Implementing the Morningside College Garden: An Innovative Approach to Empowering Student Learning

Dr. Thomas H. Paulsen
Associate Professor & Department Head
Student Empowerment

• “Integral to the learning process” (Frymier, Shulman, & Houser, 1996)

• Set of motivational processes that increase…
  • Increase personal initiation
  • Persistence to complete a task
  • Feelings of self-efficacy (Conger & Kanungo, 1988)

• Four dimensions of empowerment (Deci & Ryan, 1985)
  • Meaningfulness
  • Competence
  • Impact
  • Choice
Student Empowerment

• Connections to *Self-Determination Theory* (Deci & Ryan, 1985)

| Similarities Across Human Needs and Empowerment Dimensions (Brooks & Young, 2011) |
|-------------------------------------------------|-------------------------------------------------|
| Human Needs                                    | Empowerment                                    |
| Autonomy (control, personal agency, self-determination) | Competence (self-beliefs, values) |
| Competence (control, personal agency, self-determination) | Impact (influence) |

Student empowerment is highly (and positively) correlated with intrinsic motivation (Brooks & Young, 2011)
How did this all begin?

Scheduled to teach a Global Experiences course *History of Food & Agriculture*


How did this all begin?

Final Exam: USDA NIFA Grant Narrative

How did this all begin?

Wellmark Healthy Living Small Match Grant
Establishment of a Club
Building the Garden
Developing Fundraisers
Learning Production & Food Safety
Engaging in Outreach
Feeding Peers
Curricular Integration

Engaging Students in Risk Management Assessment in a College Garden

Dr. Annie Kitwa-Muringa
Professor of Agribusiness
Department of Applied Agricultural and Food Studies

Morningside College
Research and Internships

- Research
  - How other campus gardens compared to Morningside by mean compensation, size, and age.
  - How Morningside can benefit from this study.
Garden to Table Experience

**Fresh Produce**

- 2033 Pounds of produce harvested
- 1075 People served fresh garden produce per day
- 470 Paid hours in the garden
- 21 Days of fresh produce served
- 5 Different types of fresh vegetables served
- 4 Interns
Garden to Table Experience

Educational Impact

- 1550 Experiential learning hours in the garden
- 170 Students directly involved in co-curricular activities
- 18 AAFS lab sessions in the garden
- 10 College majors represented
  - Applied Agriculture and Food Studies, Agricultural Education, Biology, Business, Education, Marketing, Nursing, Non Profit Management, Political Science, Religion
- 7 Classes engaged in garden planning and activities
- 4 Demonstration plots managed by the Crop Production
- 1 Cover crop research project
Garden to Table Experience

Outreach Impact

- **650** Community members engaged
  - Boys and Girls Club, Native American Childcare Center, Morningside Mentors in Science, Spalding Elementary, Mater Dei Catholic School, Omnicron Delta Kappa
- **80** Elementary students served during *Into the Streets*
- **$10,000** Wellmark Healthy Living Grant
Learner Outcomes

Implementation Year Impact of the Morningside College Garden: An Outcomes Framework Approach

Introduction
- Recently, there has been a renewed public interest in food-related programs and initiatives in the U.S. School gardens exhibit many educational benefits.
- Experiential garden-based curricular, co-curricular, and outreach activities were implemented.
- Student perceived impact of 14 research-based outcomes were collected (Perkins, 2018).

Conceptual Framework
- Davis, Vann, & Scott’s (2016) framework for the evaluation of school gardens was used.
- 14 I-Smart, 13 Intelligence, and 11 Long-term Outcomes for school gardens.
- Provides a “valid foundation for an outcomes-driven school gardens program” (Perkins, 2018).

Methods
- Census of students (n=470) who participated in garden-based curricular or co-curricular activities in the Morningside Garden’s initial year.
- 80 usable responses (67% response rate).
- Electronic, online questionnaires.
- Pre-post reliability was excellent (r=0.98).

Conclusions
- Students who participated in garden-related activities increased their knowledge and understanding of key garden outcomes.
- Outcomes-driven programming provides students with high levels of attainment.
- Increased appreciation of local food systems, interdisciplinary connections, and a better understanding of the value of a garden provide an ideal for activity development.

Implications/Recommendations
- Study has implications for those who develop curricular and co-curricular garden programming.
- Backyard design principles, horticulture programs, and food gardens should be used.
- Additional research regarding knowledge and Long-term Outcomes should be implemented.

References
The garden allowed me to:

• Develop leadership and cooperation skills
• Improve and diversify my leadership skills
• Improve my social interaction with peers
• Advocate for agriculture in my community
• Communicate and work with others in a non-athletic setting
• Develop accountability and time management skills
• Teach hands-on sustainability practices to my peers
• Teaching youth about growing food
• Improve my self-awareness and self-reliance

Student empowerment is highly (and positively) correlated with intrinsic motivation (Brooks & Young, 2011)
Questions?