Facilitating Career Pathways for Low-Income Rural Students:
Cooperative Extension as a Community Connector

To: Workforce Engagement Model Design Team

From: Sheila Martin and Florencia Drumwright, APLU

Date: April 7 2021

Re: **Internal memo highlighting existing Cooperative Extension workforce resources**

The purpose of this internal memo is to identify and review resources currently available to the workforce engagement model design team and addressing any gaps. We appreciate your resource submissions and look forward to continuing working together towards setting up the pilot communities by July.

Workforce engagement model resources categorized by elements

Identifying Workforce Needs

Available resources:

Contain methods and sources

I. Grant funded research-based, data-driven pilot projects with a focus in:
   a. Understanding the process of moving into the workforce in rural versus urban areas [2] [1]..
   b. The workforce and education pipeline [12] .
   c. Initiative to identify skill gaps and quantify the skill level of their workforce. [46]

II. Descriptive studies and methods used on analyzing:
   a. the impact of remote employment in rural communities.[14]
   a. Data resources needed to analyze the workforce pipeline (see Appendix A) [12]

III. Others:
   a. Employer needs survey, state's workforce report.
   b. Practical guidance for workforce collaboratives interested in embedding qualitative research into Learning Community Partnership
   c. AFRI workforce development program.

Gaps:

The need that is not addressed is a specific tutorial on how to use quantitative data and qualitative data to answer the questions: what kind of workforce does this community need? What skills are already here? What gaps exist?

Developing Key Partnerships

Available resources and Programs

a. with the purpose of strengthening the capacity of rural America communities by developing and implementing development and partnership. [6]
b. Intensive occupational program via Land-grant Universities designed to efficiently improve communication for non-native speakers and employers [22]
c. Promising initiative that can foster scholarship type collaborations by leveraging existing resources.
d. An Integrated Education and Training (IET)curriculum [49]

I. Resources:
   a. That show different elements of the workforce system [10]

b. Online courses and training material to for local leaders, communities and development groups to assist with business retention and expansion in rural areas. [9] [10] [4]
c. Workforce development proposal and sample program [47].

II. Methods of partnership development between University and community by offering a community-based service-learning experience [31]

Gaps

The main gaps seem to be resources for understanding what different partners in the workforce development system can bring to the table: what are their roles, motivations, and resources for operating in the workforce development system. A few resources exist about who these partners might be, but a more complete understanding of their roles, responsibilities and motivations and how Extension is positioned to work with them is needed.

Mapping Pathways

I. Available resources
   a. Building Industry-Driven career pathway guide (Colorado)

II. Community development models:
   b. for creating a competitive workforce. [12]

III. Programs with methods:
   a. Encouraging culturally relevant community collaboration for the future of youths and minority groups. [16]
   b. Designed for 18+ rural youths. [29] [35] [15]
   c. Methods to building a 4-H Career Pathway Initiatives.

Gaps:

What is needed are examples of how extension has worked with community partners to design programs that get a worker/learner ready for, into, and through training that prepare them for specific jobs or careers and then gives them access to those job opportunities.

Recruiting and Supporting Rural Learners.

Available resources

I. Programs that:
   a. Education low -income families on the process of moving from welfare to work [38]
   b. Encourage the collaboration with nonprofit and other organizations to help both partners increase program impacts and decrease costs [31][21]

II. Models of outreach used to best attract specific groups of people, such as women and youth. [15] [26] [20] [18] [35] [34] [2][7][18] [24]
   a. Culturally relevant program designs (Latinx community).[17]
   b. Means and Standard Deviations for why youths might leave programs like 4-H [29]

III. Social Media as an outreach method [27][28]

Gaps

A model for determining the most effective outreach methods for rural learners and workers, and for determining the kinds of supports they may need to pursue a career path, with information about Extension can connect them to relevant resources.

Building rural entrepreneurship and leadership skills.

