



2008 Galaxy III Conference
Poster Session
Indianapolis, IN



***Preparing teens for the 21st century workforce:
Work-based learning as a strategy to bridge the skills gap***

Graham R. Cochran, Nate Arnett, Niki Nestor McNeely, and Theresa M. Ferrari
Ohio State University Extension

The poster session abstract, key resources and a mini version of the poster are included on the following pages. Electronic versions of the poster, poster handout, and supporting resources referenced in the poster or handout can be found at <http://www.ohio4h.org/workforceprep/>. For more information, please contact Nate Arnett (arnett.67@osu.edu; 937-278-2601) or any of the authors.

Abstract

Extension professionals across program areas have an opportunity to address the “skills gap” through work-based learning experiences. Learn about the skills young people need, work-based learning as a model for engaging teens, key ingredients, and evaluation strategies that will make the work experience a learning experience for teens.

Key Resources

A list of supporting resources for developing and implementing work-based learning programs is included below. Electronic versions can be found at <http://www.ohio4h.org/workforceprep/>.

Sample tools from OSU Extension work-based learning programming that could be adapted for use in other Extension programs.

- [Performance evaluation](#)
- Youth [self-assessment](#)
- [Journal](#)

Ohio 4-H workforce preparation overview ~ Guide for Extension professionals to align their work and program planning with workforce preparation concepts and programming strategies.

Skills for success in the knowledge economy ~ Action brief providing a synthesis of recent publications describing workforce skills needed in the 21st century.

Work-based learning ~ Action brief including a description, strategies, and key ingredients for success.

Ferrari, T. M., Arnett, N., & Cochran, G. (in press). ~ Paper describing one of OSU Extension’s work-based learning programs.

Cochran, G. & Ferrari, T. (2008). ~ See p. 29-33 for program profiles, key ingredients, and illustrations. For more information on assessment, see p. 35.

Cochran, G. & Ferrari, T. (in review). *After-school programs and workforce preparation: Exploring the opportunities to prepare youth for the 21st century knowledge economy.*

References

Arnett, N., Lekies, K., & Bridgeman, B. (2008). *2007 Sauder-Funded Work-Based Learning Programs (Gardening Focus)*. Retrieved July 1, 2008 from Ohio State University Extension, 4-H Youth Development web site:
<http://www.ohio4h.org/workforceprep/documents/SauderGardeningWBL2007.pdf>

- Bailey, T. R., Hughes, K. L., & Moore, D. T. (2004). *Working knowledge: Work-based learning and education reform*. New York: RoutledgeFalmer.
- Cochran, G., Arnett, N., & Ferrari, T. M. (2007). Adventure Central: Applying the “demonstration plot” concept to youth development. *Journal of Higher Education Outreach and Engagement*, 11(4), 55-75.
- Cochran, G. & Ferrari, T. (in review). After-school programs and workforce preparation: Exploring the opportunities to prepare youth for the 21st century knowledge economy. Paper submitted for publication in *Afterschool Matters*.
- Cochran, G. & Ferrari, T. (2008). Workforce preparation in the context of youth development organizations: Building a case with theory, research, and practice. Available at <http://www.ohio4h.org/workforceprep/>
- DeCoursey, J., & Skyles, A. (2007). *Making connections: Engaging employers in preparing Chicago's youth for the workforce*. Chicago: Chapin Hall Center for Children at the University of Chicago.
- Eccles, J., & Gootman, J. A. (Eds.). (2002). *Community programs to promote youth development*. Washington, DC: National Academy Press.
- Ferrari, T. M., Arnett, N., & Cochran, G. (In press). Preparing teens for success: Building 21st century skills through a 4-H work-based learning program. *Journal of Youth Development*.
- Halpern, R. (2006). After-school matters in Chicago: Apprenticeship as a model for youth programming. *Youth and Society*, 38(2), 203-235.
- Kazis, R., & Kopp, H. (1997). *Both sides now: New directions in promoting work and learning for disadvantaged youth*. Boston: Jobs for the Future. Retrieved from www.jff.org
- Kress, C. A. (2006). Twenty-first century learning after school: The case of 4-H. *New Directions for Youth Development*, 110, 133-140.
- Lerner, R. M. (2006). *The study of positive youth development: Implications of developmental change across grades 5, 6, and 7*. General session presented at the National Association of Extension 4-H Agents, Milwaukee, WI.
- Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E. Gestsdottir, S. Nadeau, S., et al. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. *Journal of Early Adolescence*, 25(1), 17-55.
- Levin, H. M. (1994). Educational workplace needs. *Theory into Practice*, 33(2), 132-138.
- Matloff-Nieves, S. (2007). Growing our own: Former participants as staff in afterschool youth development programs. *Afterschool Matters*, 6(Spring), 15-24. Retrieved January 20, 2008, from http://www.robertbownefoundation.org/pdf_files/2007_asm_spring.pdf
- National 4-H Impact Assessment Project. (2001). *Prepared and engaged youth*. Washington, DC: U.S. Department of Agriculture, Cooperative State Research, Education, and Extension Service. Retrieved from http://www.national4-hheadquarters.gov/about/4h_impact.htm
- New Ways to Work. (2003). *Quality work-based learning toolkit*. Sebastopol, CA: Author. Retrieved January 26, 2008, from http://www.newwaystowork.org/mastertools/guidebooks%20and%20toolkits/kcktoolkit/Print_Toolkit.PDF
- Partee, G. L. (2003). *Preparing youth for employment: Principles and practices of five leading United States youth development programs*. Washington, DC: American Youth Policy Forum. Available at: www.aypf.org
- Pittman, K., Yohalem, N., Wilson-Ahlstrom, A., & Ferber, T. (2003). *Policy commentary #2: High school after-school: What is it? What might it be? Why is it important?* Washington, DC: The Forum for Youth Investment. Retrieved January 28, 2008, from: <http://www.forumfyi.org/Files//ostpc2.pdf>
- Whalen, S. P., DeCoursey, J., & Skyles, A. (2003). *Preparing youth for the workforce: Exploring employer engagement in the Chicago region*. Chicago: Chapin Hall Center for Children at the University of Chicago.



