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The Sprout Society
Michelle Haapala, Craig Coolman, and Jamie Groendyk
Grand Valley State University
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Abstract:

The purpose of this project is to address two contributing factors surrounding our current nutritional and environmental problems: a lack of experiential education and a lack of motivation. As a team of Grand Valley State University students, we sought to address this problem by using our diverse backgrounds to create an elective course in a local K-12 setting. The course, entitled "The Sprout Society," will engage students through the integration of guest speakers, community service efforts, interactive technology, and art-making activities. We will establish a learning experience that encourages young adults to be aware, motivated, and involved in sustainability and food issues empowering them to make educated choices.

Through community partnerships we have begun working with our local schools and teachers. This cooperation has given us further insight into how we can collectively fill the existing void in food education. While we have met with teachers and school leaders to start forging a way, we are still actively seeking and involving many other voices throughout the community in order to incorporate additional perspectives and talents. Our ultimate goal is for this class to establish an effective way to impact our youth, motivating and empowering them to care about food justice.

Introduction

A wicked problem is by definition a problem that has no single solution. Often times the solutions that are put in place have implications that are detrimental to other parties involved; causing an entangled web that lies around the issue at hand. Furthermore, wicked problems cannot be approached from a single discipline or expert, but must be approached from a variety of perspectives in order to gather a full understanding of what is at stake (Brown, 2010, p. 61).

Wicked problem scholar Valerie Brown argues that the only way to alleviate a wicked problem is through processes of collaboration. This is most likely to happen when we bring a variety of stakeholders to the table to frame the issue more fully. As Hal Salwasser notes, “collectively, the multiple stakeholders see ‘the problem’ and objectives differently” (2002, p. 9). Adding to the wickedness of the problem, Salwasser argues “Stakeholders are also likely to have different value preferences and different tolerances for risk; not only do they not see ‘the problem’ alike they do not see solutions alike either” (Salwasser, 2002, p. 9). This makes gathering together the voice involved in the problem quite difficult but essential work for anyone seeking to address such problems.

One of the most significant wicked problems we currently face involves our food systems: their health and sustainability. In recent years there has been a lot of attention focused on the environmental, social, and political aspects of food. From all this recent food dialogue, one must learn how to start the process of correcting these wrongs. True to

its very definition, in ameliorating a wicked problem, one must begin with collaboration.

Framing the Issue and Clarifying our Values

In a 2008 *New York Times* article Michael Pollen persuasively argues that “changing the food culture must begin with our children, and it must begin in the schools” (Pollen, 12).

With this recommendation and our own core values and skills in mind, we -- a group of Grand Valley State University students -- began to explore these issues in the winter of 2014 through our class “Wicked Problems of Sustainability” (LIB 322). A common denominator in our team’s strategic plan was to *actively* educate and motivate students in these current issues surrounding food. Our proposed plan of action has the ability to reach past systematic inequalities such as social class, race, political systems, and economic limitations by including students that may not have otherwise had the opportunity to participate. We valued the concept of teaching students about the many facets of our food systems. By doing this, they would be more likely (and better equipped) to make healthy choices and encourage others around them to do so as well. We also recognize that our efforts are simply one step in the right direction. As Pollen also suggests: “to change our children’s food culture, we’ll need to plant gardens in every primary school, build fully equipped kitchens, train a new generation of lunchroom ladies (and gentlemen) who can once again cook and teach cooking to children” (12). Inspiring children through a motivating and experiential education is

likely to facilitate the systematic structural changes Pollan references.

Currently, many students are not taught about the wickedness of our food systems. We found that courses offered to students do not frame the entire issue at hand, but rather focus on individual pieces of information. Students may take health class, study nutrition, or learn about plant matter, but there are few classes that teach students the systematic processes of getting food from the ground to our table. In our estimation we need to do better at bridging the learning gap between individual facts and application. In order to lessen this gap between what students learn at school and what they practice at home, we must develop a model that explores both knowledge *and* skills. We set broad goals for this plan, encompassing both audiences of unmotivated and motivated students.

Additionally, it was important for our team to create an approach different from the standard educational model. We believe in order for students to become both motivated and educated about food, instructors must apply a hands-on, active inquiry process in current learning curricula. David Kolb, for instance, argues persuasively for the lifelong transformational impact of experiential learning. “Learning,” he says, “is the process whereby knowledge is created through the transformation of experience” (38). The kind of learning we want to promote here encourages “creativity, problem solving, decision making, and attitude change” (33). It is “assertive, forward moving, and proactive” (132).