Available resources

I. Framework that focuses on community empowerment, generational success, and community development. [2] [17]

II. Programs that

a. Work to strengthen the capacity of rural America communities to work together in developing and implementing an economic development. [32][13]
b. Microenterprise development programs. [27]
c. to enhance leadership skills, such as thinking critically and creatively, communicating effectively, self-awareness, decision making, strategic planning and managing conflict in rural communities [18]
d. Workshop focused on building and strengthening communities entrepreneurial network. [44]

III. Online tools and software that enable communities to bring local leaders and development groups together for a comprehensive look at the needs and opportunities of local business. [10][3]
IV. Innovative entrepreneurship curriculum. [36] [37]

Gaps
How might communities assess where the business development opportunities might be for an aspiring entrepreneur—for example, identifying unmet needs of local residents and businesses.

Program Evaluation

I. Evaluation Tool for Collecting Statewide Outcomes for Single-Session Programs [39]
II. Web analytics mapping tools to evaluate program impacts. [40]
III. A Model for Integrating Program Development and Evaluation [41]
IV. Innovative methods to evaluate programs. [42]
V. logic models as the basis for meaningful evaluation. [43] [9A]
VI. Sample workforce development system performance analysis, and youth workforce projects.

Gaps
Analyzing whether the current evaluation tools, models and methods are sufficient to create a successful program evaluation.

Conclusion
These resources will serve as a starting point, their review will help us identify gaps and begin to outline the process for developing the model using these elements.

Resources:

I. Bridging the Skills Gap

- Grant funded research-based, data-driven pilot project funded by the Rural Futures.
- SDSU Extension, Nebraska Extension and Purdue University.
- A comprehensive, strategic approach to education and workforce development that enables a community to recognize the good things they already have underway and identify the greatest opportunities and issues that they can then address

2. DMAP 2016

- Grant funded tri-state focus groups aimed to understanding workers incentives, minimize the impact of lost jobs to communities by implementing workforce planning and revitalization efforts.
- Purdue University.
- Results based on Engine and furniture maker industries.

3. University Innovation Connector.

- University Innovation Connectors.
- There are multiple existing and emerging hot beds of University innovation. This initiative aspires to create "bridges" between University innovation and rural communities and entrepreneurs.
- Targeted opportunities include: Engler Agribusiness Entrepreneurship Program – www.engler.unl.edu; Raikes School of Computer Science and Management – www.raikes.unl.edu

4. Ecommerce Training through the Broadband & E-Commerce Education Center (2014)

- Series of hands-on pilot workshop with the goal of understanding demand, needs, training and best practices. The series of e-courses support the adoption and use of technology to foster economic development in communities.
- University Wisconsin Extension

5. Stronger Economies Together (2015)

- The purpose of the Nebraska Extension program, Stronger Economies Together (SET) is to strengthen the capacity of rural America communities to work together in developing and implementing an economic development blueprint.
- University of Nebraska – Extension

6. The Community Bridge Project (missing program link)

- Grant funded project that assesses via surveys the experiences of rural versus urban low-income individuals as they become employed and try to maintain their employment as a way to leave welfare behind. It compares similarities and differences in demographic characteristics, prior work experiences, and levels and sources of income
- Overall goal: To better understand the process of moving into the workforce in rural versus urban areas.
- Pennsylvania State University – Extension

7. CYFAR (Children, Youth, Families At-Risk)

- Grant-funded program that works with vulnerable populations to bring them what they deem necessary for their communities.
- University of Minnesota & Pennsylvania State University

8. Rural Workforce and Entrepreneur Recruitment and Retention (2017)

- NIFA/AFRI-Funded project focusing on efforts to attract and retain a rural workforce. The research project will support people-focused initiatives by: 1) creating a typology of efforts; 2) conducting focus groups and surveys that better describe newcomers; and, 3) using focus groups and surveys to understand whether newcomers of many types are integrating well into rural life.
- The University of Minnesota Extension

9. Business Retention and Expansion

- Strategic Program (course) aimed to brings local leaders and development groups together for a comprehensive look at the needs and opportunities of local business. A toolkit that provides training, facilitation, online tools and software that enable communities to build their own BR&E approach.
- University of Minnesota- Extension

10. The Stronger Economies Together (SET) Badlands/Bad River

- The SET Program is sponsored by USDA Rural Development, in partnership with South Dakota State University (SDSU) Extension and the Regional Rural Development Centers.
- Designed to strengthen the capacity of rural communities and counties to work together in developing and implementing regional economic development plans

11. Workforce Systems at a Glance

- List of workforce councils, local employers, state and federal stakeholders.

