

**A CRITICAL LOOK AT THE CREATION AND
UTILIZATION PROCESS OF LOGIC MODELS**

by

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ABSTRACT

Logic models as a technique have been well accepted into the discussion around increased accountability and evaluation. This research questions the appropriateness of the use of logic models for every program and mandating their use. In total, 104 sources were systematically reviewed, including theoretical discussions on the structure and use of logic models, case studies utilizing logic models, and practical application guides for logic models. A primary case study was also conducted where multiple stakeholders participated in separate development sessions where they created logic models. The findings of the primary case study are consistent with the literature synthesis in that there are definite potential benefits from developing a logic model, while there are also concerns and potential negative impacts that should be addressed.

Chapter 1

INTRODUCTION

As a result of additional interest in evaluation and accountability from governments and foundations, the evaluation of programs is increasingly demanded from and recommended to organizations receiving funding from outside sources (Trochim et al., 2008). Evaluation is used to assess a program's effectiveness and therefore can be used for issues such as an organization or individual deciding if they would like to fund the program in question. Evaluation can also help identify specific aspects of a program that are not working as intended and need improvement and/or further review.

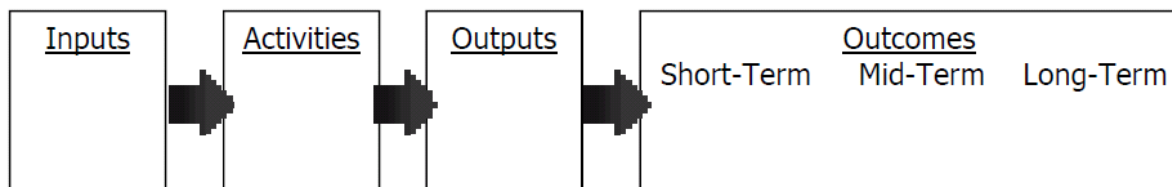
Theory-based evaluation is a specific type of evaluation that looks at the rationale of a program: namely, the program's assumptions and the relationships between each aspect of the program and the results that program is supposed to achieve (Chen & Rossi, 1983). Logic models are a tool within theory-based evaluation that provide a visual representation of the program's theory and the series of links from the initial resources to the final broad and long-term goals of the program. Logic models have been increasingly utilized to evaluate and facilitate the evaluation of programs as part of the rise in demand for formal accountability and assessment (Kaplan & Garrett, 2005; Trochim et al., 2008). In fact, to address this demand for accountability and a clear picture of a project being funded, foundations often require potential grant recipients "to develop logic models as part of the application process or to facilitate program monitoring and evaluation" (Kaplan &

Garrett 2005, p. 167). In addition, government agencies at all levels have incorporated the use of logic models into their planning, evaluations, and/or reporting processes in the hopes of strengthening the quality of their implementations and evaluations, and communicating results to those not familiar with a specific program (Medeiros et al., 2005).

Logic models were first developed in the 1970s in order to help evaluators “identify essential program activities, set appropriate outcomes and develop a plausible theory for explaining the association between program activities and anticipated outcomes” (Gugiu & Rodriguez-Campos, 2007, p. 349; McLaughlin & Jordan, 1999). Since the initial development of the logic model framework, there have been variations to the basic format and much discussion about how to create a logic model for a given program

As will be further explained in chapter two, logic models visually show the resources, activities, outputs, and outcomes of a program, project, or other service looking to impact change in some way. In its most basic format, a logic model will look as follows:

Table 1.1 Logic Model Structure



With the further development and refinement of the logic model technique and the increased use of logic models, foundations and other funders have been able to tailor

the logic model to their needs and some have developed instructional manuals to help organizations and individuals develop logic models. The United Way, W.K. Kellogg Foundation, and the University of Wisconsin's Cooperative Extension are three well-known organizations that have done this. The perspective of each of these sources is to provide guidance on how to create a logic model as part of program planning or a larger evaluation. All note that individual circumstances are important to consider and logic models may not be appropriate in a given situation. Yet neither of the guides from United Way or the W.K. Kellogg Foundation go into any additional detail nor is any guidance provided about what logic models may be unable to capture. The University of Wisconsin's logic model guide (Taylor-Powell & Henert, 2008) does provide a list of limitations of logic models, including that logic models:

- Represent the program's intent, not the program in reality
- Focus on the positive, intended outcomes, not the negative or unintended outcomes
- Oversimplify causality without allowing for other mediating forces and assuming the program is the reason for the change
- Can assume that the program is the solution, focusing on how the program can be made better, not if the program should be done at all
- May limit creativity

While Taylor-Powell and Henert (2008) identify these limitations, they are not explored or explained further. It is the hypothesis of this research that logic models may have additional limitations and are not necessarily appropriate in every situation. The following questions have driven this research:

- What kind of conditions are useful and/or necessary in the development/use of a logic model in order for it to be most beneficial to the evaluator, organization, and/or other stakeholders?
- What are the limitations and drawbacks of logic models? Can these be addressed and eliminated or minimized?
- What are stakeholder perceptions of the logic model development process?

With the increased use of any technique, the practical and theoretical aspects of that tool should be critically reviewed and evaluated. While there has been much discussion about logic models as a tool in evaluation, this thesis further explores the practical side of logic models with a two-pronged approach. Chapter two is a review and synthesis of the literature on logic models. This includes academic sources that cover 1) how logic models can and should be created, 2) the benefits and negative effects that result from the creation and use of a logic model, and 3) how circumstances affect the end result of logic model creation and its impacts.

The second approach, covered in chapter three, is a case study of the Delaware Foundation Reaching Citizens with intellectual disabilities (DFRC)'s Hand-in-Hand matching program. Here several different stakeholder groups were identified and asked to develop what each group felt was an appropriate logic model of the Hand-in-Hand Program. Each stakeholder group not only created their own logic model(s), but also answered some basic questions about the process and final product.

Finally, in chapter four, reflections are discussed in reference to the case study in combination with the literature synthesis. Here, conclusions are drawn regarding the specific circumstances and conditions in which logic models are created and the impact these conditions have on the final product and the participants and program itself.

Chapter 2

ANALYSIS OF LOGIC MODEL LITERATURE

A systematic literature synthesis is one of the primary research methods used in this thesis (Randolph 2008; US Government Accountability Office [GAO], 1992). The literature on logic models is extensive. This chapter describes the literature search and review process and presents the results. The DFRC case study described in chapter three provides additional detail and understanding of the circumstances that may affect the utility of a logic model in a given case.

Literature Review Methodology

Literature Search Process

The first step in a systematic synthesis of the literature is to ensure that the pool of documents reviewed is both relevant and comprehensive. To identify relevant literature on logic models, initial research sources published from 2000 to 2010 were reviewed. This timeframe was selected to provide a base for the literature review from which important literature published prior to 2000 could be identified through citations.

The resource search started with broad terms in order to avoid prematurely filtering out relevant sources. The search terms "logic model" and "logic models" were used with no additional specific terms. In order to restrict the results so that every

article that used the term "logic model" was not returned, it was specified that this term must be found in either the title, abstract, or be identified as a key word for any given source.

While much of the literature about logic models has come from within the evaluation community, logic models are used across disciplines and these other users of logic models may have vital practical information. For this reason, research in evaluation journals (the *American Journal of Evaluation* and *Evaluation and Program Planning*) was broadened to every journal in online databases such as ScienceDirect and Wiley Inter Science. By keeping the search field restricted to the title, abstract, and key words fields, approximately 70 results of sources from 2000-2010 dealing with logic models were found.

McLaughlin and Jordan (1999) discuss other terms that refer to techniques similar to logic models, including "chains of reasoning," "theory of action," and "performance framework," and in 2004 "outcome sequence charts." Upon initially searching for these terms, it appears that they at times refer to similar techniques to that of logic modeling, but may also refer to completely different techniques in other fields. These additional terms were most widely used while the logic model process was still in early development and so were available for academics to build upon when creating and refining the logic model process. As a result, the majority of the information returned upon searching using these terms was repetitive of what was found by exploring the citations of the initial results of the search for sources with the term "logic model" or "logic models" in the title or abstract. For this reason, the results of the additional terms are not included in the literature review.

Finally, by opening up the searches to non-evaluation sources approximately 150 results from computer science, waste management, and technology journals that referenced "fuzzy" logic models were found. These results refer to a different technique and so are not included in this research. Every other search result that was returned, however, has been included in the master database.

The Sample

Three main types of sources were discovered through the searches: 1) instructional guides, 2) more academic discussions of logic models, and 3) case studies that utilized logic models in some way. Strengths and weaknesses of logic models were discovered across all three types of sources.

The first sources to be reviewed are the instructional guides on how to best utilize logic models or other techniques (such as collaboration or cross-cultural evaluation) that incorporated logic models. These sources did not necessarily critique logic models or list the necessary characteristics for a quality logic model, but did offer information on how to maximize use and understanding, and what kind of outcomes would result. Representatives of these instructional guides are briefly reviewed before the synthesis of the other two types of sources to provide a base of what should be happening in practice.

Second, there are basic critiques or theoretical discussions of logic models. These sources were clear in their general support for logic models as a tool and

technique, but did attempt to add items to the logic model format or the process of creation.

Finally, there were case studies of a program evaluation that included the use of a logic model or simply the creation of a logic model. These typically did not offer much discussion on the theory of the logic model technique, but did provide useful details on the specific situation of the program and utilization of the logic model.

The case studies included in this review cannot claim to be representative of all logic models utilized by organizations, evaluators, and researchers or even of published works that have utilized logic models somewhere in the process. However, these studies provide a balance in practice to the mainly theoretical literature. In addition, problems, situational impacts, and/or benefits to logic models observed across multiple case studies can be interpreted as having greater legitimacy or salience to logic models in general than those discovered in a single case.

From the total 104 valid sources found across various disciplines, many of the findings were of articles from the evaluation community (62), however, twenty sources were from the medical field, with eleven of those focused on nursing. Seven sources were from environmental or agricultural journals, with an additional nine sources found in some sort of social or community focused publication (including articles about government programs, behavioral trends, and social work). Due to the number of publications in public health journals and concerning public health or medical programs, it appears that the public health community has embraced logic

models, particularly with programs dealing with prevention. In all of the public health articles that discussed the use of logic models, the focus was on how logic models could help identify indicators for practitioners or evaluators to track. This is consistent with the logic model guides such as the United Way's *Measuring program outcomes: A practical approach* (1996), the W.K. Kellogg Foundation's *Logic Model Development Guide* (2004), and other academic sources that describe that the logic modeling process as part of a larger goal of tracking results.

Review Process

A second step in a literature synthesis is the systematic documentation and coding of the sources. In this study, all sources were entered into a Microsoft Access database with the following fields:

- Name of Article
- Assigned Article Number
- Name of Source
- Type of Source
- Search Terms Used
- Authors
- Year
- Type of Article
- Length & Pages
- URL or DOI
- Theory or Use Discussion of Logic Models?
- Case Study?
- Article Published Post 1999?
- From a Reliable Source?
- Use Source?
- Provides New Information?
- Strengths and/or Description of Ideal or Necessary Circumstance Characteristics for Logic Model Use
- Criticisms of Logic Models
- Content
- Referenced in other article(s)?

- Potential resources found in article

A screen shot of the database can be found in Appendix A.

The database serves as an accessible way to manage and systematically review all of the sources. After entry of all sources into the database, relevant information from each source can be isolated. A tally sheet listing of each piece of information was the main tool to condense the massive amount of information so that different findings could be identified as occurring multiple times or if there were unique and original ideas that were not found elsewhere. This listing of the strengths and weaknesses of logic models and the characteristics found in successful case studies and/or described as necessary to create a logic model were all identified while tracking how this information was obtained and how many times it was referenced throughout the literature.

The synthesis of the literature allows analysis of how much support there is for a certain concern or strength. This quantitative aspect will support conclusions about how widely recognized specific concerns and strengths are and allow for points of comparison with the primary case study research. Finally, the synthesis will allow for points of comparison with the primary case study research. The case study is presented in chapter three and the lessons learned from comparing the literature to the case study are presented in chapter four.

Literature Review & Synthesis Findings

The findings from the literature review and synthesis are presented in three sections. The first discusses variations in the instructions of how to create logic models. The second section explores and describes the strengths and weaknesses of logic modes. The final section discusses some additional issues that do not fall into the first two categories.

Practical Guidance

Practical guidance for logic model development can be found from several sources. In addition to the academic literature identified through the search process, instructions for creating logic models were found from philanthropic and program-based sources. Three of the most commonly cited of these sources are: United Way's *Measuring Program Outcomes: A Practical Approach*; W.K. Kellogg Foundation's *Logic Model Development Guide*, and University of Wisconsin Cooperative Extension's (UW-CE) *Developing a logic model: Teaching and training guide*. Examples of other practical guides include: The Innovation Network, Inc., *Logic Model Workbook*; The Prevention Research Center, *A Guide on Logic Model Development for CDC's Prevention Research Centers* (Sundra, Scherer, and Anderson, 2003); and The U.S. Department of Health & Human Services, Administration for Children & Families, *Logic Model Instructional Guide*.

In the United Way's *Measuring Program Outcomes*, the logic model is part of the process for measuring overall program outcomes. Because logic models are not

treated as their own entity, it is sometimes difficult to decipher if the logic model process could be removed from the outcome measurement process and what steps in the process are truly necessary to create a logic model. The W.K. Kellogg Foundation's *Logic Model Development Guide* was developed to be a companion to the foundation's *Evaluation Handbook*, and as the title implies, focuses mostly on the development and understanding logic models. The Kellogg Foundation defines a logic model as "a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve" (p. 1). UW-CE provides many resources for logic models, including several templates, sample models, an online course and slide presentation, and an explanatory text -- *Developing a logic model: Teaching and training guide*. The materials are intended for use by program and/or organizational "facilitators," in a format similar to the United Way and W.K. Kellogg resources.

Looking across both academic and other sources dealing with logic models, there are different perspectives on the following points:

- when a logic model should be created (at what point in a program and/or organization's life cycle)
- the role and use of the logic model
- the framework of the logic model and the definitions of its terms
- who should be involved, and at what level, in the creation of a logic model

These major concepts are illustrated by the United Way, Kellogg Foundation, and UW-CE materials in table 2.1 and discussed further in the text that follows.