As our wicked problem scholars noted, this means we need “a spirit of

cooperative innovation” along with “an attitude of provisionalism” (Kolb, 5, 28). Kolb’s experimentalism advises we intentionally engage in new and different experiences, reflect from perspectives beyond our own, work to integrate these into testable theories, and then use our theories to inform our future endeavors, all in a continual process (30).

Along with focusing on experiential learning, our curriculum also sought to integrate the learning objectives in Bloom’s Taxonomy. This set of objectives covers different processes of learning. In the creation of this elective, we focused on providing lessons that continuously exercised all levels of the taxonomy. For example, students will constantly be identifying, applying, evaluating, synthesizing, and creating. A specific lesson plan established for this curriculum focuses on the act of planting a seed. Students would learn the information to start the planting process. Once they receive this foundation, learners will expand outside the classroom and apply the knowledge by creating a plant from a seed. Following that step, they will observe the outcome, and evaluate how the outcome could have changed by the application of other skills learned in the process. The steps used to reach the solution are experimental, self-reflective, and interactive. Furthermore, the learning process will move in a circular way rather than a systemic way. By executing our class in this manner, we hope to touch on all processes of learning. This can assure that multiple intelligences are reached, and therefore, every learner can obtain his or her potential in carrying out civic duties of food justice in their own community.

Action Plan

Taking into account the diverse backgrounds of our team, we wanted to approach the wicked problem of food sustainability through our own expertise. We needed to create something that our current education systems lacked. As a team we originally tossed around several ideas including workshop activities that would allow students the opportunity to engage in the community outside of the classroom. Our major concern with this idea was that although we could reach a large diverse group of students, there was no incentive for them to regularly attend these workshops. In other words, it may be difficult for them to commit to regular attendance. Another possible idea was to create a school store with healthy food choices. The problems we faced with this idea was that although we would be offering students the opportunity to choose healthier choices for lunchtime and snacks, there was no opportunity to show them why these choices would be better, lacking the educational motivation that we value.

We decided the best approach would be to create “The Sprout Society,” an extracurricular course that is developed around the idea of teaching students through a hands-on curricula. The goals of this class are to guide students to identify the gaps between their values, knowledge, and everyday practice. With our team goals and Bloom’s Taxonomy in mind, we sought to build off students’ knowledge through application and analysis. Our goal is to create a learning cycle that students can jump into at any point in the learning process. The instructor and the curriculum meet each individual student where they are at, but also

challenge them to build relationships and ideas collaboratively through group work. For example, the course would teach students about food issues through opportunities to learn-by-doing, such as gardening (rather than through reading about gardening). The instructor will teach the learners through *actions* to encourage this action in themselves. The instructor will also consistently encourage student *reflection* to instill self-assessment and group assessment. Consistent opportunities to not only act, but reflect on our actions is how we improve not only ourselves, but also our systems, our processes, and our solutions. This course will encompass both of these ideals concurrently, in an iterative process of real world and current contexts. Wicked Problem scholar Brian Norton argues for such a process, noting that “in practice... the two phases [action and reflection] normally overlap and proceed simultaneously” (145).

By signing up for an elective course, students would get credit for their efforts and would not have to commit to something outside of school hours. “The Sprout Society” avoids participation problems afterschool programs are likely to face due to time constraints, other commitments, and transportation issues. This allows families the convenience of not having to make additional arrangements during peak after school hours. Additionally, by offering this class during school hours we hope the student body, as well as the community of parents, local citizens, and school staff, would embrace and encourage students’ actions through service learning projects. “The Sprout Society” would give students the opportunity to learn about alternative sustainable food practices

from those in the community who practice the skills and applications of this curriculum. “The Sprout Society” pushes students to learn about food’s systematic problems. Unlike existing programs and regulations, this course empowers students to make changes without forcing change on them.

