Figure 3: Do you agree or disagree that accessible, sustainable education would benefit Grand Rapids?

Figure 4: Out of the choices provided, what do you think would be the most beneficial for Grand Rapids in terms of accessible, sustainable educational options: Classes, Green-Up, Advertisements, Posters, and Newsletters.

Appendix 2

D.I.Y. Composting

Materials Needed:

- * Large Bin- plastic, metal, wood, brick
- * Shovel or Pitchfork
- * Work Gloves
- * Soil
- * Appropriate Waste



How To:

- * Layer your compost pile alternating soil and your biodegradable waste.
- * Turn the compost
- * Water the compost pile

Compostable Items:

- * Grass Clippings
- * Leaves
- * Vegetable and Fruit Scraps
- * Coffee Grounds
- * Wood Chips
- * Shredded Paper

Composting is only one example of how to live more sustainably, if you would like to learn more on how to be more sustainable visit Sonder Farms! They offer classes on how to incorporate sustainability into your life! Visit their website at: <https://www.facebook.com/sonderfarms>

24% of our community's waste isn't really waste at all, it is compostable organic material such as food and yard waste. By composting, we can minimize our waste immensely.



Appendix 3

Sonder Farms Presents

This week's featured vegetable Artichoke

Spinach Artichoke Chicken

Author: Robyn Stone

Serves: 8

INGREDIENTS

- olive oil spray
- 8 chicken breasts
- 13.75 oz artichoke hearts packed in water, drained
- 10 oz frozen spinach, thawed and squeezed
- 2 shallots, chopped
- 1 clove garlic, minced
- ½ cup Greek yogurt
- ½ cup mayonnaise
- ½ cup Parmesan cheese
- ½ cup shredded mozzarella cheese

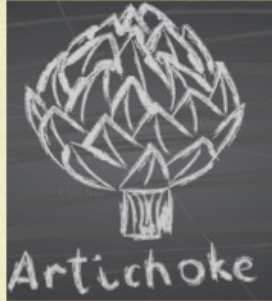
INSTRUCTIONS

- 1 Preheat oven to 375° F. Spray baking dish with olive oil nonstick baking spray.
- 2 Place chicken into baking dish. Salt and pepper chicken and then bake 15 minutes.
- 3 Meanwhile, in a medium bowl, combine remaining ingredients and then pour on top of chicken. Bake 20-25 minutes.

Let stand about 5 minutes before serving.



<http://asklapinch.com/cooking/spinach-artichoke-chicken-recipe/>



Not sure how to cook an Artichoke?

- They can be:
- Steamed
 - Boiled
 - Roasted
 - Stuffed
 - Breaded

Fun Fact:

In 1947, California selected its first official Artichoke Queen: Marilyn Monroe.

Artichoke Nutrition Facts

Serving Size: One medium artichoke (128 grams)

	Amt. Per Serving
Calories	60
Carbohydrates	13 g
Fiber	7 g
Protein	4 g
Sugar	1 g
Sodium	120 mgs

<http://foodfacts.mercola.com/artichoke.html>

Be sure to check out Sonder Farms for the featured food item, or other local farms. For more information, and more healthy and sustainable eating options, visit Sonder Farms today! Sonder Farms offers a variety of classes, to learn about nutrition, and the environment.

Appendix 4

Guerrilla Advertisement



Our first guerrilla advertisement will be done by sidewalk chalk (above is an artichoke). Food waste will be emphasized by removing the color in the display. For example, if 30% of food bought was wasted in the United States in 2014, we would leave 30% of the artichoke colorless. Providing a statistic and a provocative question, "How do you waste?"... in addition to the image will spark reflection and dialogue: Every so often new, provocative guerilla advertisements will be put in place, spurring Grand Rapids toward a tipping point for real change.

Appendix 5

1. Do you agree or disagree that sustainability is important?
 - 96% Agreed
 - 4% were neutral

- 2) Based off of the Grand Rapids community, rate how easily you can access the food you want to eat, whether it is organic, local, fast food, etc. One being very easy, 10 being very hard.
 - 4% rated 1
 - 0% rated 2
 - 2% rated 3
 - 0% rated 4
 - 0% rated 5
 - 10% rated 6
 - 18% rated 7
 - 10% rated 8
 - 14% rated 9
 - 42% rated 10

- 3) Do you feel that local, healthy food is available to you at an affordable cost?
 - 52% said yes
 - 40% said no
 - 8% said neutral

- 4) Do you agree or disagree that the food industry has a bad impact on the environment?
 - 70% said yes
 - 10% said no
 - 20% said neutral

- 5) Do you agree or disagree that accessible, sustainable education would be beneficial for Grand Rapids?
 - 94% agreed
 - 6% disagreed

- 6) “Out of the choices that I will provide you with, what do you think would be most beneficial in order to start educating the Grand Rapids community on sustainability? Guerrilla Advertisements, Posters, Classes or Newsletters?”
 - 28% said guerrilla advertisements
 - 12% said posters
 - 40% said classes
 - 20% said newsletters