LOGIC MODELS: PROGRAM DEVELOPMENT, IMPLEMENTATION AND EVALUATION

In Michigan the cooperative extension system is supported by funding from a number of different sources including the federal government, state government, county government, as well as through grants. Our current fiscal challenges have clarified the need to have program outcomes communicated effectively to all of these funding sources as well as to the public that we serve. The result is an emphasis on program development that is responsive to public need and an evaluation system that can measure how well those programs are meeting that need.

In response, many organizations, including MSU Extension, have increasingly referred to logic models as tools of program development and evaluation. The intent is to have programs explicitly define the community need, the resources that will be brought to bear in addressing that need, and desired outcome from the intervention. The model that is most often referred to for the organization is from the University of Wisconsin Extension (UWEX). UWEX has developed manuals to train staff in the creation of logic models and their application in Extension work (Taylor-Powell, et al. 2002). Logic models are widely used by other organizations as well, most notably the United Way and the W.K. Kellogg Foundation (McLaughlin and Jordan, 1999). As a result, logic models are an increasingly necessary part of programs that are supported by both public and private funds. Although in Extension, logic models are being

touted as a tool that can be used in program creation, logic models can be completed for existing programs in retrospect (Rogers, 2004).

Like strategic planning processes, logic models are designed to link a desired result (or mission statement) with a step by step process to reach that goal and outline what will be invested and who will be performing work toward the changed circumstance (Brooks, 2002). Strategic planning uses an environmental scanning technique like asset mapping or SWOT analysis to gather data about the current conditions (Brooks, 2002; Kaufman and Jacobs, 1987). Strategic planning will then select key issues and define the desired circumstance as the broad goal that needs to be reached. The broad goal is then clarified into a detailed vision that has taken into account the capacity of the organization to take action. Finally a detailed action plan with benchmarks or intermediate steps is created (Brooks, 2002). Strategic planning is ubiquitous though it is often customized to different organizations. The essential elements and planning process is the same. Evaluation is completed when the organization using strategic planning checks to see if they have reached the desired result (Kaufman and Jacobs, 1987). Strategic planning grew out of private corporate planning in the late 1960s for the short range (three to five years) as opposed to long range comprehensive planning that was designed for 20 years of change (Kaufman and Jacobs, 1987).

McLaughlin and Jordan (1999) explain the process for completing a logic model. The steps are similar to those of the strategic planning process. The first step is to collect information on the problem or issue, followed by a description of

the context of the problem; in strategic planning this is part of the environmental scan. The next steps involve organizing the parts of the model, which parallel the creation of a strategic plan. Finally, the logic model is verified (McLaughlin and Jordan, 1999). In strategic planning, this is the implementation of the plan with monitoring, updating and re-scanning (Kaufman and Jacobs, 1987). Verification may also include asking questions related to outcomes and impact that have been detailed. The questions include making sure there is sufficient detail to understand the elements, that nothing was left out, that it is theoretically sound, and with a clear understanding of the context for the logic model (McLaughlin and Jordan, 1999). Logic models, like strategic planning, are not designed for a specific program or size of community, for that reason, logic models can be used by small communities or educational programs, but can also be used for large organizations. Logic models are a process that is adaptable, customizable, and scalable depending on the need.

As part of an outgrowth of management models that emphasize continuous improvement and things like total quality management, logic models are another way to design programs that incorporate evaluation from the beginning (McLaughlin and Jordan, 1999). The logic model is designed to serve as a "plausible and sensible model of how the program will work under certain conditions to solve identified problems" (Bickman, 1987; McLaughlin and Jordan, 1999). It can be thought of as an equation with two sides, what is to be done and a clear understanding of what result is desired. It is important to create a logic model with a clear idea of the needs of the target population, what resources will

be invested, and what actions will be taken on one side of the equation and an outline of the outcomes and impacts on the other side. In the middle of the equation is a description of the people that are the audience for the program. McLaughlin and Jordan (1999) explain that “people are in the middle on purpose because the relationship between resources and results is not possible without people.”

When used in evaluation, logic models are used to “report a performance story to funders and senior decision makers” (Rogers, 2004). Rogers (2004) emphasizes that the logic model is used to show causality between outcomes and programs. There is an accounting for external factors and context within the logic model. One aspect that is not often thought of in logic modeling is other causes for positive outcomes. For example, a program to increase investment in a community can be altered by many external factors including an economic stimulus from the federal government. That can be accounted for with a logic model that addresses other ways goals are reached.

The United Way has been using logic models for over a decade for their programs to map their investments and outcomes (Rogers, 2004). They use a similar set of terms as the University of Wisconsin Extension: Inputs, Activities, Outputs, and Outcomes (Rogers, 2004). There is some debate about whether that is sufficient or if the logic model should explain the “causal mechanisms that are thought to be involved and the specific connections between various inputs, processes and output or outcomes” (Rogers, 2004). In examining foreign aid programs, Svensson (1997) discusses the problem of evaluation that only

examines results and reporting but fails to determine if the goals are appropriate to the situation. Studies of effectiveness are not appropriate if the decision making process clearly outlines objectives and results. "Results-based management requires that goals at different levels are logically connected internally so that goal fulfillment at lower levels leads to goal fulfillment at the aggregate level" (Svensson, 1996).