Process

While there have been outpourings of grassroots organizations focused on food sustainability popping up all over our local communities, there is still work to be done in order to better inspire and educate our youth on the issue. As argued by community advocates Camilla Voelker and Jeff Smith “Food banks and food charity is not food justice. While it is important to have food banks or soup kitchens, if we do not address the causes of food insecurity, then these actions are nothing more than food charity” (Well House Presentation). Desiring to take a more systematic approach and dig deeply into the current situation, one of our first steps as a team was to determine what students knew about where their food comes from. To build upon the knowledge gained through research and in our continued efforts to drive the project forward we developed a short survey to help us answer some of our most basic questions about food education. These surveys were distributed to local schools that had expressed interest in a class centered on food and sustainability. The results of these surveys were pertinent in deciding the direction we would take when drafting a course curriculum and honing in on a specific age group. The survey questions were presented as follows:

1. *Where does a carrot come from?*
2. *Where does an apple come from?*
3. *Draw a quick picture of where this apple came from? Draw a quick picture of where this carrot came from?*
4. *What color is most of your food?*
5. *Where do you get your food from?*

Immediately after reviewing student answers, we noticed a distinct trend in the relationship between questions one through four, and question five. Even Second grade students were able to identify where a carrot and apple came from. Generally speaking, their illustrations resemble a farm or the actual plant from which the food comes. Students were able to visually and verbally identify that their carrots came from the ground or a root, and their apples came from a tree. However, when the students were presented with question five, “Where do you get your food from?”, their answers were wildly different. They had a difficult time relating the food they eat to where it came from in its natural form mentioned in the first four questions. In fact, many of the students cited places like “Wendy’s” or “The Grocery Store” as the source of their food. These answers raised a red flag to our team. If students don’t understand the connection between where food is truly being produced and what they consume on a day-to-day basis, how could we expect them to make future decisions which promote sustainability and healthy eating? Our young learners need to be aware of the possibility of obtaining

food from places other than a superstore. They have the knowledge, but they are not practicing it. In order to promote effective change, we need to educate our young people on skills to become self-sustainable through gardening, harvesting, and preparing. Solving this dilemma is the foundation on which we focused our efforts.

This survey was originally given to students of a middle class suburban school district and then repeated in a low income urban district. Student answers were consistent regardless of the demographic differences. It became apparent to us that there is great need for a more practical, experiential education. For our team these student surveys became a haunting reminder of where we have led future generations. We must educate students *in* the real world, rather than just *prepare* them for it.

Collaboration

Before we could refine our course further we needed to find interested stakeholders. In connection with Tona Ambrose of the Grand Valley Charter School Office, we were connected with Angela Aumaugher, a secondary science teacher at Black River Public Schools in Holland, Michigan offering K-12 education to students. Connecting with a local school would prove to be the most important connection to have in the process of creating “The Sprout Society.” In our first meeting with Aumaugher we brought to the table this

somewhat vague idea of creating an extracurricular course for students to embrace, learn about, and explore their own solutions to the food crisis. We expressed to her the emphasis we wanted to put on community collaboration and hands-on learning for students. As a team we were encouraged to start thinking in more detail about what such a course would look like. Aumaugher advised us to come up with a catalog description for the class; this is what students at Black River would see when deciding their schedules.¹ As a team we wanted to provide a course description where students would envision our mission of a hands-on learning project.

Currently, there are not any other courses offered at Black River that encourage students to critically examine the wicked problem of our food systems. However, as part of the curriculum they do require students take a service/project based learning courses each year. Students at Black River have control over the class they choose in the sense that they get to pick their own subject matter for a special elective course each term. Aumaugher was quite enthusiastic that a class exploring food from ground-to-table would be well received by students. With continued community collaboration and partnership from Grand Valley students this course could potentially be offered as soon as the 2014-2015 school year.

Additionally, we reached out to several professors, community leaders, and

¹ Course Description: Do you know the journey your food takes starting from the planted seed and ending in your mouth? Come explore issues of food and sustainability through community outreach, guest speakers, art and technology projects, and local

garden collaboration. Play an active role in the food you consume, through growing, creating, and connecting by joining the “Sprout Society” for your next term.

grassroots organizations searching for any input, contacts, and suggestions they may have for pushing this project forward². We received many responses encouraging us to continue this work and guiding us through potential barriers and struggles that may lie ahead. These recommendations aligned with the best practices suggested in the scholarship on effective responses to wicked problems. For instance, Valerie Brown says we need to be open to new ways of thinking, be flexible, draw on all kinds of intellectual resources and all kinds of disciplines (4-5). In general, interested stakeholders and experts were overwhelmingly positive, expressing a shared sense of urgency in the matter and welcoming the work we are trying to accomplish. These contacts were immensely helpful and supportive in our process of working through the challenges we faced. We are extremely fortunate and grateful for all of the genuine interest and response we received.