Table 2.1 Major Variations in Logic Models

	Timing of logic model development	Placement/ use of logic model development	Language and Structure of Logic Model	Involvement of Stakeholders
United Way <i>Measuring Program Outcomes: A Practical Approach</i>	Prior to or during a program's implementation	Part of larger outcome measurement of program	Inputs > Activities > Outputs > Initial Outcomes > Intermediate Outcomes > Longer-term Outcomes	Work group of program staff and others implementing or planning the program to create the outcome measurements and logic model. Clients, the public, and other stakeholders are consulted, but not directly involved.
W.K. Kellogg Foundation <i>Logic Model Development Guide</i>	Prior to a program's implementation	Part of the creation and evaluation of a new or new implementation of a program	Resources/Inputs > Activities > Outputs > Outcomes > Impact	Viewpoints of different stakeholders should be included, however, this does not necessarily mean direct involvement.
UW-CE	Prior to a program's implementation (ideally) or throughout	Part of program planning stage, but also useful in the implementation, evaluation and discussion of a program	Inputs > Outputs a) Activities > b) Participation > Outcomes-Impact a) Short > b) Medium > a) Long >	Program manager and evaluators create logic model, with diverse stakeholders as sources of information, not directly involved in logic model creation process.

Timing

One of the first things to consider when one is creating a logic model is the timing of its development and use. As discussed earlier, the increased demand for accountability and evaluation has led to amplified use of logic models in existing programs. More recently, including a logic model in an application for the funding of a new program has become a regular requirement. This timing of logic model development as part of the initial creation and proposal of a program was mandated or suggested by much of the literature (Coffman, 1999; McGlyn, 2003). Some of these same sources also recognized the usefulness of logic models at any point in a program's life cycle, while others simply did not specify. However, all three practical logic model development guides (Kellogg, 2004; Taylor-Powell & Henert, 2008 ; United Way, 1999) stress the importance of keeping the logic model fresh and updating it to maintain its fidelity with the program as the program changes.

For the W.K. Kellogg Foundation the logic model is “drawing a picture of why your program should succeed” (p. 27). It is something that is clearly done prior to a program's creation. The UW-CE is also clear that logic models should be part of a program's planning stages, however, it offers alternatives and shows how logic models can be beneficial when planning, implementing, evaluating, or discussing a program. The UW-CE also goes beyond the work of United Way and the W.K. Kellogg Foundation in that it offers interactive explications and templates with the

understanding that the logic model process may be feasible at different points for different programs.

Role

In the United Way and W.K. Kellogg Foundation descriptions, logic models are shown as part of a larger process. For the United Way, the process is outcome measurement: to see if the goals of the program are being met and if the intended impact is occurring. The W.K. Kellogg's Logic Model Development Guide focuses on the creation of the logic model, yet within the larger processes of program planning and evaluation. The academic literature instructional sources were not as consistent with their explanation of the role of the logic model as the practical instructional guides of the United Way, the W.K. Kellogg Foundation, and the UW-CE. However, several sources did state that logic models have the potential to aide in program evaluation or management (Coffman, 1999; Kaplan & Garrett, 2005) while several case studies contributed the identification of program indicators (Saxton, Naumer, & Fisher 2007; Unrau, 2001) or the basis for the larger evaluation (James-Burdumy, Dynarski, & Deke , 2007;) to the creation and utilization of a logic model. Similarly, Renger & Hurley (2006) state that part of the purpose of logic models is so that evaluators and managers can understand the program's theory, while Saxton, Naumer, and Fisher (2007) and Arheart et al. (2004) explain that the logic model served as a base for implementing the program the respective 2-1-1 resource line (similar to 9-1-1 or 4-1-1) and anti-tobacco programs.

Definition of Terms

The United Way provides some basic definitions. As will be discussed, these are not completely standard definitions across the logic model and evaluation field, however, these are the definitions that are utilized whenever these items are discussed throughout this research.

Inputs are defined as the “resources dedicated to or consumed by the program.” “Inputs also include constraints on the program, such as laws, regulations, and requirements for receipt of funding” (p. 17).

Activities “are what the program does with the inputs to fulfill its mission” (p. 17).

Outputs “are the direct products of program activities and usually are measured in terms of the volume of work accomplished” (p. 17). These are a program’s basic monitoring data, such as the number of clients served and the amount of time the program ran for.

Outcomes are then the change in the clients or the target population or their condition that is expected to occur as a result of the program.

United Way’s guide also discusses what should and should not be considered outcomes. For instance, an agency’s or organization’s internal improvements to strengthen efficiency or a program’s service may impact the results of a program, however, they are not outcomes of the program itself. United Way focuses on the flow and consecutiveness of inputs, activities, outputs, and outcomes, and breaks outcomes into “initial,” “intermediate,” and “long-term” outcomes. The initial outcomes are “most closely related to and influenced by the program’s outputs” (p. 18) and are typically a shift in knowledge or attitude. The intermediate outcomes are then a change in the participant’s behavior and a stepping-stone to the ultimate goal of

the program. The long-term outcomes are that end goal, often a change in a participant's "condition or status" and perhaps further impact on people or the community not directly involved in the program.

The categories of the W.K. Kellogg Foundation's logic model structure are similar to those described by the United Way. The only significant difference is in terms of outcomes, where the W.K. Kellogg Foundation utilizes units of time to define the different categories of outcomes. Kellogg repeatedly reiterates that there are two levels of participant/client outcomes that are 1) short term, being changes in "attitudes, behaviors, knowledge, skills, status, or level of functioning" (p. 8) and long-term that are built on the short-term outcomes and are specific changes in these same types of items occurring four to six years after the program's completion. The broader influence of the program is considered the "impact" of the program occurring, seven to ten years after the program. Kellogg's base logic model can then be detailed differently depending on the purpose and perspective of the logic model.

The UW-CE's Taylor-Powell and Henert stress the importance of vocabulary and include several exercises to help participants understand the differences between inputs, activities, participation, short-term outcomes, mid-term outcomes, and long-term outcomes. Taylor-Powell and Henert's definitions of these items and the overall structure of the logic model differ from that of the United Way and the W.K. Kellogg Foundation. While UW-CE's inputs are similar to the inputs and resources categories of United Way and Kellogg, the next two categories -- "activities" and "participation"

-- are grouped under the “outputs” label. The “activities” category is the same as the activities described in the United Way and W.K. Kellogg Foundation models, however, UW-CE is the only one to consider this an output. Additionally, the “participation” category is something that would likely be included in the input section for the United Way and W.K. Kellogg Foundation. The breakdown of the outcomes is perhaps not in conflict with the definitions from the United Way and W.K. Kellogg, but these sections are labeled differently. Taylor-Powell and Henert explain the outcomes as short-term, medium-term, and long-term/impact. These divisions appear to be the same as the United Way’s immediate, intermediate, and long-term outcomes, while also similar to W.K. Kellogg’s short-term, long-term, and impact categories, but without the time guidelines for each division. Additionally, UW-CE includes two new items in the logic model structure. Although both the United Way and W.K. Kellogg discuss the environment in which a program will exist in, UW-CE accounts for outside factors in the model itself, by adding two boxes separate from the direct flow of the logic model. One is for recording “assumptions” that impact the ability for a program to run and the other is where “external factors,” such as other types of influences or programs that can potentially impact the outcomes of the program, would be identified. UW-CE encourages users to change the flow, shape, and process of the model, creating cycles, sidebars or other changes, so that it can best fit the program in question.

The W.K. Kellogg Foundation utilized a framework for logic models with the same basic structure as that displayed in table 1.1. This base logic model can then be detailed differently depending on the purpose and perspective of the logic model. The UW-CE encourages users to change the flow, shape, and process of the model, creating cycles, sidebars or other change, so that it can best fit the program in question. While the UW-CE provides numerous examples of how logic models can be created, the W.K. Kellogg Foundation has more structure to these changes, creating categories of perspectives that include theory, outcome, and activities approaches where additional detail can be included in the logic model in order to:

- focus on the rationale and need for a program (theory)
- break down the different types of outcomes to be more specific short-term outcomes, longer-term outcomes and the overall impact of the program on the community, (outcomes)
- “map the processes of implementation” (p. 10) of the program, so that the process of putting on the program is clearly understood (activities)

The majority of the recent academic literature utilizes the basic framework as is described in table 1.1. There are, however, variations in language and structure. For example, some authors include logic models that do not have mid-term outcomes, only short and long-term (Coffman, 1999) or “short-term outcomes” and “impacts” (Julian, Jones, & Deyo, 1995), while others cite mid-term outcomes as “intermediate” or “inputs” as “resources.” McLaughlin & Jordan (1999; 2004) include one of the more major variations or updates to the logic model structure which is the formal inclusion of “customers” in the model in between the outputs and outcomes. They do

not state that the customers be listed or broken down by type or name, simply that it is important to include customers as part of the model because the goals of the program are not achievable without them. Indeed, McLaughlin & Jordan (2004) explain that “[p]lacing customers... explicitly in the middle of the chain of logic helps program staff and stakeholder better think through and explain what leads to what and what population groups the program intends to serve” (p. 9).

Participants in the Process

These concepts of the placement of the logic models and logic models as an aid to understanding leads us to the question of who should be conducting and/or involved in the development of a logic model. If one of the benefits or goals of the logic model is to help others understand the program, who are the different types of people that need to understand the program and should they be involved in the development process? At what level should people be involved? Several sources, in addition to Kellogg (2004) and United Way (1999) describe the importance of having some level of stakeholder involvement (Kaplan & Garrett, 2005), however, the type and level of involvement suggested varied. For some, it was simply that different stakeholders’ general perceptions of the program should be assessed without the different types of stakeholders being part of the actual creation process: simply addressing their perspective and understanding their goals and involvement in the program (Gugiu & Rodriguez-Campos 2007). This method was utilized and explored in Unrau’s (2001) case study examining a specific interview technique of the different

stakeholders of a family literacy program. In this example, Unrau does not inform the different stakeholders of the development or use of a logic model but probes their knowledge and needs.

Other sources suggest a more active stakeholder participation, including the creation of multiple logic models prior to finalization of the logic model to ensure multiple perspectives are included. This was done in the Osborne, Elsworth, and Whitfield (2007) case study, where each stakeholder group met to create their own logic models of how they thought the chronic disease education and self management program should be doing and ultimately attempting to achieve. Different types of stakeholders were also discussed, including involvement of clients of a program, representatives from other similar organizations, and the general public. Overall, staff and management were identified most often as needing to be involved in some way in the logic model creation process (Julian, Jones, & Deyo, 1995; Helitzer, 2009). Indeed, it is often staff that must create a logic model for funding purposes. Many sources, however, briefly touch on the subject of stakeholder involvement as a method of buy-in and that a more complete logic model resulted when different stakeholders were involved (Kaplan & Garrett, 2005; Renger & Titcomb, 2002). These sources indicated that when stakeholders are involved in the logic model process, they are more receptive and accepting the final logic model (Hampton, Fahlmn, & Jeffery, 2005; Kellogg, 2004) and that it is more likely to be used after it is created (Gugiu & Rodriuez-Campos, 2007).

The United Way provides some specific guidance on who should be involved in developing a logic model and in what ways. It recommends creating a work group of four to five people involved in the production of the tasks of the program (primarily staff) with various levels of involvement. While the working group is representative of some of the program's stakeholders in itself, it should also work to incorporate the views of other stakeholders. Views of program participants and clients should also be taken into consideration, however "[t]he time required and the focus on administrative details of the program generally are not a match for participants' schedules and interests." Instead, the working group should get at these viewpoints by conducting focus groups, surveys, and/or having informal interviews with program staff, volunteers, participants/clients, and board members.

United Way stresses the importance of not committing to a finalized model prematurely and soliciting outside input while the logic model is still in draft form. However, it does not detail the process of coming to a consensus on these issues, only describing the entire development process as potentially time consuming and that "program personnel are likely to have difficulties in shifting from a focus on internal activities and outputs to a focus on outcomes" (p. 52). Variation in the content of the logic model and what the programs outcomes should be is acknowledged as a real possibility, but United Way does not offer suggestions for how to get to some sort of consensus, just that it is important to have staff and volunteers "focused in the same direction" (p. 52).

Kellogg talks about the importance of involving different stakeholders only when describing how the logic model should be used in an evaluation, in determining the focus and needs of the larger evaluation and shaping an evaluation question. UW-CE's guide is set up as an instructional manual for any individual looking to share the logic model technique with others, so it focuses on engaging stakeholders in learning about logic models but is not prescriptive about how stakeholders are involved in creating logic models. Taylor-Powell and Henert describe two approaches to developing a logic model. With both, they recommend starting by identifying the ultimate end goals of the program. The first approach proposed is to work from the right side of the logic model, looking at the main goal and then working backwards to the mid-term and short-term outcomes, who is participating in the program, what they are doing, and then the resources they need to accomplish the final end goals. The second approach is very similar to the first, but more directly addresses stakeholder representation and input. Taylor-Powell and Henert recommend that stakeholders be involved in identifying the "initial situation, problem analysis, and goal setting" aspects of creating a new program or describing an existing program, and also state that stakeholders can be involved in identifying aspects or the entire logic model development process. As with the first approach, the authors recommend first identifying the end goals with the stakeholders, but then focusing on activities, identifying as many as possible and then creating "if-then" statements for each

activities. Stakeholders can also be engaged by repeatedly asked “why” an activity is done and why that result is desirable, and why and what does it lead to.

The United Way, W.K. Kellogg Foundation, and the University of Wisconsin’s Cooperative Extension all frame the logic model as a visual tool that links the different parts of the program with the different levels of outcomes. Taylor-Powell and Henert state this particularly well, explaining that the level of detail, method, structure (linear v. non-linear), and timing of the logic model development all depend on the program in question, and that logic models can be flexible and fit many different scopes and sizes of programs and organizations.

Logic Model Strengths and Weaknesses

This section presents the findings on the strengths and weaknesses of logic models, based on the literature review and synthesis. Differences in ideas of how, when, and why a logic model should be created impact the strengths and weaknesses of logic models. With additional research, the results could be presented according to the different variables discussed in the previous section. However, since the research questions focus on strengths and weaknesses, the findings are organized instead by the specific praise or criticism. Case studies are used to support and illustrate the strengths and weaknesses.