Preparing Teens for the 21st Century Workforce: Work-Based Learning as a Strategy to Bridge the Skills Gap

Graham Cochran, Nate Arnett, Niki Nestor McNeely, and Theresa M. Ferrari — Ohio State University Extension



Preparing youth for the workforce has taken on new meaning in the 21st century. A shift from the industrial age to the knowledge economy has created widespread concern that young people lack the skills essential for job success and are entering the workplace unprepared. Extension professionals and programs can play an important role through work-based learning.

What Is Work-Based Learning?

Work-based learning programs involve teens in practical experiences that integrate work and learning, taking into account the developmental needs of youth participants.

Work-based learning programs:

- Are real life experiences that are structured, supervised, and evaluated
- Use the experiential learning model
- May be paid or unpaid, but are clearly viewed as real work

Why Is Work-Based Learning Important?

High quality work-based learning programs are an opportunity to build the capacity of tomorrow's workforce. Not only will young people be better prepared for work, our country will benefit from having young people who are prepared for the responsibilities of life in a civil society. The importance of preparing our youth for success in this new age—the knowledge economy of the 21st century—cannot be underestimated.

Studies show that work experiences can have a positive impact on both the young people and the businesses or organizations that participate by hosting teens as employees in work-based learning programs (DeCoursey & Skyles, 2007; Ferrari, Cochran, & Arnett, in press). Those with experience conducting work-based learning programs perceive multiple benefits.



Benefits of Work-Based Learning

Teens

- Make connections between real work expectations and the classroom
- Pursue education with a greater sense of purpose
- Interact with positive adult role models
- Develop new skills
- Receive feedback on their skill development
- Experience enhanced self-concept and self-esteem
- Expand their horizons and awareness of future work options

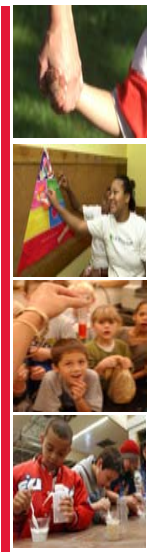
Employers

- Enhance skills of their employees (e.g., learning to supervise others)
- Realize contributions youth make to workplace
- Give back to the community

Youth Organizations

- Accomplish their mission
- Meet developmental needs
- Retain teens in their programs
- Add authenticity and relevance to the learning experiences they provide
- Groom potential employees in their organization

Source: Cochran & Ferrari, in review; Secondary Sources: Bailey, Hughes, & Moore, 2004; Ferrari, Arnett, & Cochran, in press; Halpern, 2006; Matloff-Nieves, 2007; New Ways to Work, 2003, p. iii; Pate, 2003; Whalen, DeCoursey, & Skyles, 2003



Skills for Success in the Knowledge Economy

- Thinking Skills
- Communication
- Teamwork and Leadership
- Lifelong Learning and Self-Direction
- Technology Adoption and Application
- Professionalism and Ethics