Feedback

After a successful dialogue with community members and organizations, we are hopeful that the future of “The Sprout Society” proves to be a step in the right direction. We were offered a great deal of input from the community, giving us achievable suggestions and advice in terms of future planning. For instance, the feedback we received has helped us compile a list of

community members all located in the Holland area. This list will be pertinent in this class becoming a reality (see Addendum).

Some of the other feedback we received expressed a need to get families, not just students involved in the project. As a team we have decided the best approach to this is to include the community in certain aspects of the course. While it remains pertinent that students will be leading much of the course work, it is valuable that other interested community members be involved in aspects of the course. For example, collaboration with community gardens and local farmers are effective at helping students see the seed-to-table work occurring all around them. Through an extended partnership of “The Sprout Society” and community (see Addendum), it is possible that more than just students can gain education and motivation from this.

Challenges

When confronted with a wicked problem, challenges are guaranteed. As a team, we did our best to use these challenges as a positive catalyst to create new action. One challenge that hindered us for the majority of the fifteen week process was the unresponsiveness of many contacts and stakeholders. We thought it was necessary to gain support in order to get into a school or administration board. We believed that, once we had that foundation, we could gain greater

² Professor Paul Wittenbraker (Grand Valley State University) Suggested potential stakeholders and bigger picture ideas such as civic involvement.

²Melissa Baker-Boosamra (Grandville Center for Arts and Humanities) Offered research suggestions and service learning experience.

²Our Kitchen Table (Grand Rapids, MI) share a similar mission of empowering people through education.

²Ken Freestone was one such interested stakeholder: a creative thinker well-connected in the Holland community and passionate about food justice.

insight into that specific school's needs and restrictions. Once we gained contact with Tona Ambrose (with the GVSU Charter School Office), we were able to move forward with a plan of action.

Another challenge that seemed to follow us throughout the process was addressing the standards and benchmarks associated with the development of a curriculum. Schools use such benchmarks to justify whether a course contributes to creating a holistic education. Once we built a relationship with Black River Charter School, we were able to create a partial curriculum within their boundaries. This led to a more detailed and concise idea of our plan, as well as a real chance for execution of the plan.

Perhaps the greatest challenge we faced as a team was focusing in on one specific proposal. Taking on a problem of this magnitude leaves one with the feeling of helplessness and overwhelming possibilities. Although we had many ideas on the table, the process of choosing just one to develop proved to be difficult when confronted with the scale of this wicked problem. Collectively we spent many hours reaching out to community stakeholders, researching similar programs, developing and redeveloping "The Sprout Society." As the project progressed, our efforts turned to the process of regrouping, refocusing, and reworking the project. Such a process was frustrating. In fact, this iterative process of working and reworking our action plan led one team member to drop the course. This goes to show that the complexity and efforts needed to tackle wicked problems are not for the faint at heart.

Opportunities for Future Considerations

With the collaboration of Black River Public Schools, the head of their science department Angela Aumaugher, and future students at Grand Valley, as well as established community organizations in Holland, MI there is a strong chance the Sprout Society will become a reality. As our goal in creating this elective course has always been to establish a curriculum that would offer students an alternative way to learn about food, our work has in reality become a foundation for future classes at Grand Valley to work from.

We would hope in the future to include Professor Anne Marie Fauvel's LIB342: "Food Matters" students in on our action efforts for this elective course. This class would ideally be taught on the Holland Campus of Grand Valley, placing future students in the very same communities of Black River and its interested stakeholders. By handing off this project to future students, we can secure our actions thus far and not let this idea fade away. Additionally, by utilizing Grand Valley students, Black River students and staff, as well as the Holland community, "The Sprout Society" can work to create a community functioning within a community. Working with Professor Danielle Lake, Professor Anne Marie Fauvel, and the faculty and administration at Black River Public Schools, we wish to carry this elective course to its execution by Spring of 2015.

In connection with Ken Freestone, we have discovered there are many organizations in and around Black River that would be crucial partnerships in creating this course. Established groups such as City of Holland City Garden Projects, The Commons at

Evergreen Community Garden, MSU Extension Programs, Community Kitchen, and Western Theological Seminary would prove to be invaluable resources for the Sprout Society. Through future collaborations these organizations would play a huge role in this course as far as field trips, expertise, and community engagement.

Next Steps

While there is still so much to be done in order to bring this course to fruition, there are a few crucial steps that lie ahead. While Black River Public Schools and Angela Aumaugher are on board with offering this class to students in the next school year, it is important that our team is able to hand off our connections to future groups. Our first step will be to set up a meeting with both Black River and Professors Danielle Lake and Anne Marie Fauvel. This will enable our efforts to be preserved through future students.