In general, it was much more common for the sources identified to discuss strengths than weaknesses. Thus, the potential strengths of logic models are described

first. Many of the benefits of using a logic model came up repeatedly in all of the different types of sources examined, including that logic models:

- Provide a visual representation of a program (33 articles)
- Facilitate consensus building within organizations or across stakeholders (18 articles)
- Allow evaluators and/or outsiders to understand underlying theory of program and aid in an evaluation or assessment process (20 articles)
- Help to identify places in a program for improvement (19 articles)
- Identify indicators of effectiveness where certain results cannot be directly measured (6 articles)
- Include some level of context and external factors in which the program exists in (3 articles)

These and the other strengths identified in the review were organized into four main themes: Enhanced Understanding and Communication; Identifying Outputs and Outcomes for Monitoring and Evaluation; Specifying/Refining Program Theory; and Stakeholder Involvement, Buy In, and Consensus Building.

Enhanced Understanding and Communication

The most important strength of logic models identified in both the theoretical and case study literature was their ability to increase understanding of a program and its underlying theory (Chen & Freeman, 1993; Coffman, 1999; Hernandez, 2000). The visual representation of program theory was cited as the definition or benefit of logic models in almost every source as the particular element of logic models that contributed to this strength. A variety of stakeholders can benefit from this increased

level of understanding, including program planners, external evaluators and/or others outside the program (Trochim 2008), and more broadly for anyone involved in the program (Helitzer et al., 2009; Julian, Jones, & Deyo, 1995).

In addition to general understanding of a program, several versions of logic models include external forces or context so that stakeholders can identify not only the relationships within the program, but between the program and external factors (Cooksy, Gill, & Kelly, 2002; Julian, Jones, & Deyo, 1995). Similarly, a logic model can serve as a reference point to aid in discussing a program's process with stakeholders. This ability to communicate can lead to additional understanding, or can be a result of understanding of the program (Helitzer et al., 2009). In any case, this tool for communication allows for stakeholders to discuss the program and any changes in priorities or methods that they would like to incorporate.

The case study literature provides some specific examples. In examining a program addressing the cancer disparities for African American women, Scarinci et al. (2009) describe how logic models increased this ability of clients to understand the program, its goals, and how they should benefit. Medeiros et al. (2005) examined a nutrition education program and reported that the logic model helped the different sites' program planners understand the goals and basic methods and resources needed to set up the program at each site.

An extension of the understanding and the visual representation logic models provide is the point of comparison that it can provide. The logic models of multiple

programs can be examined, drawing out similarities, differences, patterns, or inconsistencies (Cooksy, Gill, & Kelly, 2001). This ability to include detailed and/or streamlined information that is easily comprehensible (Coffman, 1999; Conrad et al, 1999; Renger & Titcomb, 2002) is linked to the other strengths discussed later in additional detail.

Identifying Outputs and Outcomes for Monitoring and Evaluation

Not only do logic models aid in understanding of the program, but they also have the potential to go beyond this understanding to identify the outcomes that should be measured when the logic modeling process is part of a larger evaluation (Helitzer et al., 2009; Julian, Jones, & Deyo, 1995; Millar et al., 2001; Trochim et al., 2008). For example, in Saxton, Naumer, and Fisher (2007), the guidance provided by the logic model's structure used for assessing a crisis call center was especially helpful when examining the outcomes of the program. In this case, although clients and staff were not included in the logic model development process directly, the evaluators asked them about their experience with the program and what they felt the goals of the program were. Saxton, Naumer, and Fisher (2007) found that the goals of the program discovered through the interviews fit naturally into the breakdown of short-term, mid-term, and long-term outcomes within the logic model structure, while also allowing for easy comparison with the larger immediate, mid-term, and long-term needs of the community after a crisis has occurred. Additionally, when potential

specific inputs were identified, Saxton, Naumer, and Fisher (2007) utilized the logic model format to follow these inputs through the logic model structure so that corresponding activities, outputs, and outcomes were identified. Logic models can provide indications of effectiveness in cases where outcomes cannot be measured, but outputs can be (Helitzer et al., 2009).

Specifying/Refining Program Theory

When conducted in the planning stages of a program, a logic model can be key in establishing and clarifying the program's theory (Coffmann, 1999) and the relationship between the different items within the logic model (Julian, Jones, & Deyo, 1993). When evaluators or moderators are included in the creation of the program itself they have the opportunity to reflect on the implementation of the program and propose changes to the implementation in order to strengthen the program's efficiency and fidelity (Helitzer et al., 2009). For example, in Kruk et al.'s involvement in the planning of a program looking to address the health care and statebuilding in post-conflict countries, they utilized a logic model to hypothesize and show the potential for value in giving priority to rebuilding health care systems after a major catastrophe (2010). Similarly, in the study of a juvenile justice program, Myer and Ferrell (2007) developed a logic model as the basis for treatment of juvenile offenders.

When logic models are not part of the planning process, but created later, logic models can and should be consulted to help to measure the program's fidelity to its initial theory (Chen, 1990, Friedman, 1997; Pumariega, 1996). This may help the program to identify its theory of change if it does not have one (Hernandez & Hodges, 1999; McLaughlin & Jordan, 1999) or describe what is actually happening in a program (Cooksy, Gill, and Kelly 2001; Pumariega, 1996). This strength is not necessarily unique to instances where logic models are created after a program is implemented, however, logic models created in the planning stages must be reviewed and updated so that they do actually describe what is being done in the program. When the logic model has strong fidelity with the program in practice, logic models can show how the different parts of a program and the goals of that program fit together.

In addition, the clarity and explanation of a program that a logic model provides can be vital for identifying the essential components of a program so that the program can then be replicated (Pumariega, 1996) and so that the responsibilities of stakeholders are clear (McLaughlin & Jordan, 1999). These strengths were exemplified by a Center for Disease Control's multi-site anti-tobacco campaign (Arheart et al., 2004). In this case, the logic model from the CDC was utilized to create the programs across Minnesota and also aid in measuring the outcomes of the program against the expected outputs and outcomes (Arheart et al., 2004). This

multiple site program establishment and then measurement was also utilized in the community nutrition programs of Medeiros et al. (2005).

Stakeholder Involvement, Buy In, and Consensus Building

The strength of logic models to be accessible to the non-evaluation community (Conrad et al, 1999) and to bring in stakeholders into the process was often cited (Trochim et al., 2008). While this strength is perhaps simply a component or characteristic of how logic models as a communication aid is utilized, this ability should not be overlooked.

It is not necessary or innate in the logic model structure to have all stakeholders involved in the development process. However, when stakeholders are included done, the final product of the process is seen to be useful and positive by those stakeholders (Kaplan & Garrett, 2005), as seen in Unrau's 2001 exploration of a family literacy program, where all stakeholder groups were represented, including some members of the greater public; Scarinci et al.'s 2009 work on creating a program to address cancer diagnosis and treatment disparities; along with the case studies address by Medeiros et al (2005). Involving stakeholders can also help to refocus stakeholders on a common goal (Kaplan & Garrett, 2005). The discussion process can broaden stakeholders viewpoints and potentially overcome disagreement of specific details, instead focusing on and/or clarifying the common goal (Julian, Jones, & Deyo, 1995; Kaplan & Garrett, 2005). When stakeholders are included in the process and

satisfied with it, this also fosters a larger collaboration and builds a general consensus around the program (McLaughlin & Jordan 1999; Millar, Simeone, & Carnevale, 2001), as seen in the community nutrition program examined by Medeiros et al. (2005).

Weaknesses or Cautions

Some of the commonly identified weaknesses of logic models are:

- Incorrect conclusions and the identification of indicators that will not inform the organization or evaluator if the program is having the intended results (4 articles)
- May be manipulated or misused to show results where there are none (4 articles).
- Potential rejection from stakeholders of ideas and/or logic model concept (5 articles)
- Confusion on the part of practitioners and/or stakeholders due to unclear definitions of the components of the logic model or other complex elements (3 articles)
- The inability or the exclusion of negative outputs and outcomes (2 articles)
- Inclusion of unnecessary information in logic model (1 articles)
- The need for extensive amount of time to conduct the process (12 articles)

The criticisms of logic models are also thematic and can be broken down mainly in terms of 1) process, or how logic models are created, and 2) the end product and/or how finalized logic models are used. The majority of these weaknesses focus on the process side. Incorrectly completed logic models have the potential to do harm in that they can be misinterpreted as being unhelpful or even damaging (Renger 2006). While it would be wonderful for all tools and techniques to be “foolproof” it is

important to not overly-criticize the process for instances in which the process was done incorrectly. Overall, there was much less literature addressing concerns with logic models, with the majority of the concerns discussed below coming from theory-based literature and only four total case studies having concerns about the logic model itself. This is not to say that in practice logic models are working well, just that from these cases there are not many concerns expressed. However, it is important to remember that these studies are not representative sample and many have larger goals than simply creating a logic model for their program.

Process Concerns

The instructional guides discussed the many steps and levels of inquiry that should be done in order to create a quality logic model. In examining these processes, it is evident that the creation of a logic model has the potential to be extremely time consuming (Gugiu and Rodríguez-Campos, 2007; Renger & Titcomb, 2002; Weiss, 1997). Additionally, the collaboration aspect of many logic model processes can be difficult for a program to conduct and the programs and organizations that have the ability to be collaborative and dedicate the time and effort to the process will likely benefit the least from the process, do to their already apparent strength (Kaplan & Garrett, 2005). Conversely, programs that may need the reflection and benefit most from a logic model are often already over taxed and faced with a higher level of difficulty to pull together a stakeholders (Kaplan & Garrett, 2005). It is also difficult

for programs to create groups to make a logic model if the program pulls people from a very large geographical area (Kaplan & Garrett, 2005). Ultimately, the value of a logic model is dependent on having a thoughtful development process (Renter & Hurley, 2006) and the ability of those creating the model to comprehend the process itself. Renger and Hurley (2006) state that logic models can be “difficult for practitioners to understand and utilize” (p. 106) because of the reliance on program theory and other “complex elements” (p.106).

Ultimately there is nothing inherent in the logic model itself mandating that those creating the model create a working group around the project, discuss it with anyone else, or have any sort of expertise on the program (Renger & Hurley, 2006). A logic model can be created by one person that may simply fill out the chart without much thought. Even if this is done well and accurately describes the program, it may not explore the theories and rationales that the program is based upon (Chen, Cato, & Rainford 1998-1999, Rener & Titcomb 2002), which is the ultimate purpose of creating a logic model. As discussed earlier, there are different suggestions about how logic models should be created and who should be involved. In the case of Gugiu and Rodríguez-Campos (2007), they explore the utilization of semi-structured interviews when creating a logic model, providing a guide for a process that they state is not always clear to practitioners. In their limitations, however, Gugiu and Rodríguez-Campos (2007) note that their model of semi-structured interviews may not be appropriate for all programs because the type of information needed for any given

program varies and may require a different method of inquiry to achieve the needed information.

Content and Use

The issue of logic model content is not one that is at the center for many recent sources, however, it is an issue that cannot be ignored. Saxton, Naumer, and Fisher (2007) cite the benefit of logic models being tools that can aid in the replication of a program, however, logic models do not capture the quality or detailed content of a program. While staff and administrators should certainly be able to tailor a program to their specific environment, additional information about a program is vital to replicate it or make constructive changes.

In some of the case studies explored, issues of quality did arise when stakeholders were involved. Osborne, Elsworth, and Whitfield (2007) examine a chronic disease intervention and education program by utilizing direct stakeholder involvement through focus group sessions. In these sessions, the issues of the quality of the program did come up and the concerns were incorporated in the program, and additional research was done prior to implementation (Osborne, Elsworth, and Whitfield, 2007). However, this appears to be unusual, and in no other source in this research did concerns over the quality of the program in question come up due to the logic model itself. Logic models have the ability to drive a program's development,

but must be accompanied by additional research and collaboration with experts in the program field (Kellogg 2004).

Once a logic model is created, even if there has been stakeholder involvement in that creation, there is the opportunity for confusion and non-interest or use of the final product because the logic model may be cluttered with program details, without the actual theory and concepts coming to the forefront (Renger & Titcomb, 2002). Additionally, while the links between outputs and outcomes are seen as a strength of logic models and a way to identify what to measure, it is also important to note that the mid and longer-term outcomes are often difficult to measure. Osborne, Elsworth, and Whitfield (2007) discover that this was true in their creation of a logic model as part of a chronic condition education program, along with Liebow et al. (2009) who were attempting to measure the long-term impacts of an asthma research program.

As part of their explanation of outcome measurement and how to develop logic models, the United Way (1996) does include information suggesting that logic models have the capacity to include potential negative outcomes or unintended effects of a program and that these need to be considered in the development and implementation of any program. In James-Burdum, Dynarski, and Deke's (2007) study of after school programs, the authors do note that logic models have the capacity to include negative outcomes. However, in this case this was not identified until after the logic model and evaluation completion and so "afterschool programs were not linked with negative outcomes and the study did not devote effort to gathering data that would

have illuminated ways in which negative outcomes could arise” (p.194). In this case, the logic model can be edited to include these aspects, however, the logic model had already played its role in planning these programs, and that cannot be redone for the programs already in place.

Finally, the issue if bad logic modeling does arise. This is a difficult issue because we must ask if it is reflective of the process itself if someone abuses and manipulates that process? Renger & Hurley (2006) state that “practitioners may be able to use the summarized logic model to show they are doing things right (the activities listed under the outputs column are being accomplished), but not to show they are doing the right things (the activities are meaningfully related to program objectives)” (p. 107).

Likewise, logic models can be created without showing the goal of the program or the causation of results or the phenomenon the program is attempting to change (Renger & Titcomn, 2002). However, if it isn’t showing the goal of the program, then it isn’t a good model. This manipulation or bad quality of a logic model does have the capacity to do harm and impacts people’s perceptions of the technique if they believe it is because of logic modeling itself that the final product or program is unsuccessful. However, we must remember that this is the case with almost any technique or method of evaluation.

Other Logic Model Considerations

In addition to strengths and weaknesses, the literature review and synthesis identified some other considerations when developing or using logic models.