- Workforce matrix poster.

12. Creating an education and workforce pipeline
- Provides a comprehensive community development model for creating a competitive workforce
- University of Arkansas Cooperative Extension

13. Strengthening Entrepreneurship and Building Leadership Capacity in Rural Communities
- Model for other Extension programs across the United States that are looking for effective strategies to support and enhance community-based entrepreneurship.
- Conference.
- The University of Maine Cooperative Extension

14. Evaluating Utah's Rural Online Initiative: Empowering Rural Communities Through Remote Work
- Grant-funded descriptive study that demonstrates an increase in knowledge, improved skills, and positive intentions toward seeking remote employment in rural communities.
- Utah State University

15. Girls in Science, Technology, Engineering, and Math: From Camps to Careers
- A model for intentionally engaging youths to expand access to career opportunities that can be adapted for other Extension programming.
- Oregon State University.

16. OSU Open Campus
- Juntos pilot program: Works to unite community partners to provide culturally relevant programs designed to reduce drop out rates, and encourage collaborative work to gain access to college.
- The Latinx Summit: Designed in two fragments; a facilitated Introductions to the Courageous Conversations About Race framework and a facilitated discussion about next steps towards assessing and scanning resources available to latinx students, and the broader latinx community.
- The Engagement Academy for University Leaders: is designed for executive that have the ability to influence or participate in planning activities that develop strategic engagement operations and policies. (APLU partner)

17. Rural Leadership North Dakota (RLND)
- North Dakota State University Extension.
- Participants develope skills to help them shape the future of their organization, community and state.
- The program helps participants enhance leadership skills, such as thinking critically and creatively, communicating effectively, self-awareness, decision making, strategic planning and managing conflict.

18. Understanding Missouri Workforce System
    - Primary responsibility of the program is to administer numerous workforce development programs across the state.
    - These programs support employer efforts to find and train employees, and help potential employees find jobs.
    - Administers programs aimed at specific groups, such as dislocated workers and youth. It also oversees—in conjunction with local workforce development boards—the nearly 30 Job Centers located across the state.

19. The Youth Development Academy is a course taught by the University of Missouri Extension targeted at youth leaders, educators, community leaders, and coaches.
    - the Missouri 4-H Foundation partners with universities, corporations, foundations and individuals to build stronger 4-H programs and provide financial support to benefit Missouri's youth. We help empower young people in every county of the state to learn by doing and become the leaders of tomorrow.
    - Academy members enroll in projects at the beginning of the academic year based on their personal interests and the availability of project leaders for their club.

20. Ramping Up Rural Workforce Development: An Extension Centered Model

- Describes a community-based approach to rural workforce development, with Extension at its center. This model recognizes Extension as a critical actor in fostering cross-sectoral collaboration to address complex workforce issues, enhance community capacity, and mobilize action.
- Through participatory methods and economic analysis of local industries.
- University of Nebraska, South Dakota State University, University of Toronto – Extension.

21. Ripple Effect Mapping: A "Radiant" Way to Capture Program Impacts
- The method, known as Ripple Effect Mapping, uses elements of Appreciative Inquiry, mind mapping, and qualitative data analysis to engage program participants and other community stakeholders to reflect upon and visually map the intended and unintended changes produced by Extension programming.

22. In Vermont, *Se Habla Español*: Using Occupational Spanish to Help Dairy Farmers Manage a Changing Workforce

- Article reports on the use of an intensive occupational Spanish program designed to efficiently improve communication between Vermont dairy farmers and their Hispanic workers.
- Organization and methodology.
- University of Vermont. partnership with a service-learning course at the University of Vermont

23. Health Professions and Cooperative Extension: An Emerging Partnership

- The grant project was awarded to seven health professions students in four states. Evaluation of final student reports and interviews of administrators, specialists, and county agents were conducted to determine the extent of service-learning benefits to the student, partnership development in communities, and benefits to Extension.
- Pennsylvania State University, and West Virginia University – Extension
- This project brought higher visibility of Extension to the community by creating and strengthening partnerships.