Key Components of Ohio's 4-H Workforce Preparation Model

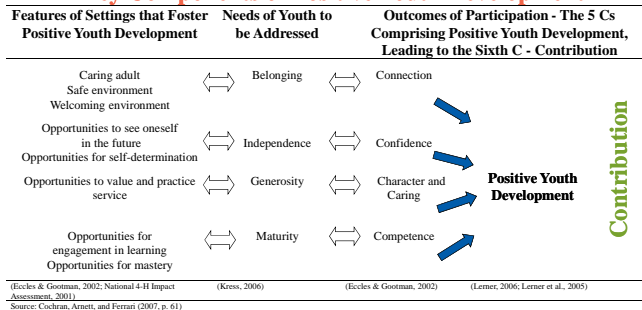
- Career Awareness & Exploration
- Skill Development
- Work-Based Learning
- Post-Secondary Internships
- Lifelong Learning

Making the Case - Why Work-Based Learning in Extension Programs?

Many of the skills critical for success in the 21st century workforce are the same skills needed to be capable, competent, and contributing citizens and family members (Kazis & Kopp, 1997; Levin, 1994). Extension programs are an ideal place to focus on developing the skills needed for the 21st century workforce for several reasons:

- Our track record of developing leadership and other 21st century skills
- Positive youth development approach provides the ideal context
- Experience designing programs that meet adolescents' developmental needs

Key Components of Positive Youth Development



(Eccles & Gootman, 2002; National 4-H Impact Assessment, 2001) (Kress, 2006) (Eccles & Gootman, 2002) (Lerner, 2006; Lerner et al., 2005)
Source: Cochran, Arnett, and Ferrari (2007, p. 61)

Features of the positive youth development approach that are especially important for work-based learning programs:

- Supportive adults
- Safe environment
- Engagement in learning

Opportunities for Extension Professionals

There are a variety of roles for Extension professionals to play. You may decide to plan and implement a new program designed for the express purpose of developing workforce skills (e.g., summer work programs with supervised worksite placements). Or, many existing programs have the potential to be designed and implemented as work-based learning. Some current 4-H program delivery models lend themselves very easily to a work-based learning enhancement such as:

- Camp Counseling
- Service Learning
- Teen Leadership



Enhancing Existing Programs

Value Added Concept

Viewing existing programs through a workforce preparation lens adds value, making them high quality work-based learning experiences. Service-learning and volunteering use the community as a context for helping youth develop and apply critical skills that are important in the workplace and in life in general, and can therefore be part of a comprehensive approach to workforce preparation (Cochran & Ferrari, 2008).



An example:

Greene County's Friends Care Intergenerational Garden

- Started as an intergenerational garden at a nursing home, it was designed as a community service project that teaches gardening skills.
- Added performance appraisals, self-assessment, and reflection opportunities.
- Now provides opportunities to build workforce preparation skills in an experiential hands-on setting (Arnett, Lekies, & Bridgeman, 2007; Beth Bridgeman, personal communication, January 10, 2008).

Growing Your Own Concept

Growing your own is a natural progression from participant to teen leader to teen employee to adult staff member. Keeping teens engaged by offering work-based learning programs is a way to retain teens who may drop out of youth programs because work often conflicts with their participation in out-of-school time programs (Pittman, Yahalem, Wilson-Ahstrom, & Ferber, 2003).

The concept of growing your own makes sense from a youth development perspective and as a practical way to address current staffing needs and develop a talent pool of future employees who have a commitment to the mission and goals of our Extension organizations. Extension organizations should consider employing teens or young adults, be intentional in implementing this practice, and be mindful of work-based learning principles to provide positive experiences.



Recommended Practices

Tips and Suggestions for Developing & Implementing Your Program with Work-Based Learning in Mind

Be deliberate and intentional	Plan for your program to be a work-based learning program and communicate that clearly.
Set the stage	Provide understandable and specific expectations to adults and teens at the very beginning of the program.
Provide training for adults on their roles	Adults need to understand the goals of the program and understand how to facilitate learning experiences for teens.
Afford teens real work experiences	Teens need to feel like what they are doing matters and is worthy of their being responsible.
Build reflection into the process	The use of the experiential learning model for work activities and experiences deepens the knowledge and helps to apply lessons learned to future situations. Look for ways to structure this into the work experience naturally as opposed to "special reflection time" that always relies on a facilitator.
Use authentic assessments/evaluations	Performance appraisals, self-reflection, journals, and solicited feedback all work easily into the process when a program is viewed through the work-based learning lens.
Remain realistic	Start small in your scope and depth of the program. Build on successes in future efforts. Add a few features in subsequent programs.