Flexibility

Several sources discussed the issue of flexibility. Several authors cite that logic models are flexible because there are not strict definitions of each category of the logic model, but that connections and flow of the model that creates the value (Cooksy, Gill, & Kelly, 2001; McLaughlin & Jordan, 1999; Medeiros, 2005). The logic model structure itself can also be altered to better suit a specific program (Cooksy, Gill, & Kelly 2001) or a program can choose another pre-existing logic model structure.

Additionally, many articles cite that it should be part of the development process to review and update the logic model on an ongoing basis (Kellogg 2004). However, while this reviewing and updating process is stressed, a tangible product is still produced as a result of the initial logic modeling process. This product can give the impression that the program is static (Weiss 1997). Additionally, if a program adapts to better serve its population and the logic model is not updated, then this may appear to be a lack of fidelity to theory, which may be seen as a negative aspect of the program, when in reality the program has done the right thing (Cooksy, Gill, & Kelly, 2001).

Molly den Heyer (2002) attempts to bridge this gap and create a new logic model design that incorporates the flexibility and review as part of the model itself. on the basic logic model design to include aspects of what she identifies as

“organizational learning,” namely, what individuals and organizations learn and change in a program due to review and discussion of the logic model and program, along with the original context of the program and any changes in context that may occur because of or in spite of the program itself. This formalization of the review and update process that many authors site as necessary is interesting, however, is not tested or utilized by den Heyer or other authors.

Terminology

McLaughlin and Jordan (2004) express that “[t]he utility of logic models has increased as managers are being challenged by oversight agencies at all levels of government and in the nonprofit sector” (p. 10). While there is no argument that logic models have been increasingly popular and required, there is great variation on the content of these models, along with disparity in the methods of creation. This variation is not necessarily a negative aspect of the field. Different methodologies possess different strengths and address different concerns that have been raised over the past forty-five years. However, for many organizations that are not familiar to the field, this variation may be overwhelming. Particularly in the nonprofit world, time and resources are already stressed and navigating the options of logic models may not be realistic. Once an individual or organization does create a logic model and is comfortable with the process and structure, it provides them with the basic theoretical understanding of what a logic model is. This theory remains the same across the

different methodologies of logic models and does give an individual or organization the basic ability to discuss their program and/or logic model with others. However, unless an individual is aware of the variation in the structure and methods of logic model development, they may be confused or have different understanding when attempting to compare or discuss logic models with other individuals or organizations.

There appears to be a bit of a gap in the literature regarding this variation in terminology. The University of Wisconsin Cooperative's slide show accompanying Taylor-Powell, E. & Henert (2008) even lists what other people in non-evaluation fields may also call the basic logic model structure ("theory of change," "program action," "model of change," "conceptual map," "outcome map," and "program logic"). This language variation issue does not appear to be a large concern within the evaluation community. However, this ultimately does impact the communication and comparison of programs within and beyond the evaluation community and should be addressed in some fashion.

Chapter 3

A CASE STUDY OF THE HAND-IN-HAND PROGRAM

As formerly mentioned, the literature synthesis is complemented with primary research consisting of a case study of a nonprofit program. This primary case study is a logic modeling process conducted for and with the Delaware Foundation Reaching Citizens with Intellectual disABILITIES (DFRC) Blue-Gold All★Star Football Game’s Hand-in-Hand Program. This program matches senior high school students with a child or young adult with an intellectual disability. The purpose of this additional primary research is to examine the logic model development in a case study setting. This primary research then allows for a point of comparison with the findings from the literature. The methodology of data collection is first described in this chapter, followed by the findings.

The Case

DFRC is an incorporated 501(c)3 nonprofit with the mission “to enrich the lives of Delawareans with intellectual disabilities.” DFRC has a board of trustees, as all nonprofits must. It has three full-time employees, including an executive director, and a part-time Director of Development. All of the events that DFRC holds are largely run by volunteers. A specific volunteer committee plans the annual DFRC Blue-Gold All★Star Football Game. This committee has an executive team made up of committee volunteers and DFRC trustees. The larger, general committee also

consists of sub-committees that focus on different aspects of the event. The Hand-in-Hand Sub-Committee is responsible for overseeing the Hand-in-Hand program. The Hand-In-Hand Program pairs high school seniors with Buddies, children and young adults between the ages of 4 and 18 who have an intellectual disability. The Blue-Gold Committee sponsors planned activities such as parties, picnics and dances from February through Game Day in June. Participants are also encouraged to do things with their Buddies on their own, such as go to a movie or play a game. The goal of these activities is help to build a bond between two young people and teach valuable lessons of diversity, awareness and acceptance.

Case Study Participants

From guidance provided on the conduct of focus groups (Krueger) and the desire to create a thorough logic model that includes input from each stakeholder group, participants were first divided by stakeholder group. Each group developed a logic model independent of the other groups, and sometimes independently of one another. This separation was intended to minimize any power dynamics that may exist, while also maximizing each stakeholder group's participation in the logic model development. Additionally, it allows for the exploration of the differences in perceptions of the programming and the logic model process that may exist among the different stakeholder groups.

Five main stakeholder groups involved with the Hand-in-Hand program were identified. Of these, logic models were developed through individual interviews instead of group sessions with the following three groups:

Buddies and their parents. To be included in the study, buddies had to be at least ten years old at the time of data collection. Ten buddies were randomly chosen from the previous year's participants and asked to participate. Eight of these buddies had participated in the program for at least three years, while two had participated in the program in 2010 for the first time. Individual logic model sessions were held with five of the ten buddies (and their parents). Of these, all had been in the program for at least three years.

Hand-in-Hand Subcommittee members. The Hand-in-Hand Sub-Committee has four individual members. Some power dynamics between them were anticipated, and individual meetings were conducted with three out of the four members. These individual meetings allowed for increased certainty that each member was able to express their thoughts and ideas about the Hand-in-Hand Program and the logic model process.

Senior participants. Twenty former senior high school participants were randomly selected from the past three years of the program and invited to participate. Only nine responded positively and were geographically close enough to be participate. The logic modeling process was conducted with them individually primarily because of logistical barriers to meeting as a group. Although not a random sample, they included students who lived in different parts of Delaware during their Hand-in-Hand participation and who were diverse in the year in which they participated, their gender, ethnicity, and the role they played in the All*Star Game (the four types of senior participants, band members, ambassadors, cheerleaders, and football players were all represented).

Across all three groups, meeting individually insured that individual voices were heard and that participants felt free to express any idea or question they may have had regarding the logic model process.

The other two stakeholder groups, the DFRC staff members and the Executive Team, each participated in their own single focus group-like meeting sessions, and their group composition is detailed below.

Executive Team members. The Executive Team consists of seven volunteer members. Three of these members are DFRC trustees, who are active members of the group who also serve in an advisory capacity and as liaisons to the Board of Trustees. The four other members consist of a Game Chair volunteer, 1st Vice Chair, 2nd Vice Chair, and Immediate Past Chair. All seven members of the Executive Team were invited to participate in the group meeting, however, only four were available for participation.

DFRC Staff members. DFRC currently has three full time and one part time employee. As the researcher and current staff member, I participated in the session only as the facilitator. The other three staff members were invited and chose to participate in a group session to develop a logic model for the Hand-in-Hand Program.

It was apparent prior to these sessions that group dynamics did exist within the staff and Executive Team, however, from previous knowledge of the interworkings of the groups, these individuals worked well together and were respectful of one another's thoughts and views. Additionally, it is also a value within DFRC that is expressed to all staff and volunteers that it is important to listen to all ideas whether or not they are immediately feasible. This value is generally respected and held to in

practice as well. With these considerations and the post-meeting survey asking individuals if they felt like their input was included and if they would change anything about the final product, the group dynamics were not a concern about impeding the logic model development process. Additionally, conducting three of the stakeholder groups with individual interviews and two as group sessions has allowed for further reflection on the variations of this logic model development process, and is discussed later in this chapter.

Other stakeholders in the Hand-in-Hand Program were not included in the research, such as the main board of DFRC trustees, non-senior participants, and the parents of high school participants. These groups are not directly involved in the Hand-in-Hand Program and their inclusion in the case study would require significantly more time and resources. In addition, it is not likely that they would have a unique view that would not be discovered through the sessions with the other stakeholders. It is for these reasons that they were not included in this case study research.

Logic Model Development

All the logic model development sessions started with an explanation of the consent requests and with the clarification and reiteration of my role as moderator in the sessions, which is considered separate from my work position at DFRC and that DFRC will not have access to information regarding the specific individuals involved (see Appendix B for copies of the informed consent forms). In addition, the basic concepts of logic models as a visual representation of the Hand-in-Hand program and all of the steps that go into what they viewed as the ultimate goals of the Hand-in-

Hand Program were reviewed and discussed. For the first two sessions, an individual former senior session and the Executive Team session, this explanation of the logic model structure was accompanied by an example of a generic logic model of a reading tutoring program. It was the original intent that this example would help explain the purpose of the logic model so that participants could more easily identify the components of the logic model for the Hand-in-Hand Program. Guidance was also provided in the outcomes sections, stating that short term outcomes typically occurred less than five years after the completion of the program, with mid-term outcomes between five and ten years upon completion of the program, and long-term outcomes at the ten year point and beyond. Including an example is one of the recommendations found in the University of Wisconsin's Cooperative Extension materials, as well as other sources where authors are explaining the logic model development process to the reader (Coffman, 1999;). Additionally, guidance on the time components of outcomes can also be found in Kellogg 2004. However, in these first two sessions the example of a logic model for a hypothetical reading program did not appear to increase the participants' understanding of logic models and, in fact, appeared to create an increased dependency on the example and drawing parallels to the items in the example instead of thinking of the specific and unique items describing the Hand-in-Hand Program. Additionally, it was not the intent of the meeting sessions to teach logic modeling to the participants, as is the point in the Cooperative Extension guides. Instead, the sessions are meant to create an end result and observe the process of creating a logic model in a group or as an individual. It appeared that most participants had an inclination to try and understand the larger concept of the logic model, even without extended focus on the example and overall technique. This was

encouraging and appeared to strike a better balance in the later groups where the example was not used. In all sessions there was a degree of the participants looking to me as the moderator, asking if the suggestions they were making were correct and what I was looking for. Most of this came in the beginning of the sessions, as individuals were becoming comfortable with the format, however, this persisted more in the session with the Executive Team and one later individual meeting session. In the Executive Team's case, it is difficult to tell if this was because participants were hung up on the logic model concept, if they were dependent on me due to our existing working relationship, or because of something else entirely. In the case of the individual that kept turning to me and asking for assurance and instruction, it appears that this participant was extremely nervous and insecure about the answers he/she was providing. This participant grasped the concept and exercised the least, placing most of the goal of the program in the output category, with no long-term outcomes listed and only one short and one mid-term outcomes as part of the logic model.

By dropping the year suggestions for the outcomes, this allowed the remaining groups to bring their own expectations to what the terms short-term, mid-term, and long-term meant for them. This allowed for additional discussion and increased consensus building and understanding. While this was sometimes frustrating for me as a moderator and the participants, it took another aspect that could have been perceived as being my judgment of the consent of the logic model, where as, if the subjects create the definitions and agree on what should be where in the logic model, they have more control of and investment in the final logic model product.

For all of the sessions, both individuals and groups, once the overview of logic models was complete, instruction was provided for filling in the logic model itself. Each participant received several note cards and was asked to identify items they felt should be included in the activities section: what people involved in the Hand-in-Hand Program were actually doing. In the group sessions, participants were asked to identify two or three initial activities and then share these with the group. If the other participants agreed on the item, it was placed in the activities column. Additional discussion was held as a group on other items that may be considered activities. This was then done for the inputs, outputs, short-term outcomes, mid-term outcomes, and long-term outcomes sections. It was also explained throughout this process of identifying items for each section that the outcomes should build on the outputs and then the other outcomes as the model progresses, meaning that if the group (or individual) identified that an output was that the senior participant and buddy had friendship, then how does that impact each of them? Does this impact others? These answers would then be considered outcomes that could be built on further to be considered mid-term and long-term outcomes. For individual sessions, this was done in the same way, simply without the group discussion aspect: first asking the participant to identify a few activities and then share the activities and try to think of others, etc. After the raw items were listed, the logic model was then reviewed by the group or individual as a whole. Were there any items repeated in different sections? Should any items be moved to a different section? Should any items be removed? At this point in discussion with the group sessions, consensus was not difficult to achieve and only required minimal discussion.

After the logic models were created and approved by all participants, a written survey was distributed. Participants were asked if they have had exposure to logic models in the past, if their view of the Hand-in-Hand Program has changed after participating in this exercise, if they felt included in logic modeling process, and also asked if they had any feedback about their specific Hand-in-Hand experience. A copy of this survey can be found in Appendix C and a spreadsheet of the results can be found in Appendix G.

Buddies and Their Parents

Pairing buddies with a parent allowed for the parents to express their own opinions while also assisting with their child's communication and ideally making their child more comfortable and assisting me in presenting the information in the most accessible way. In only one case did the parent clearly dominate the discussion and the buddy's own participation was relatively minimal. The communication skills of the buddies included in the study varied. For two of the buddy and parent sessions, the parent left the discussion area for a short period of time and the buddy was able to discuss his/her feelings about the program and describe some of their general feedback. However, the discussion with buddies was much more general than with the other case study participants. The buddies and parents seemed to find it easiest to first identify the activities, or what buddies did with their senior participant match. Then parents may have identified that there are front-end aspects that needed to happen in order for those activities to take place (planning, funds, staff). After certain general concepts were identified, often buddies could then get more specific, stating that they went to the movies or played Wii with their senior participant. While parents could sometimes grasp the differences between outputs and outcomes, this was not

something that buddies could explore. Instead, they gave general feedback about how going through the program made them feel.

Three out of the five parents discussed the potential harm a neglectful or ill-matched senior participant could have on their child. Two of these three parents spoke from their own experience of having a senior participant that was not reliable and engaged. However, in the discussions with buddies directly, all five expressed their enjoyment of the program and that they had a pleasant time. In one case a parent even tried to remind their child of a specific person who did not come to visit or participate in events and yet this buddy still did not talk about any negative feelings about having gone through the program. It is difficult to say why this may be. The negative experiences may not have had a significant impact on the buddy, the buddy may not want to remember those bad feelings, or it may be something else entirely. While the impacts and the reaction of buddies to negative experiences are interesting, it is not the point of the logic model development case study to measure these results. As earlier discussed in the literature review, although logic models may identify indicators for further research, they do not measure results themselves. While the meeting sessions with the buddies and parents were not the typical logic model development sessions described in the literature, they resulted in a logic model that the parents were comfortable with and several items were identified as indicators and areas for further research.