24. Environmental Project Provides Work Experience for Rural Youth

- Bootstraps is a 12-week program designed for rural youth, ages 18-21, who are not working and not in school. The program goal is for participants to develop skills and motivation to find meaningful work, which is accomplished through a combination of classroom learning and practical fieldwork.
- The environmental fieldwork on public lands, funded by the Bureau of Land Management, provides the venue for these disenfranchised youth to change their attitudes and values about work.
- University of Nevada Cooperative Extension
- The program is based on transition into adulthood. The goal is for graduates to develop life skills and work experiences while working on an environmental field project.

25. Increasing Participation of Women in Agriculture Through Science, Technology, Engineering, and Math Outreach Methods
- Review of literature and data associated with the prevalence and persistence of women's engagement in agriculture from youth-focused programs through to college and employment in order to learn which models of outreach may best attract women to and retain women in agricultural careers.

- Systematic literature review shows that using science, technology, engineering, and math models of outreach and reframing agriculture as a career that builds communities and cares for the planet can engage more women in agriculture.
- Virginia Tech and Virginia State University, Virginia Polytechnic Institute and State University.

26. The impact of microenterprise development (MED) programs on low-income clients

- These programs educate low- to moderate-income Vermonters on how to start and run a business so they may successfully pursue self-employment
- MED programs provide low-income persons with access to these and other resources that they might not otherwise have access to from mainstream organizations
- Model: Micro Business Development Program Theory
- Methods: Survey, Cross tabulation and McNemar analyses

27. Twitter Chats: Connect, Foster, and Engage Internal Extension Networks

- The Ohio State University, Utah State University, Mississippi State University -Extension.
- To engage Extension clientele and other audiences, Extension professionals must seek out and use the current tools and methods of engagement. The EdTechLN has found this method useful for engaging with its members
- The use of this technology can be a worthwhile method of engagement if suitable for the intended audience.

28. Expanding the Reach of Extension Through Social Media

- Research illustrating how social media can be integrated into outreach and measured, and describing opportunities and challenges for Extension professionals enhancing their work with social media.
- Survey results: Social Media Tools Used Most Often and Thought Most Useful for the Work Place Mission.
- Using social media, illustrates how social media can be integrated into current outreach plans, and establishes opportunities and challenges for Extension professionals enhancing their reach with social media
- North Carolina State -Extension.

29. Addressing Retention in Youth Programs: A Survey for Understanding Families' Experiences

- University of California, University of Idaho
- Addressing Retention in Youth Programs: A Survey for Understanding Families' Experiences
- Survey used to assess the first-year experience and intent to reenroll. View of the survey development process, survey testing, lessons learned, and conclusions related to its future use.
- Means and Standard Deviations for Why Youths Might Leave the 4-H Progra

30. Increasing Collaboration Between Extension and Community-Based Nonprofits: The Quick Chats Workshop

- Enhanced collaboration between Cooperative Extension and nonprofit organizations has the capacity to help both partners increase program impacts and decrease costs
- process that was pilot tested in one Cooperative Extension district in Florida. Cooperative Extension faculty and leaders of nonprofits in the region were invited to a semi structured session called Quick Chats. The purpose of the event was to provide potential collaborators a safe place to introduce themselves and their professional interests and to exchange contact information—all within a few minutes

31. Economic and Leadership development programs

- Programs on business retention and expansion, strategic planning, business location decisions, workforce development in rural communities.
- Leadership programs that enhance decision making skills, effective communication, meeting techniques and coaching.
- Community based programs with local goverment resources, susstainable development initiatives and entrepreneurship.

32. To Like or Not to Like: Social Media as a Marketing Tool

- Article focused on a specific social media strategy for a rural business, lessons are applicable and replicable.
- 5 steps for rural businesses social media marketing strategy.