URBAN COLLABORATORS

The UC Program uses funding from Michigan State University's Provost, MSU Extension, and the counties or regions that host Community and Economic Development Educators. The faculty members involved in UC provide instruction in different educational programs within the School of Planning, Design and Construction including Landscape Architecture, Urban and Regional Planning and Interior Design. UC is also connected to the Global Urban Studies Program at MSU. These faculty members provide a valuable link to teaching and research at the university as well as current trends in academic discourse around urban areas. In the Urban Collaborators logic model these are the inputs. Urban Collaborators strengthen the connection between communities and the university through a number of initiatives including Urban Planning Partnerships, mini grants, research projects, summer internships for students, and information and educational programs. There are also avenues through which the community information can be brought to the university via the MSU Extension Urban Collaborators members including surveying, community discussion, and informal feedback. These activities are outputs in the logic model. The audiences for

Urban Collaborators work include community residents, local and state government, private foundations, businesses, Extension and University colleagues, and community-based, faith-based, and non-profit organizations.

The short-term outcomes of these efforts are increased awareness of MSU Extension and Urban Collaborators, the practice of Urban Collaborators work, awareness of partners in the community, lessons from student work, distribution of research reports in the community, shared learning and networking among Urban Collaborators members, and motivating community organizations to take actions to further their mission. The medium-term outcomes are collaboration with community partners, implementation of findings from practicum or research projects, increased leadership capacity in community organizations, and application of best practices in communities. This will be visible through investment in communities, adequate and affordable housing, social equity, and citizen empowerment that will be evidenced by viable neighborhood commercial districts, mixed uses, higher owner occupancy and population density, lower rates of foreclosure, safer environment, and improved walkablity. Long-term outcomes are all part of a vision for sustainable positive change in our urban communities that is illustrated by the medium-term outcomes. The long-term outcomes are sustainable positive change in our community and revitalized neighborhoods.

Table 1: Urban Collaborators Logic Model (2009)

Inputs:	Outputs, What?	Outputs, Who?	Outcomes, Short-Term	Outcomes, Medium Term	Outcomes, Long-Term
• Funding from MSU, MSUE, County • Faculty • MSUE Offices, Educators and Staff • Mini-Grants • Research • Funding	• Educational Programs • Internships • Practicum Projects • Urban Collaborators Meetings • Mini Grant Projects • Research Projects • Facilitating Community Discussions • Surveying Clientele • Information Delivery (via websites, publications, newsletters, memoranda)	• Local Government • Community Based Organizations • Businesses • Residents • Non-Profits • Faith-Based Organizations • Extension and University Colleagues • State Government • Foundations	• Awareness of MSUE and U.C. • Practice of U.C. Work • Awareness of Partners in the Community • Lessons from Practicum Projects • Research Reports are Disseminated in the Community • Motivated Neighborhood/Community Organizations to take actions such as newsletter, meetings, elections, fundraising Shared learning & networking among U.C. Team Members	• Working with community partners • Collaboration with Partners • Implementation of findings from Practicum or Research • Leadership Capacity in Community Organizations • Application of best practices and Lessons Learned • Strong neighborhood or community organizations • investment in communities • adequate and affordable housing • citizen empowerment • social equity • neighborhoods with viable neighborhood commercial districts, mixed uses, higher density, higher owner occupancy, lower foreclosure, safer environment, walkable	• Sustainable positive change in our community • (Sustainable Communities) • Revitalized Neighborhoods.

Mini grants are small grants to communities which can be used for small projects that will demonstrate new research in action. For example, in 2008 the Genesee County Community and Economic Development Educator was granted $1,000 for a demonstration project showing the viability of small wheat plots in Flint. The project team in Genesee County used the grant money to hire a local farmer to till and plant wheat in two locations in conjunction with urban agriculture work by two community organizations. The goal of the project was to provide an example of what can be done with vacant residential sites to improve the prosperity of those communities. Both of the community partners, Harvesting Earth Educational Farm and Urban Youth Community Outreach are actively engaging youth in urban gardening and agriculture and providing training and education of the participants.

The research agenda of the Urban Collaborators has been guided by community input. The projects have included a comparison of the capacity of community-based organizations in Grand Rapids, Lansing, and Flint, a study of mixed income neighborhoods in Grand Rapids, a guide for the re-use of vacant land in Michigan Communities, a guide for enhancing neighborhood commercial districts, and a resource guide for community based organizations and citizens to create socio-economic profiles.

The Summer Internships provide both opportunities for students to get work experience and communities to complete additional work during the summer months. Urban Collaborators provides the majority of the support for the students and each student is required to produce, with the supervision of the

Extension educator, a final product for use by the team. The final product most often represents a summary of the work or findings of the student during the summer in the community. Job descriptions for the internships are posted in different departments at the University but some consideration is given to students in the School of Planning, Design and Construction.