Senior Participants & Hand-in-Hand Subcommittee

The senior participant and Hand-in-Hand subcommittee sessions went smoothly and consistently. Overall, all subjects were excited to discuss their

experience and participate in the exercise. As discussed earlier, only one individual really struggled with the logic model concept.

Executive Team

The session with the Executive Team ran smoothly. All parties were extremely respectful of one another. Members of the group were almost too quick to dismiss their own ideas in favor of others, however, this was likely a product of the unfamiliar concept of the logic model and the initial lack of confidence in understanding the process and the items that were to be included. From direct observation and the follow up surveys, there appears to be no issues with group dynamics hindering participation of any individual and all were satisfied with the experience and final logic model. The Executive Team's logic model was more detailed and complete than those developed from individual sessions.

DFRC Staff

The session with the DFRC staff was not as smooth as that of the Executive Team. There appeared to be some divergent ideas about how specific the logic model should be. It was at this point that one individual expressed his/her authority and how she/he thought the logic model should be. While the opinion to stay more general is certainly relevant and acceptable, there would have been more discussion and perhaps a different outcome if this power dynamic was not present. The one individual participant that considered including some more specific ideas was not as vocal in the session after this idea was dismissed. However, upon completing the post-meeting survey, all parties included in the session noted that they felt as though their input was recognized in the logic model and that they would not change anything in the logic

model. A more in-depth logic model process, perhaps including more background on logic models in general, could still be beneficial for the DFRC staff group and could address these concerns and explore some more specific options to include and/or different versions of the logic model.

As a result of the multiple sessions with the different stakeholders, there are 18 different, unique versions of a logic model of the Hand-in-Hand Program. A collapsed logic model that includes every response where it was listed in the individual logic models can be found in Appendix D. There is variation in the detail of some items along with the placement of others. While Appendix D shows all of the initial responses, Appendix E shows a collapsed version that has illuminated duplicate listings and also created a general level of specificity, that is typically more general than some of the initial answers. Several outcomes that were initially listed as outputs by stakeholders have also been moved into the outcomes categories, so that Appendix E can serve as the finalized logic model for the Hand-in-Hand Program.

Unique Logic Model Items and Points of Disagreement

As can be seen in Appendix D, many of the logic model items were repeated from all types of stakeholders. However, there are several items that were unique to specific stakeholder groups. These are detailed below.

Having Fun, Talking, & Listening. The DFRC staff included these items in the activities section of their logic model. These activities cut to what is hopefully being done every time participants and buddies get together. They are on a different

level than listing the events themselves. These items express the core of the program and that the actual events are able to change, but as long as participants (and volunteers and staff) are having fun, talking, and listening, then the program is moving forward and conducting the activities it is supposed to. These have been included in the final logic model despite their difference in scope from the other types of activities

Interacting with Other Organizations and the Press. These are also items included only by the DFRC staff. The promotion of the Hand-in-Hand aspect of the DFRC Blue-Gold All★Star Football Game is an ongoing concern and goal of DFRC. The exposure of all DFRC members (volunteers, staff, participants, etc.) to DFRC partners is also an overarching goal for DFRC. It is unsurprising that these items came up in the staff session, however, it is apparent that they are not goals consciously and/or continuously recognized by others outside of the DFRC staff.

A “Mental Break.” One buddy parent was particularly honest in the difficulties she and her son encounter and that the Hand-in-Hand program gives her a sense of momentary relief where she is able to trust senior participants with her son. She explained that she felt that DFRC provided a safe space and relationship where she could worry less about her son’s well being. This is not specifically included in the final logic model, but could be seen as included in the “buddy parents have exposure to additional resources and programs.”

Tangibles. Only one individual from the senior participant group listed an actual tangible item that was produced from completing the program. At a picnic event in June, there has been a station where buddies can make a trophy for themselves. This senior participant included the trophy as an output of the Hand-in-Hand program. This tangible item is an output of the program and complements the

items such as supplies and locations listed in the inputs category. However, there are other items such as awards, tailgate prizes, the yearbook, and merchandise that are also takeaways from the program. While this individual obviously remembers the trophy from his own experience, I do not believe it warrants its own listing in the final logic model, but can be considered part of a larger tangible category. However, this output category of “souvenirs” would not be included in the final logic model if it had not come up in this individual senior participant session.

Negative Results. As discussed earlier, buddy families identified the possibility of negative program outputs and outcomes from participating in the Hand-in-Hand Program. Senior participants also included these potential negative results, however, this is a clear distinction between the stakeholder groups that are clients and those that are on the planning and implementation end. The DFRC staff members did bring up the possibility of harm or negative results, but chose not to include it in the model because it is not the intent of the program and if sensitivity and quality of the program is high, then negative outputs or outcomes should not result from the program.

Buddy and Senior Participant Interaction. There was much variation and difference in distinction of the types of things buddies and senior participants were doing together as part of the program. Many former senior participants and buddy families simply listed the actual activities that they did with their partner, such as playing Wii together, going to a birthday party, or the buddy shadowing the senior participant at school. These specific experiences are part of their own perspective and were not surprising. A Hand-in-Hand subcommittee member, however, made a distinction between the social events that buddies and senior participants participated

in and instances where senior participants may be “tutoring” the buddy with homework or other tasks. Another Hand-in-Hand subcommittee member made this distinction between social events outside of the house and times where the senior participant would go to visit the buddy at his/her home. The DFRC staff and the Executive Team groups, however, simply listed these as interaction between buddies and senior participants at non-DFRC planned events/activities.

Overall Level of Detail. As was seen in the category of senior participant and buddy interactions, ranging level of detail occurred throughout the sessions, even within the same stakeholder group. This occurred across every category. In the inputs sections, some research participants chose to make distinctions between types of volunteers and parents, while others simply stated that there were volunteers and parents that were necessary for the program to run. In the output and outcomes sections, there were general themes of enjoyment and fulfillment for senior participants, buddies, parents, and volunteers; increased communication skills for participants and buddies; senior participants’ and buddies’ ongoing involvement in community activities; increased involvement in DFRC; senior participant’s inclusion of disability awareness in future education and employment; and overall increased awareness and respect of people with intellectual disabilities throughout the larger community. However, each of these themes are made up of various listings, from the different perspectives that can be seen in Appendix D.

For the final DFRC combined logic model (Appendix E), wherever there was a variation in the level of detail, the more general category was included, except in the case of volunteers. The planning and implementation stakeholder groups all made distinctions among the volunteer groups. Additionally, each of these groups has

unique responsibilities and so for the purpose of this research, the groups were kept distinct.

Overall, the Executive Team and Hand-in-Hand had a much more complex view of the inputs, including more program planning aspects such the breakdown of the committee structure and volunteers. The Executive Team made distinctions between event volunteers, committee volunteers, Hand-in-Hand subcommittee volunteers, Executive Team volunteers, and DFRC staff. The Hand-in-Hand subcommittee also made some of these distinctions, specifically between the Hand-in-Hand subcommittee, the Executive Team, and the general committee. Of note, none of the three Hand-in-Hand subcommittee members included the DFRC staff or office in the list of inputs. After the last Hand-in-Hand subcommittee session was completed, follow up with these three members was conducted and they were asked why the staff and office were not part of their model. One individual thought for sure that she had included it, while the other two stated that they assumed that it would be implicit or that would be included in the model. It is difficult to draw conclusions from this occurrence, however, it is a substantial aspect that all three members left out.

The buddy families and senior participants did recognize the fact that there was a large amount of preparation and set-up that had to occur for the Hand-in-Hand Program to exist. These groups identified the people doing this work in a generic way as “planners” or “volunteers,” even though they did not necessarily know the behind-the-scenes structure or terminology. There was an acute sense of the planning aspects that directly involved them including items that reached as far back as to the

recruitment of new buddy parents and the selection of the senior high school students that are to participate in the general DFRC Blue-Gold All*Star Program.

For the DFRC staff, there was much discussion of the including these intricacies of planning and putting on the program. This discussion was more detailed than any other group's and ultimately resulted in the decision to not include those types of details. Because the DFRC staff consciously chose to keep many details out of the model, it is the most generic logic model of all of the stakeholder groups.

In this primary case study, each stakeholder group brought their own perspective, as was expected. However, there was a level of understanding of the overall program that stretched across each group. This was surprising to find, particularly in the senior participant and buddy families groups, with their sensitivity to the planning aspects.

Expected Versus Actual Findings

Before these stakeholder sessions were conducted, a logic model was developed from my perspective of working with the Hand-in-Hand Program from my staff position, which can be seen in Appendix F. This logic model is similar to that of the final combined model representing the different stakeholder groups. However, there are several new items included in the stakeholder model. None of the items listed above that were found uniquely from one or two stakeholders, such as the program souvenirs or the "fun" content of the activities, were included in the predictive logic model. The final logic model is also more detailed in some areas such as the activities where participants made distinctions between the typical DFRC sponsored events and the training session with participants. Additional detail is also

provided in the outcomes, including details on increased awareness and the types of additional activities buddies participate in.

Participant Reaction

Finally, a coded version of answers to the post-meeting survey can be found in Appendix G. Of note, eighteen of the participants had not heard of logic models, while four participants had heard of the term prior to the meetings, and two were at least somewhat familiar with the concept. No participant said that they would change anything about the final logic model or that they had additional input that was not included in the final model. Nineteen participants stated that their view of the Hand-in-Hand Program did not change after going through this process, however, five participants did cite a change, with three of these coming from the group sessions. The three that cited change and were part of the group discussion all described their experience as enhancing or deepening their understanding of the program or thinking about it in a deeper way. It is not clear what this means or how this will impact their participation in the future, but would be an interesting point to explore further. The two participants from individual sessions that responded that their view changed because the session led them to remember their experience and enjoyment with the program.

Chapter 4

COMPARISON AND CONCLUSION

There is somewhat of a disconnect between the primary case study examining the Hand-in-Hand Program and the larger literature. In none of the instructional sources or the case studies were the logic models conducted without the larger context of program review. In a way, the case study was a balance to this literature for the very reason that it was able to focus solely on the logic model process. However, it is not able to get at the larger context and purpose that so many sources refer to.

Additionally, the literature reviewed was primarily from academic sources. While the McLaughlin & Jordan (2004) text and the United Way (1996), W.K. Kellogg (2004), and Cooperative Extension guides were included, there are additional sources that could have been included. Original evaluation reports could have been helpful for more detailed comparison with the Hand-in-Hand case study, however, it would have been difficult to insure quality of these reports while also gaining a representative and focused pool of reports to review. Additional knowledge could also have been gained through further review of earlier sources to track the evolution of the logic model technique or through the inclusion of discussions of the larger category that is program theory.

Given those caveats, however, the findings of the primary case study do not appear to contradict any of the literature review findings. However, additional perspective and insight was gained through the case study, especially in the areas discussed below.

Discussion

Dealing with Different Perspectives on the Program

As discussed in chapter two, several of the sources of practical guidance on logic model development indicate that either the working group or some other moderator or evaluator is to manage all of the different stakeholder ideas and contributions. Guidance is not provided on how this should be conducted, simply that it is up to the discretion of the person or group deemed responsible. The Hand-in-Hand case study, however, highlighted the difficulty of this task. By focusing on the view of stakeholders and the inclusion of their views, the moderator must make a judgment of those views when they are in conflict or unclear. This may be a reason to conduct one single group development session with representatives from different stakeholder groups so they are able to discuss their ideas and concerns together and come to a consensus on their own. This has drawbacks in that it limits the number of people that will be able to be involved. Additionally, the case study illustrates that the different groups came up with some unique items and differences in scope. These distinctions and differences in scope may not come out as part of a single group session. However, having a single stakeholder development group session will likely make the processes much simpler and less time consuming. Supplemental research and interviews can also add additional perspective and items to be included in the logic model. In the case where there are multiple logic models produced, ultimately the moderator must simply choose a consistent and defensible method of containing and condensing the responses.

Internal vs. External Evaluator/Moderators

The literature on how the facilitator of the logic model process should be related to the program itself is mixed. The United Way, W.K. Kellogg Foundation, and the University of Wisconsin Cooperative Extension all write from a practical perspective in that a program may not be able to hire an external evaluator for this process, even if it is the ideal. Much of the academic literature consists of evaluation guidance and completed evaluations that were conducted by outside evaluators. The logic model development process is not heavily impacted by the variation of an external or internal moderator, however, there are important aspects to consider. An external moderator is likely impartial and brings expertise and experience to the development of a logic model. Internal moderators, on the other hand, already have a basic knowledge of the program, often know where to look to get relevant information quicker and may already have a relationship with stakeholder groups. This history with the program can bring bias and potentially negatively impact the research if the moderator has negative relationships or strained power dynamics with anyone that should or is participating in the development of the logic model.

Being an internal moderator of this case study, I had the advantage of knowing the program well and was able to bring my expertise in how to best involve all of the stakeholders, particularly the buddy families. Additionally, I had access to all relevant DFRC information and I could create a projected Hand-in-Hand logic model without discussion with anyone else from DFRC, avoiding any impact on their opinion or knowledge of the program, prior to their own involvement in it.

However, as discussed in chapter three, there was a high level of reliance on me as a facilitator in terms of what was “correct” to include in the logic model. It is not clear if this was because of my relationship with the participants or the newness

and complexity of the subject matter. Additionally, I identified the urge to lead research participants towards what I anticipated to be possible items to include in the logic model. I feel that ultimately this was not done and that participants came up with their ideas on their own. I did provide assistance in that often an idea could be carried through the spectrum of outcomes: that a output can lead to a short-term outcome, to a mid-term outcome, to a long-term outcome. However, I may have overcorrected in that I did not provide enough guidance on the distinction between outputs and outcomes. As can be seen in Appendix D, where many outputs contributed by participants should be listed as outcomes. Because of this perspective, I am unable to conclude if, in the case of the Hand-in-Hand Program, it is the logic model structure that is confusing or the direction and influence of the internal evaluator that prevented outputs from being clearly defined.