As a group we have prepared a list of organizations around Black River that could possibly offer their expertise in the form of field trips, lectures, and advice to the Sprout Society. This list will be given to Aumaugher, Lake, and Fauvel serving as a resource list in the development of a quality food issues course. This foundation was put in place with the goal that future students and faculty continue to nurture the relationships with the stakeholders. It is upon these relationships that “The Sprout Society” can take root and begin to reshape how today younger generation of learners understands their relationship to food.

The possibility for effective change is high. As a team our goals were to educate students through application, analysis, and

experimentation. We have been able to achieve so much progress towards our end goal of implementation through partnerships within the community; and through these relationships it is possible our efforts will become a reality for students within the upcoming year.

Conclusion

As a group of educators, motivators, and communicators, we – The Curriculum Artisans – explored food as a wicked problem, and took steps to relieve and improve the issue at hand in our surrounding community. We have discovered three significant insights in the process are: 1) When working with wicked problems, it is necessary to build positive relationships in order to collaborate with others; 2) It is acceptable, and even sometimes effective, to take steps that are not completed right away when tackling a wicked problem such as food and; As a community we must strive to better our children’s abilities to execute self-sufficient skills of planting, growing, harvesting, and picking their own nutritious food. All of these factors stem from our larger mission: teaching not simply the information, but also application (interactive skills) in order to inspire motivation for future practice in students’ lives outside of school. Once this is established, the gap between what students learn at school and what they are practicing in the real world will merge. We must challenge individuals through community education and real-world contexts in order for food justice to properly manifest itself in society.

References

- Brown, V., Deane, P., Harris, J., & Russell, J. (2010). Towards a Just and Sustainable Future. In *Tackling Wicked Problems: Through the Transdisciplinary Imagination* (pp. 3-15). Washington DC: Earthscan.
- Kolb, David. *Experiential Learning: Experience as the Source of Learning and Development*. Upper Saddle River, NJ Prentice Hall. 2003. Print.
- Norton, Bryan G. (2004). *Sustainability: A Philosophy of Adaptive Ecosystem Management*. Chicago: University of Chicago Press.
- Pollen, Michael (2008, 10 09). Farmer in Chief. *New York Times*, pp. 1-14.
- Salwasser, Hal (2002). Confronting the Implications of Wicked Problems: Changes Needed in Sierra Nevada National Forrest Planning and Problem Solving. *Sierra Nevada Science Symposium*, (pp. 7-16). Kings Beach, CA.
- Smith, Jeff & Voelker (2014, February). *Food Justice Workshop*. Presented to Lib 322: "Wicked Problems of Sustainability class." Allendale, MI

ADDENDUM

NAME: Payton Reeds

CLASS CODE: SK5

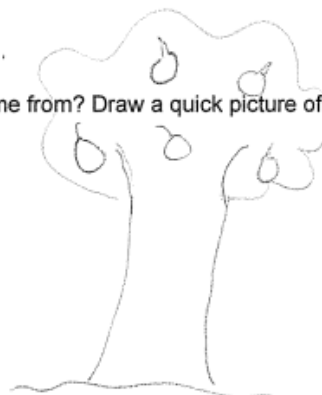
Where does a carrot come from?

seed

Where does an apple come from?

Seed/tree

Draw a quick picture of where this apple came from? Draw a quick picture of where this carrot came from?



What color is most of your food?

Green

Where do you get your food from?

Grocery
Store

2nd grade

NAME: Toby

CLASS CODE: _____

Where does a carrot come from?

a garden

Where does an apple come from?

tree

Draw a quick picture of where this apple came from? Draw a quick picture of where this carrot came from?



What color is most of your food?

orange

Where do you get your food from?

Wendys

POTENTIAL COLLABORATORS FOR BLACK RIVER'S "THE SPROUT SOCIETY"

City of Holland City Gardens

Shelly Devries: 616-990-4212

"Next to Black River"

The Commons at Evergreen Community Garden

Kathy Spitzley: 396-7100

spitzkale@macatawa.org

Science of Gardening

Anne Marie Fauvel

"Volunteer Hours"

MSU Extension

Barry Anderson

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"Master Gardener/Community Gardens"

Community Kitchen - Western Theological Seminary

Tom Boogart

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Composting

Ken Freestone: 616-403-5777

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