33. IT Workforce Development: A Family and Consumer Sciences Community Capacity Model
- Virginia Tech.
- Develop community capacity through a unified sustainable program of change grounded in the *Learning Partnership Model (LPM)* and based on effective business practices to provide community team members with the necessary tools to increase interest among middle and high school girls in jobs requiring IT skills.
- demonstrated the development of relationships within the targeted communities to empower others to prompt a deeper understanding of gender inequity within IT by situating learning within a culturally conscious context.
- This increase in knowledge encourages the development of community capacity

34. Assessing Results of 4-H Mentoring with Native American First-Generation 4-H Youths
- findings indicate that as a result of relationships with mentors, youths gained positive life skills and critical workforce expertise that will assist them in attaining their education goals and securing career opportunities.
- North Dakota State University Extension

35. Beyond Lemonade Stands to Main Street Business Development: A Youth Entrepreneurship Curriculum
- University of Nebraska–Lincoln
- Youth entrepreneurship curriculum—Entrepreneurship Investigation (ESI)—for middle and high school students.
- Used at 4-H summer camps, for formal classroom and out-of-school instruction, and in additional educational environments.
- Findings indicate that the ESI curriculum may be effective for promoting community entrepreneurship and that communities that provide entrepreneurship education might ultimately see business creation by student participants.

36. The Dollar Game Curriculum: Inspiring Wealth Creation in Rural Communities
- an innovative curriculum where participants collectively build an understanding of how innovation, income distribution and export affect their communities.
- The game can be used as a front-end module in larger community development programming as well as standalone to help a community explore place-based needs
- The game was piloted with Extension educators in Idaho and at the 2014 Western Rural Development Center's Community Development Extension Institute. After peer review by colleagues from Utah State University, Oregon State University, and within the University of Idaho Extension, the game is now accepted as a formal curriculum within the University of Idaho.

37. Characteristics of Effective Training: Developing a Model to Motivate Action
- The article reviews findings on effective training, reports the process and outcomes of training model development, and suggests practical ways for implementing the resulting model in the classroom.
- Extension educators at The University of Tennessee focused on development of more effective techniques to guide families through the processes that move them from welfare to work.
- University of Tennessee
- Methods for Developing the Training Model.

38. Evaluation Tool for Collecting Statewide Outcomes for Single-Session Programs
- Purdue Extension Health and Human Sciences (HHS Extension)
- Evaluation tool based on the need to collect statewide metrics on a standardized set of questions addressing the topics of food, family, money, and health. This evaluation tool, Survey Builder,HHS Extension to demonstrate the collective outcomes of statewide programming efforts.
- Survey Builder was developed to be used by other organizations as well.

39. Using Maps in Web Analytics to Evaluate the Impact of Web-Based Extension Programs
- University of Wisconsin-Madison
- Web analytics tools to evaluate program impacts.
- Maps add a unique perspective through visualization and analysis of geographic patterns and their relationships to other variables.
- Assess whether program goals are being met and lead to better understanding of the roadblocks to effective online information delivery.

40. A Model for Integrating Program Development and Evaluation
- The Pennsylvania State University
- Framework for combining program development and formative evaluation .
- The model includes inputs, an educational intervention, and outcomes.
- Data collection allowed for a rigorous examination of whether or not program components were successful, and why.
- Extension educators should consider using the model as an effective way to combine program development and evaluation.

41. The Skillathon: Program Evaluation Can Be Fun!
- Rutgers University
- Innovative methods to evaluate programs, especially tools that capture improvements in skills but are not burdensome to participants.
- The skillathon, can be adapted easily for use as an assessment tool well suited for documenting skill changes.

42. Be "Logical" About Program Evaluation: Begin with Learning Assessment
- Oregon State University
- Using logic modeling as the basis for meaningful evaluation, specific steps are outlined for measuring learning outcomes.
- The steps include articulating outcomes, turning outcomes into knowledge statements, and constructing a tool to measure perceived changes in knowledge.

43. Homegrown: Entrepreneurship in your Community Workshop
- Building and strengthening your community's entrepreneurial network.
- This program will aid participants in creating a supportive network in rural areas, so that when entrepreneurs are considering starting a business they get supportive signals from key community leaders.