Inclusion of Negative Program Outcomes

A single case study (James-Burdumy, Dynarski, & Deke, 2007) included reflection that the ability to include negative outcomes was only identified as a possibility after the completion of the logic model and larger evaluation. For James-Burdumy, Dynarski, & Deke (2007), it would have been preferable to include these aspects in the logic model and would have impacted what information they asked for. This issue also arose in the Hand-in-Hand case study in that the buddy families and former senior participants identified potential negative outcomes from the program because of their own experience and/or observations.

The logic model structure does have the capacity to include negative outcomes from a program, but this is not frequently done or considered. A logic model is supposed to be the program's theory, balanced with what is feasible and actually

happening in practice. The negative outcomes do not fit in program theory that is trying to make a positive change. However, they must be considered in practice for any program to be successful. These potential negative outcomes can be a subcategory of each outcome time frame, and can then lead to a more complex logic model that includes some cyclical aspects focusing on the prevention of those unwanted, potential negative outcomes. In this case, these negative outcomes are included in the final logic model in Appendix E, however, the prevention piece is not included because it was not discussed in any logic model session. This is potentially a place for additional reflection and feedback.

Stakeholder perceptions of the logic model development process

The case study was unable to determine the stakeholders' perceptions of the logic model development process. Although it is clear that if stakeholders are involved in the process, they are more likely to accept it, there was very little discussion of their perceptions on the process in the literature. There were sources stated that stakeholders that had been directly involved in the process did see the benefit and appreciated the process (Kaplan & Garrett, 2005; Fieldena et al., 2007), however, this is certainly not representative of all types of stakeholders associated with all types of programs. Additionally, this is likely a question that will be significantly impacted by the logic model development process that is utilized and the level of stakeholder involvement.

The post meeting surveys completed as part of the primary research included a question asking if individuals' thought processes concerning the Hand-in-Hand Program had changed as a result of the logic model development exercise. Even with the five respondents self identifying that their thought process had changed, this

question alone does not detail their perspective on the process, nor is it representative of those who participated in the process, let alone all stakeholders.

Conclusions

The combination of literature review and case study yielded some support for specific characteristics that support quality logic models and also point to some policy recommendations. These are summarized below.

Supportive Characteristics

Several beneficial circumstances for logic model development were identified in both the literature review and the case study experience. These include items such as knowledge of the program, clarity of terms, a well defined problem the program is/will address, and interested/engaged stakeholders. However, there are three main items that need to be present for a quality logic model to be produced. These three items were cited consistently across all types of literature and were also apparent in the primary case study. They include:

Stakeholder involvement. In the case study it is clear that stakeholder involvement brought additional key information and components into the logic model of the Hand-in-Hand Program. The literature also shows that there is more interest and likelihood of use and acceptance from stakeholders when they are involved or represented in some fashion. However, as noted in the earlier discussion, there is not consensus in the level of involvement. The appropriate involvement likely varies depending on the program and timing.

A moderator or logic model expert. One of the findings most apparent from the primary research was the importance of a central individual or group that is able to make informed decisions concerning items for inclusion in a logic model. This can be more than one person, such as the kind of working group suggested in several guides and articles, however, a comfort with the concept of logic models is necessary.

Time. The amount of time available for the creation of a logic model drives the other conditions and aspects of the process. If time is limited, extensive stakeholder involvement is not possible. However, if time is extremely limited, without the possibility for discussion with others, then the outcome of the development process will not likely be useful in any way.

Policy Implications

The implications of this research do not suggest large shifts in policy concerning the use and requirement of logic models. While one of the benefits of logic models is how they can be tailored to the specifics of a particular program, the variations in structure and vocabulary can also be confusing. While the field of evaluation does not necessarily need an additional guide for logic models, it is advised that governments and other funding agencies choose a specific methodology and vocabulary that is already in existence when asking for logic models from programs. This level of consistency should not only aid these agencies' ability to compare programs, but also serve as a base point for the programs to discuss operations and results with one another.

The other benefits of logic models are clear, and so there is certainly a basis for the praise logic models have received as a tool and technique. However, as outlined above, there are the environmental items that are necessary for a quality

model to be produced. Additionally, it is clear that a logic model cannot be the sole method of assessing a program and that guidance is necessary for a program to complete a logic model, and should not be relied upon as such. I would advise that funders and governments that require logic models from their grantees and contractors put in the same amount of work in explaining or facilitating the logic model development process as they expect from their recipients.

The potential policy implications of this research also bring us back to the role of logic model. Three main roles were identified through the literature synthesis, and these have a distinct impact on the process of developing a logic model. These differences in role are also somewhat parallel to the eight different purposes of program measurement that Behn discusses in his 2003 *Why measure performance? Different purposes require different measures*. Here, Behn concludes that “performance measurement is not an end in itself” (p. 586) and that there are eight distinct purposes of performance measurement including items such as motivating participants or identifying how the program can become more effective. These differences in purposes of program measurement should be considered in the context of logic models. If a policy mandates logic models so that a program may receive funding, it will likely not lead to the inclusion of stakeholder direct involvement since buy-in and representation is not a purpose of the logic model. These implications must be considered when requiring logic models in any form.

Items for Additional Research

One item for additional research is an investigation of whether the findings and theory from the case study can be useful as the basis of a full evaluation or outcome measurement plan for the Hand-in-Hand Program. This activity could potentially be

extremely helpful to DFRC and the stakeholders involved in the Hand-in-Hand Program.

Looking more broadly at logic models in general, the issue of the impact of the logic model process on stakeholders is one that has much potential for review and discussion. A survey of stakeholders participating in evaluation and logic model development in real time may be able to address this issue while allowing for the variability of levels of involvement. In the case study, it appeared that all the participants, with the exception of two individuals, were enthusiastic about being involved in the research and logic model development. It is unclear if this was because of their feelings about the program, if it is simply human nature to want to please the moderator, or if there was something else at play. Dissecting these apparent feelings and gauging their significance and impact on the logic model development process could be particularly interesting and impact how development sessions are conducted.

This research is not definitive in terms of when it is not appropriate to conduct a logic model. It can be inferred that if there is not sufficient time, stakeholder involvement, or expertise, a quality logic model will likely not be produced. However, other environmental or program characteristics not discovered in this research could also be detrimental to logic model development. These could likely be identified through additional research, including reviews of programs that have not successfully completed a logic model or where a logic models have not been used after their initial creation. This information was not found in the published literature, and so, would likely require advanced primary data collection and research.

Finally, the impacts of the different roles or purposes of the development of a logic model can be studied. These purposes can be identified and isolated in practice. How programs and participants are then affected can then be explored and compared. There is the potential for great deviation of impacts depending on why a logic model is ultimately developed.

In short, it is clear that logic models have benefits to programs, but also have limitations. They can be time consuming and confusing, and they do not capture the quality of a program. In addition, as demonstrated by this research, some specific conditions are needed for a high quality logic model to be produced. Although this study has explored the pros and cons of logic models in general, additional research is needed to examine the characteristics of effective logic models conducted for different purposes or roles.

APPENDIX A

Resource Database Screen Shot

Thesis Article Database - Microsoft Access

Home Create External Data Database Tools Add-Ins Acrobat

View Paste Font Rich Text Records Filter Sort & Filter Size to Fit Form Switch Windows Find

Forms

- Log of Searches
- Thesis Article Database

Name of Article		Article ID Number:
<u>The Use of Logic Models by Community-Based Initiatives</u>		7
Name of Source	Type of Source	Search Terms Used
Evaluation and Program Planning	Academic Journal: Online	"logic model"
Author(s)	Date	Type of Article
Sue A. Kaplan & Katherine E. Garrett	2005	Academic Journal Article
Length_Pages	URL or DOI	
6 pages, 167-172	DOI: 10.1016/j.evalprogplan.200.09.002	
All Criteria Met?	Theory or Use Discussion of Logic Models?	Article in English?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes
	Post 1999?	Reliable Source?
	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes
New Information?	Confirmatory	Other
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Referenced in other article?	Accept?
	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yes
Exception Explanation:		
Note:		
Confirms/Contrasts Articles:		
Content		
<p>PAGE 1: "Many grant programs now require community based initiatives to develop logic models as part of the application process or to facilitate program monitoring and evaluation." "Although logic models are often used in program evaluation, ideally, the logic model approach offers practitioners a planning and management tool - to help clarify goals, achieve consensus, identify gaps in logic or in knowledge, and track progress (Millar, Simeone, & Carnevale, 2001)." PAGE 2: "Many logic model proponents believe that the process of developing a logic model forces participants to articulate and clarify the project's goals and assign responsibility for tasks and outcomes, thereby helping to foster collaboration and build consensus (Goodman, 1998; McLaughlin & Jordan, 1999; Millar et al., 2001; Patton, 1986; Weiss, 1995). In our experience, these benefits tend to accrue to coalitions that are already fairly strong and collaborative." PAGE 3: Strong program coalitions saw logic model creation as an opportunity, where as weak coalitions were difficult to even engage. "Using logic model development to foster collaboration can be challenging for organizations that are stretched thin in terms of their resources, or spread wide in terms of the location of their members. "...most of the sites we interviewed did not place high priority on involving coalition members in the initial development of the draft. Generally, staff developed a draft model and then shared it with a wider circle of coalition members. Several sites explained that their coalition members were eographically dispersed and difficult to convene. Many partners were already stretched thin in implementing the project, and the staff was reluctant to burden them with this additional task. However, those sites that engaged a collaborative logic model development process (six of the 45) uniformly characterized it as positive." "Those that engaged in such a collaborative effort tended to submit more complete models, perhaps because of a wider range of input and scrutiny, and perhaps because they gave the process greater priority." CAITLIN'S CONCLUSIONS: need buy in from participants for them to get anything out of logic model process. A large range of geographic constituents can be a problem. If staff are already burdened/stretched, this can be a barrier to creating a quality logic model and getting anything out of the process itself. If collaboration is already used in logic model process is very likely to go well and be of benefit to participants/organization.</p>		

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APPENDIX B

Informed Consent Forms

Hand-in-Hand Logic Model Development

[Date]

Caitlin Gamel-M^cCormick, Student Researcher

Informed Consent Acknowledgement

On behalf of the University of Delaware, Caitlin Gamel-McCormick is conducting research on the usefulness of logic models as a method of program evaluation.

The purpose of the research is to determine if the development of a logic model by different groups produces different results and to explore the experiences of the participants in the model development process. A logic model is a visual representation of a program that lists the different parts of the program and how they relate to one another.

Five different groups of people involved in the DFRC Blue-Gold Hand-in-Hand Program will meet to develop and discuss a logic model of the program. You have been chosen as a representative of [specific group category]. Approximately 40 people will take part in this study altogether, with 4 to 10 individuals from each group. Participation in the study will involve an approximately 90 minute feedback session. Some sessions will be held individually, while others will be held in groups with other individuals from the same participant group.

Your answers may be reported by your type of participation and the county you live in, but individual names will be excluded in the analysis. Meetings will be audio-taped. All audiotapes will be destroyed within one year of the completion of the project. Meeting notes will not contain any personal information that will be able to be used to identify any given individual.

You can refuse to answer any question or to leave the meeting at any time. Withdrawing from the project will not result in any negative consequences for you. If you have an individual session, none of your feedback will be included in the final report if you choose to leave. If you are participating in a group session, your impact on the group discussion cannot be removed and so your input will remain in the final report in some fashion.

Additionally, if you are participating in a group session, please be aware that there are others in the group who will leave the meeting with the additional knowledge and input you choose to disclose in this session. We ask all group members to use discretion and respect of your fellow participants if you choose to discuss this meeting with anyone outside of this meeting.

Essentially your participation poses no risks to you. While the project also won't have any direct benefits, it may help improve the Hand-to-Hand program in the future.

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If you have questions about the project you may contact Caitlin Gamel-McCormick at 302-743-4123. If you have questions regarding your rights as a participant, you may contact Chair, Institutional Review Board, University of Delaware at 302-831-2137.

Do you wish to participate? Please initial here _____ if you agree to the audio-taping of the meeting. You are free to leave or stop the audio-taping at any time during the meeting.

By your signature below, you agree to participate in the study. You will be given a copy of this form. Thank you!

Participant Signature

Date

Primary Researcher

Date

Adult Participant Consent Form

Informed Consent Acknowledgement

On behalf of the University of Delaware, Caitlin Gamel-McCormick is conducting research on the usefulness of logic models as a method of program evaluation.

The purpose of the research is to determine if the development of a logic model by different groups produces different results and to explore the experiences of the participants in the model development process. A logic model is a visual representation of a program that lists the different parts of the program and how they relate to one another.

Five different groups of people involved in the DFRC Blue-Gold Hand-in-Hand Program will meet to develop and discuss a logic model of the program. Your child has been chosen as a representative of [specific group category]. Approximately 40 people will take part in this study altogether, with 4 to 10 individuals from each group. Participation in the study will involve an approximately 90 minute feedback session. Some sessions will be held individually, while others will be held in groups with other individuals from the same participant group.

Your child's comments may be reported by his/her type of participation and the county you live in, but individual names will be excluded in the analysis. Meetings will be audio-taped. All audiotapes will be destroyed within one year of the completion of the project. Meeting notes will not contain any personal information that will be able to be used to identify any given individual.

Your child can refuse to answer any question or to leave the meeting at any time. Withdrawing from the project will not result in any negative consequences for you or your child. If you choose to stop the meeting before it is completed, your responses will not be included in the final report.

Essentially your child's participation poses no risks to your child. While the project also won't have any direct benefits, it may help improve the Hand-to-Hand program in the future.

If you have questions about the project you may contact Caitlin Gamel-McCormick at 302-743-4123. If you have questions regarding your child's rights as a participant, you may contact Chair, Institutional Review Board, University of Delaware at 302-831-2137.

Do you wish for your child to participate? Please initial here _____ if you agree to the audio-taping of the meeting. Your child is free to leave or stop the audio-taping at any time during the meeting.

By your signature below, you agree to allow your child to participate in the study. You will be given a copy of this form. Thank you!

Name of Participant

Parent Signature (if participant is under 18 years of age) Date

Primary Researcher Date

Parent Consent Form

Informed Assent: Script

My name is Caitlin and I would like to ask you to participate in this meeting where you will answer some questions about the Hand-in-Hand Program where you were matched up with a senior buddy for the DFRC Blue-Gold Football Game.

Your answers should help make changes to the Hand-in-Hand Program to make it better and more fun in the future.

Your name will not be revealed and there will be no harm to you in participating. We will be recording the session, but these tapes will stay with me and will not be given to anyone else.

You can stop the meeting at any time.

Your [guardian relation] has agreed to let you participate in this meeting. Is that okay with you?

Minor Assent Consent Script

APPENDIX C

Post Meeting Surveys

Feedback Form for Group Sessions

Hand-in-Hand Logic Model Development
[DATE]
Follow-Up Survey

Please circle the answer that fits best to you.

- 1) Did you have any knowledge about logic models prior to receiving the letter inviting you to this meeting?
 - a) Yes, I was familiar with the term and technique.
 - b) I had heard of the technique before, but was unsure to what it was.
 - c) No, this was the first time I had heard of logic models.

- 2) Did you research logic models in any way before coming to this meeting? If so, please describe what you did.
 - No
 - Yes, _____

- 3) Did your view on the Hand-in-Hand Program change after participating in this meeting? If so, please explain.
 - No
 - Yes, _____

- 4) Do you agree with the final product from tonight's meeting? If not, please explain how you disagree.
 - Yes
 - No, _____

5) Did you feel that your views were incorporated in the final logic model? Please explain.

Yes No

Explanation: _____

6) Please provide any feedback on the Hand-in-Hand you would like to share: _____

Feedback Form for Individual Sessions

Hand-in-Hand Logic Model Development
[DATE]
Follow-Up Survey

Please circle the answer that fits best to you.

- 1) Did you have any knowledge about logic models prior to receiving the letter inviting you to this meeting?
- a) Yes, I was familiar with the term and technique.
 - b) I had heard of the technique before, but was unsure to what it was.
 - c) No, this was the first time I had heard of logic models.

- 2) Did you research logic models in any way before coming to this meeting? If so, please describe what you did.

No

Yes, _____

- 3) Did your view on the Hand-in-Hand Program change after participating in this meeting? If so, please explain.

No

Yes, _____

- 4) Do you agree with the final product from tonight's meeting? If not, please explain how you disagree.

Yes

No, _____

5) Are there any other items you feel should be included in the logic model? Please explain.

Yes

No

Explanation: _____

6) Please provide any feedback on the Hand-in-Hand you would like to share: _____

purple = multiple groups yellow = seniors blue=buddy families green=HandinHand orange=staff pink=Exec Team

Inputs	Activities	Outputs	ST Outcomes	MT Outcomes	LT Outcomes
schools (high schools, buddy schools)	Hand-in-Hand and Exec Team Meetings	at DFRC events there is a "judgment free" area where everyone is welcome	buddies are more independent		
classrooms and books at schools	matching process	certain percent participation rate in DFRC events	buddies have increasing social abilities to deal with new situations socially		
school personnel/ administration	parents & participant education about DFRC and people with intellectual disabilities	non-DFRC participant and buddy events have been completed	all involved in program learn to focus on the abilities of individuals not disabilities		
selection process of senior participants	sensitivity training with participants	new people have been met	overall increased awareness and compassion for people with disabilities		
Potential Buddy Parents (prior to signing up)	training (what to expect and general preparation) for the Hand-in-Hand process	fun has been had	senior participants and buddies and their families champion the cause to others		
senior participants	Initial introduction of participants to buddies	happy feelings	all participants (inc parents) support DFRC financially in some way		
buddies	interaction/ planning between participants and buddy parents	good experience	all parents are more likely to support DFRC financially and in other methods	buddies have a decreased level of anxiety around new people	buddy will remember experience

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APPENDIX D
Condensed Logic Modeling Session Results

Inputs	Activities	Outputs	ST Outcomes	MT Outcomes	LT Outcomes
parents (all - buddy & participant parents)	interaction between buddies and participant parents	senior participant and buddy had many talks	all who have been involved have may a behavioral change towards people with disabilities	buddy is more sociable and makes new friends	buddy has more self confidence
support system (buddy's extended family)	overall communication: participant & buddy parent, participant & buddy, DFRC & participants/buddies	senior participant and buddy have the gratification of having a friend	buddy and parents have feeling of satisfaction	buddy has a broadened sense of ability - encouragement trying new things - courage	buddy is more sociable and makes new friends
buddy and participant's genuine interest in program and making it work	DFRC planned/ sponsored events	senior participants and buddies have self pride	buddies see senior participants as role models	buddy knows what to expect can help participant through program	buddies succeed on some level on their own, additional level of independence
"planners"	Hand-in-Hand Party	senior participants and buddies stay in contact	buddy has increased anticipation for next season	buddy looks forward to next year hopefully every year	buddies may make different choices in the activities they choose because of the exposure to the senior's activities
Executive Team	Bowling	good food was eaten by the participant and buddy	buddies may enjoy football or other interests they were exposed to during the program	buddies may have additional likelihood to get/live on own with or without assistance	buddies have enriched lives through multiple years in program
Hand-in-Hand Committee	Blue Rocks	attitude have been touched	buddies lives are "enhanced"	buddies and participants may reconnect on a deeper level	buddies has increased awareness with community

<u>Inputs</u>	<u>Activities</u>	<u>Outputs</u>	<u>ST Outcomes</u>	<u>MT Outcomes</u>	<u>LT Outcomes</u>
general Blue-Gold Committee	Football Scrimmages	knowledge has been gained	buddies and buddy parents have a better idea of what to expect the following year	buddy parent has sense of security and hope in the new relationship with high school participant	buddy parents utilize other services outside DFRC
Non-Committee (event) volunteers	Buddy Walk	emotional experiences/memories have been had	buddies are more independent	buddy parents have continued sense of security in child's future	buddy parents network with each other ability to improve child's future opportunities
DFRC Staff	Blue-Gold All Star Football Game	relationships between participants and buddies is developed	buddy is more sociable and makes new friends	buddy parents understand that child will succeed when they are unable provide care	buddies and their families are potentially damaged if they did not have an involved/attentive participant
participant's availability for events (off from school/work)	participants meeting buddies on field on Game Day	there is an opportunity for the buddy-participant relationship to continue	buddies are able to better handle new social situations	senior participants have ongoing sense of fulfillment	general committee members incorporate awareness in life
introduction of participant and buddy	Blue-Gold committee members and trustees observe interactions and dynamics at DFRC sponsored events	buddy and parent have met other people with and without disabilities, that they may encounter later in life	buddies have familiarity with people that they met in the program and may see elsewhere in the community	senior participant has increased awareness of the specific needs of people with disabilities	parents, buddies, and senior participant alumni maintain relationship with DFRC: volunteering, donating, and/or continued communications
talking/arranging between participants and buddy parents	participants and buddies meeting/talking at DFRC events	a trophy (made at Media Day)	buddies develop confidence to expand circle of friends	senior participant is more patient with people with disabilities	senior participants are more aware of people with disabilities

<u>Inputs</u>	<u>Activities</u>	<u>Outputs</u>	<u>ST Outcomes</u>	<u>MT Outcomes</u>	<u>LT Outcomes</u>
participant mailings/ information	non-DFRC individual participant and buddy events	buddies have a new friend in their sr. participant	buddies have additional, options possibilities through participant and greater community	senior participants may change their major/minor including specialized or education	senior participants are more comfortable talking with people with disabilities that were not in Hand-in-Hand
buddy and/or participant's homes	social experiences between participants and buddies outside home	Buddies have increased social skills	buddy and senior participant relationships may not continue to the extent the buddy and/or participant would like it to	senior participants incorporate their experience in their choice of employment	senior participants interact more positively with people with disabilities and are more open to inclusion in life
venues/ personnel at venues	graduation/graduati on parties	Buddies are more comfortable in public	buddy parents may enroll their child in Hand-in-Hand program again	senior participants that go into education may be able to identify potential buddies	senior participant is more patient with people with disabilities
Supplies (including educational materials and power points), furniture, set-up at events	Attending a friend's birthday party	buddies have a feeling of acceptance	buddy parents see other options and support throughout larger community	senior participant stays involved with DFRC	senior participants have better social skills to interact with new people with disabilities
food (at events)	Dinner together	buddies understand that others have different personalities and abilities and levels of interactions	buddy stays involved in DFRC and other enjoyable activities	senior participants may inspire others to feel more comfortable with people with disabilities in life/work	senior participants better understand other people in the greater community with disabilities

Inputs	Activities	Outputs	ST Outcomes	MT Outcomes	LT Outcomes
calendar/ schedule of DFRC events	visits to buddies at their home	buddy has a sense of belonging	buddy parents are encouraged about their child's future in the greater community	senior participants more likely to get involved in other programs for people with intellectual disabilities	senior participants will raise awareness to friends/family through sharing their experience
orientation session	planned get together for sr. participant and buddy	buddy has a sense of happiness from going through program	parents of buddies more open to allowing child to participate in other activities		senior participants carry empathy and understanding of individuals with disabilities into their careers and as citizens of the community
"agenda" of events (merchandise, supplies, paperwork)	unscheduled/"stop by" events/visits to the buddy's home	buddy has a sense of happiness from going through program	buddy parents may not enroll their child in the Hand-in-Hand program again due to a bad experience		senior participants may change career plans to include disabilities
DJ at Party	participants attending/ helping buddy with his/her regular activities	buddy has an improved sense of self esteem	parents of buddies and participants join DFRC as volunteer		senior participant has additional sensitivity in employment to people with intellectual disabilities and other parts of life
t-shirts	buddy visiting sr. participant at school	buddy has had a good experience attending events going through program	senior participants' perspective of people with disabilities has changed		senior participants more aware and change how interact in jobs, inclusion of people with disabilities
kid-oriented merchandise	participants volunteering in buddy's class at school	buddy has increased skill level	senior participants have increased communication and social skills		senior participant uses experience and self reflection from program to assist in choosing career path

Inputs	Activities	Outputs	ST Outcomes	MT Outcomes	LT Outcomes
Transportation	lunch with high schooler at buddy school	buddy is happy to have gone through program	senior participant has sense that he/she mad a difference in this/her buddy's life		senior participants more prepared if they have a child with an intellectual disabilities
communication with buddy parents - what is okay to do with buddy	buddies going to participants sports practices	buddy parents feel appreciated and supported by participants	senior participant views people with disabilities the same as everyone else (does not stare when in public)		generations of participants continue to participate in Hand-in-Hand
DFRC event locations	visits between participants and buddies at buddies home and/or school	buddy parents get a "mental break" of the responsibility of their child while knowing they are safe	senior participant is more sensitive to what people say and how people act towards people with disabilities		senior participants return to DFRC and Hand-in-Hand program as volunteer
	participant and buddy playing video games	buddy parents have a sense of happiness for their child	participants understand that others without exposure or experience with people with disabilities may tease or not understand other with disabilities		families with individuals with a disability in the larger community may view DFRC events and see there is a larger disability community, and that there are other families like theirs
	visits between participants and buddies - a "tutoring" session	parents of buddies have exposure to other people with other types of disabilities	participants promote events beyond, Hand-in-Hand, in schools dealing with disability awareness		people who attend DFRC events who are not directly involved in the Hand-in-Hand program are more understanding and less judgmental
	visits to buddies at their work	buddy parents network together potentially doing more things together outside of Hand-in-Hand	participant is more involved in groups, involving people with int. disabilities		community has more awareness of people with disabilities and their similarities

Inputs

Activities

Outputs

ST Outcomes

MT Outcomes

LT Outcomes

other group activities - non-DFRC events that are with other buddies and participants	senior participant parents have additional understanding beyond the disability specific label	participants experience with their buddy helps them associate and understand people with disabilities
phone calls between participants and buddies	parents of senior participants are more aware and understanding of people with disabilities	senior participant has gone into special education
participant and buddies e-mailing	senior participant has "grown up" some	participants are able to utilize their experience when applying for jobs
participants making scrapbook for buddies	participant has a sense of self satisfaction	participants share their knowledge of the Hand-in-Hand Program to others involved in personal job/teaching
interaction with the press concerning Hand-in-Hand matches/experiences and broader Blue-Gold	participant is more responsible	relationship and communication between buddy and participant may continue

overall change in consciousness in greater community
general public is more aware and accepting of people with disabilities
the Hand-in-Hand Program continues annually impacting more classes and raising more awareness

Inputs

Activities

Outputs

ST Outcomes

MT Outcomes

LT Outcomes

interaction with other organizations and population groups/ additional dynamics with people outside the DFRC family	senior participants have satisfaction and happiness of being able to and helping buddies	participant parents have general awareness of people with disabilities
senior participants encourage buddy involvement in DFRC events and outside events	senior participants have new perspective	parents of participants and participants may become members of the Blue-Gold committee
talking	senior participant has better understanding of people with intellectual disabilities - builds compassion	elimination of labels utilized by participants, committee, parents
listening	senior participant has more positive views of people with disabilities and compassion towards them	people first mentality grows throughout community
having fun	senior participant learns that their buddy and others with disabilities are very loving, like hugs, and other sort of interpersonal connections	

<u>Inputs</u>	<u>Activities</u>	<u>Outputs</u>	<u>ST Outcomes</u>	<u>MT Outcomes</u>	<u>LT Outcomes</u>
	monitoring and reporting of buddy and participant communication by Hand-in-Hand and other committees, trustees	senior participants learn that people with disabilities want to be and are independent			
		senior participants see that people with disabilities can participate in fun activities like people without disabilities			
		senior participant has a reinforced sense of knowledge of his/her ability to communicate with someone with a disability or other differences			
		realization by senior participants of similarities with buddies			
		senior participant has increased communication skills			
		senior participants have a sense of confidence in ability to help others			
		senior participants have more knowledge on how to interact with and help people/ students with disabilities			

Inputs

Activities

Outputs

ST Outcomes

MT Outcomes

LT Outcomes

senior participants have the ability to carry the awareness from program to others in their school and/or community
senior participants include their experience in life and career ("carry it with them")
"growth" of parents
all parents encourage child to get involved in other activities
"growth" of general BG committee members more aware of disability community
"growth" of Hand-in-Hand Committee
"planners" have fulfillment and gratification through the participant and buddy interaction
family & friends of participants have increased awareness of DFRC & mission