44. A Research Based Approach to the Development of Educational Programs for Extension Clientele: A Case Study on Land Use Issues in Ohio
    - A series of surveys of public attitudes regarding land use
    - Respondents were deeply concerned about preserving farmland and rural character.

45. ACT Work Ready Communities - Work Ready For Counties
    - ACT® Work Ready Communities [WRC] initiative, counties can identify skill gaps and quantify the skill level of their workforce.
    - This helps educators build career pathways aligned to the needs of business and industry -- and it also helps a community stand out and be recognized for its workforce development efforts. A strong workforce is a tremendous economic development advantage.

46. Virginia's Workforce Development Programs
    - The General Assembly directed JLARC to assess how effectively Virginia's workforce development programs meet the needs of employers and to examine the transparency of information on program expenditures and outcomes

47. Tennessee Pathways

- The Tennessee Pathways Certification, a designation for school districts and their partners, recognizes strong alignment between high school programs of study, postsecondary partners, and high-quality employment opportunities in each region of the state.

48. Developing Basic Skills Curriculum for an IET:A Guide for the Pathways to Employment Program
    - The Central Pennsylvania Workforce Development Corporation (CPWDC) launched the Pathway to Employment initiative to enhance job training services available in the region with a particular focus on adults who lack basic skills
    - in communication, reading, and math.
    - It provides resources and tools that will help
    - practitioners plan, design, and implement the basic skills component of an Integrated Education and Training (IET)curriculum

Additional Resources

1A. Community Prosperity Collaboration

- The goal of the Rural Community Prosperity Working Group is to create a comprehensive strategic framework – a scaffold -- for an innovative, robust and integrated approach to rural community vitality, prosperity and resilience. This framework should reinforce the role of the University of Nebraska as a key resource with core assets to help rural communities position themselves for long-term economic prosperity.
  Participants in Prosperity (2016)
- Grant funded research consisting of facilitated group discussions among workers and job-seekers struggling to live on limited incomes, employers, staff of support organizations, and people holding economic development and other leadership positions within the community.
- Explore community strategies.
- Portage County UW-Extension.

2A. Engaging Your Community: A Discussion Leader's Guide-L. Steven Smutko, NC State University, Raleigh, NC, 2008

- This series of nine booklets help discussion leaders and facilitators design and lead collaborative community problem-solving forums.

3A. Adapting Community and Economic Development Tools to the Study of Local Foods: The Case of Knox County, Ohio

- assessment of the economic development opportunities and impacts of local food system development in Knox County, Ohio.
- The data and analysis are drawn from several different sources, including demographic census data and retail and economic activity data.

- The assessment findings and the process of coordinating the assessment effort reveal some of the opportunities and challenges of Extension effectively supporting community development related to local food systems.

4A. Building Regional Networking Capacity Through Leadership Development: The Case of Leadership Northwest Missouri

- case study analysis of a regional leadership development program.
- The impact on individual and group leadership skills and how the skills are employed to benefit individual communities and the region as a whole.
- The need to expand partnerships in order to better utilize resources.

5A. Public Scholarship: A Tool for Strengthening Relationships Across Extension, Campus, and Community

- Promoting public scholarship in and beyond Extension is a promising initiative that can foster collaborations by leveraging existing resources in advancing the Extension mission.
- The program is intended to increase knowledge about public scholarship and awareness of its benefits to stakeholders, identify barriers to public scholarship, and provide concrete examples of ways Extension and non-Extension faculty can collaborate on research and programming efforts.
- Common types of community engagement scholarships

6A. strengthening-workforce-development-rural-areas.pdf (investinwork.org)

- Examine perspectives from both the listening sessions and research in the workforce development field to explore what challenges and strategies stakeholders face in building stronger rural economies

7A. Workforce Partnerships/partners Sample

- NCWorks is a partnership between education and workforce agencies in the public and private sectors.
- The strong relationships between these partners enable us to connect job seekers to employers.

8A. Building Career Pathways Systems for Education, Training, and Employment

9A. Data Collection for Program Evaluation