<u>Inputs</u>	<u>Activities</u>	<u>Outputs</u>	<u>Short-Term Outcomes</u>	<u>Mid-Term Outcomes</u>	<u>Long-Term Outcomes</u>
<ul style="list-style-type: none"> • High Schools & their in • High School Advisors and Coaches • Student selection process • Students • Senior Participant Parents <p><i>DFRC</i></p> <ul style="list-style-type: none"> • Hand-in-Hand Committee • Executive Team • General Volunteers • Staff • Supplies (such as office supplies and merchandise) <p><i>Buddies</i></p> <ul style="list-style-type: none"> • Potential Buddy Parents • Buddy Parents • New buddies • Returning Buddies <p><i>External</i></p> <ul style="list-style-type: none"> • Locations (for DFRC & non-DFRC events) • Transportation/General Accessibility 	<ul style="list-style-type: none"> • Ongoing planning meetings • Participant & Buddy Parent Orientation Sessions • DFRC planned events (Hand-in-Hand Party, Bowling, Picnic, Blue Rocks, Media Day, Killens Pond, Football Game) • Non-DFRC planned activities between buddies and senior participants • General contact and interaction between buddies and participants, including talking, listening, having fun, and support of one another • Buddy and senior participant interaction with the other's parents • General monitoring and maintenance of the buddy and senior participant interactions and communications 	<ul style="list-style-type: none"> • Certain percentage of DFRC event participation • Completion/enjoyment of non-DFRC events by buddies and senior participants • Additional contact between buddies, senior participants, DFRC staff & volunteers, and parents has been had • Buddy families have been exposed to other resources • New friendships have been made • All participants and parents have met new people 	<ul style="list-style-type: none"> • An opportunity is provided for a greater friendship • General satisfaction and enrichment of all involved <p><i>Senior Participants</i></p> <ul style="list-style-type: none"> • Have enjoy their experience • Have learned about their buddy, identifying that there are more similarities than differences • Have greater understanding and knowledge of people with disabilities <p><i>Buddies</i></p> <ul style="list-style-type: none"> • Increased confidence and social skills • Developed new interests • Return to program the following year <p><i>Buddy Families</i></p> <ul style="list-style-type: none"> • Sense of fulfillment for child • Know what to expect for future years <p><i>DFRC Staff & Volunteers</i></p> <ul style="list-style-type: none"> • Sense of fulfillment of completion of program • Knowledge of needed improvements for future programming 	<ul style="list-style-type: none"> • Buddies & Participants maintain contact <p><i>Senior Participants</i></p> <ul style="list-style-type: none"> • More compassionate towards people with disabilities • Spread awareness to others not directly involved in the Hand-in-Hand Program • Some senior participants choose careers in special education <p><i>Buddies</i></p> <ul style="list-style-type: none"> • Involved in more activities beyond Hand-in-Hand • Gained additional level of independence 	<ul style="list-style-type: none"> • Buddies gain compounded skills due to multiple years in program • Positive changes in attitudes for all participants • Senior participants have better understanding of disabilities and the disability community • Continued contact between senior participants and buddies • Senior participants include aspects of awareness and inclusion in job • Former participants are less judgmental about people they do not initially understand • Certain percentage of former participants reengaged with DFRC in some way (volunteering or donating money) • Buddy parents have additional resources and networks for services • Buddies are able to care for themselves on a higher level • Parents have increased sense of security over child's future • Overall community benefits and is more aware and accepting of people with perceived differences

<u>Inputs</u>	<u>Activities</u>	<u>Outputs</u>	<u>Short-Term Outcomes</u>	<u>Mid-Term Outcomes</u>	<u>Long-Term Outcomes</u>
<p><i>DFRC</i></p> <ul style="list-style-type: none"> • Volunteers • Staff • Supplies • Funds • Contacts w/in community <p><i>High Schools</i></p> <ul style="list-style-type: none"> • Advisors and Coaches • Students <p><i>Buddies</i></p> <ul style="list-style-type: none"> • Former buddies choose whether or not to participate again in Hand-in-Hand program • Buddy Parents • New buddies <p><i>External</i></p> <ul style="list-style-type: none"> • Event Locations (DFRC & non-DFRC) 	<ul style="list-style-type: none"> • Monthly events (Orientation, Party, Bowling, Picnic, Media Day, Killens Pond, Football Game) are coordinated by DFRC Volunteers and Staff • All participants attend events and have contact with each other • Buddies and high school participants keep in weekly contact • DFRC Volunteers stay in contact with high school students and buddy families, contacting any participant not contacting the other 	<ul style="list-style-type: none"> • Certain percentage of event participation of events • Additional non-DFRC events attended/enjoyed • Additional contact between buddies, senior participants, DFRC staff & volunteers, and parents has been had • Buddy families have been exposure to other resources 	<p>An opportunity is provided for a greater friendship</p> <p><i>Senior Participants</i></p> <ul style="list-style-type: none"> • Have enjoy their experience • Have learned about their buddy • Have greater understanding of people with disabilities <p><i>Buddies</i></p> <ul style="list-style-type: none"> • Increased confidence and social skills • Return to program the following year <p><i>Buddy Families</i></p> <ul style="list-style-type: none"> • Sense of fulfillment for child <p><i>DFRC Staff & Volunteers</i></p> <ul style="list-style-type: none"> • Sense of fulfillment of completion of program 	<p><i>Senior Participants</i></p> <ul style="list-style-type: none"> • More compassionate towards people with disabilities • Spread awareness to others not directly involved in the Hand-in-Hand Program <p><i>Buddies</i></p> <ul style="list-style-type: none"> • Involved in more activities beyond Hand-in-Hand • Have additional independence from family 	<ul style="list-style-type: none"> • Positive changes in attitudes for all participants • Senior participants have better understanding of disabilities and the disability community • Continued contact between senior participants and buddies • Some senior participants will be inspired to go into special education careers • Participants are less judgmental about people they do not initially understand • Certain percentage of former participants reengaged with DFRC in some way (volunteering or donating money) • Overall community benefits and is more aware and accepting of people with perceived differences

	<i>Did you have any knowledge about logic models prior to receiving notice about this meeting?</i>	<i>Did you research logic models in any way before coming to this meeting? If so, please describe what you did.</i>	<i>Did your view on the Hand-in-Hand Program change after participating in this meeting? If so, please explain.</i>	<i>Do you agree with the final product from tonight's meeting? If not, please explain how you disagree.</i>	<i>Did you feel that your views were incorporated in the final logic model?</i>	<i>Any additional feedback on the Hand-in-Hand Program?</i>
<i>HiH Comm Member 1</i>	no	no	yes, as much as I have worked with Hand-in-Hand this really got me thinking about all the good it does	yes	yes	A wonderful unique program!
<i>HiH Comm Member 2</i>	no	no	yes, it makes us look at our committee and how we plan in a different way	yes	yes	We think the Hand-in-Hand Program is a great tool to enhance acceptance and awareness. The relationships are something that touches the heart of both the participant and the Buddy.
<i>HiH Comm Member 3</i>	no	no	yes	yes	yes	It looks like the Hand-in-Hand program is a good way to build relationships.
<i>Exec Team Member 1</i>	had heard of the technique, not sure what it was	no	no	yes	yes	
<i>Exec Team Member 2</i>	no	no	no	yes	yes - a great group discussion	
<i>Exec Team Member 3</i>	no	no	no	yes	yes	
<i>Exec Team Member 4</i>	no	no	no	yes	yes	
<i>Senior 1</i>	no	no	no	yes	yes	
<i>Senior 2</i>	had heard of the technique, not sure what it was	yes - we talked a little about it in high school classes	yes, helped encourage and see love for organization	yes	yes	The Hand-in-Hand program changes participants views on life in general and is one of the best programs I have ever been in. I encourage everyone to get involved.
<i>Senior 3</i>	no	no	no - not really, but it was interesting	yes - I think the discussion unfolded naturally according to the model of questions	yes	I would participate in it again in a heart beat! it provides such good feelings and knowledge about children with disabilities. It also provides knowledge that many people do not have about those with special needs.

	<i>Did you have any knowledge about logic models prior to receiving notice about this meeting?</i>	<i>Did you research logic models in any way before coming to this meeting? If so, please describe what you did.</i>	<i>Did your view on the Hand-in-Hand Program change after participating in this meeting? If so, please explain.</i>	<i>Do you agree with the final product from tonight's meeting? If not, please explain how you disagree.</i>	<i>Did you feel that your views were incorporated in the final logic model?</i>	<i>Any additional feedback on the Hand-in-Hand Program?</i>
<i>Senior 4</i>	no	no	yes - It actually brought back a lot of positive memories, made me re-think of how lucky my experience truly was I got to share with my buddy.	yes	yes - we included a basic knowledge of all the material I feel any other feedback would have fit in the already chosen categories	It was good, I would not change my experience they had constantly event which kept the relationship strong.
<i>Senior 5</i>	no	no	yes - it was nice to see others point of views as their experience was quite different than mine	yes	no	students such as (Juniors 11th grade) could be included. wish more buddies participated. get the word out there. senior year is a very busy stressful time so maybe other grades should be included as well
<i>Senior 6</i>	yes, was familiar with term and technique	no	no	yes	yes	as a family we have always and will continue to believe in and support the program
<i>Senior 7</i>	no	no		yes	yes	It's a great experience and I feel like more people should have a chance to help not just the high school kids.
<i>Senior 8</i>	no	no	no	yes	yes - model covers all aspects of my Hand-in-Hand experiences. Beginning, middle, and end.	Great experience, highlight of my senior year. I remember more about my time spent with my buddy than I do about the game.
<i>Senior 9</i>	no	no	no - reminded of the great experiences	yes	yes	such a great experience - would do it again - love to see how the program grows, glad it continues

	<i>Did you have any knowledge about logic models prior to receiveing notice about this meeting?</i>	<i>Did you research logic models in any way before coming to this meeting? If so, please discribe what you did.</i>	<i>Did your view on the Hand-in-Hand Program change after paricipating in this meeting? If so, please explain.</i>	<i>Do you agree with the final product from tonight's meeting? If not, please explain how you disagree.</i>	<i>Did you feel that your views were incorporated in the final logic model?</i>	<i>Any additional feedback on the Hand-in-Hand Program?</i>
<i>Staff 1</i>	yes, was familiar with term and technique	no	yes, my knowledge was expanded to a deeper level through over discussion	yes	yes, Caitlin did a great job to ensure this for all	Discussion emphasized the important key role of this program and the importance of reviewing and evaluating Hand-in-Hand continuously to make it work best for all
<i>Staff 2</i>	had heard of the technique, not sure what it was	no	no	yes	yes	no
<i>Staff 3</i>	no	no	no	yes	yes - all input was valued by the moderator and other participants	DFRC needs to expand buddy recruitment current process could be considered to passive. many recruitments made in narrow group should involve more groupslike DSA, Autism Delaware, and Arc to
<i>Buddy Fam 1</i>	no	no	no	yes	yes	
<i>Buddy Fam 2</i>	no	no	no - not really, but it was interesting	yes - I think the discussion unfolded naturally according to the model of questions	yes	
<i>Buddy Fam 3</i>	no	no	no	yes	yes	looking forward to the outcome of this meeting
<i>Buddy Fam 4</i>	no	no	no	yes	yes	We always enjoy our buddies and look forward to the next year right after the current one is over!
<i>Buddy Fam 5</i>	no	no	no	yes	yes	

APPENDIX H
Institutional Review Board Approval



RESEARCH OFFICE

210 Hullahen Hall
University of Delaware
Newark, Delaware 19716-1551
Ph: 302/831-2136
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DATE: September 2, 2010

TO: Caitlin Gamel-McCormick, B.A.
FROM: University of Delaware IRB

STUDY TITLE: [182515-1] Conditional Effects on the Logic Modeling Process and Use
IRB REFERENCE #: [REDACTED]
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: September 2, 2010
EXPIRATION DATE: September 1, 2011
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 7

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.

APPENDIX H
Institutional Review Board Approval

If you have any questions, please contact Elizabeth Peloso at 302-831-8619 or epeloso@udel.edu. Please include your study title and reference number in all correspondence with this office.

REFERENCES

- Adler, M.A. (2002). The utility of modeling in evaluation planning: the case of the coordination of domestic violence services in Maryland. *Evaluation and Program Planning, 25*(3), 203-213. doi:10.1016/S0149-7189(02)00016-2
- Arheart, D.F., Sly, D.F., Trapido, E.J., Rodriguez, R.D., & Ellenstad, A.J. (2004). Assessing the reliability and validity of anti-tobacco attitudes/beliefs in the context of a campaign strategy. *Preventive Medicine, 39*(5), 909-918. doi:10.1016/j.ypmed.2004.03.028
- Behn, B. D. (2003) Why Measure Performance? Different Purposes Require Different Measures. *Public Administration Review, 63*(5), 586-606. http://www.ppmrn.net/images/resources/behn_2003.pdf
- Brickmayer, J.D., & Weiss, C.H. (2000). Theory-Based Evaluation in Practice: What Do We Learn? *Evaluation Review, 24*(4), 407-431. doi:10.1177/0193841X0002400404
- Chen, H.T., & Rossi, P.H. (1983). Evaluation with sense: The theory-driven approach. *Evaluation Review, 7*(3), 283-302. doi:10.1177/0193841X8300700301
- Chen, W. W., Cato, B. M., & Rainford, N. (1998–1999). Using a logic model to plan and evaluate a community intervention program: A case study. *International Quarterly of Community Health Education, 18*(4), 449–458. doi:10.2190/JDNM-MNPB-9P25-17CQ
- Chen, H.T. (1990). *Theory-driven evaluations*. Newbury Park, CA: SAGE Publications, Inc.
- Cooksy, L.J., Gill, P., & Kelly, P.A. (2001). The program logic model as an integrative framework for a multimethod evaluation. *Evaluation and Program Planning, 24*(2), 119-128. doi:10.1016/S0149-7189(01)00003-9
- Conrad, K.J., Randolph, F.L., Kirby, M.W., & Bebout, R.R. (1999). *Creating and Using Logic Modles: Four Perspectives*. In Homelessness Prevention in Treatement of Substance Abuse and Mental Illness: Logic Models and Impementation fo Eight American Projects. New York: The Haworth Press, Inc.

- Cretin, S., Shortell, S.M., & Keeler, E.B. (2004) An Evaluation of Collaborative Interventions to Improve Chronic Illness Care: Framework and Study Design. *Evaluation Review*, 28(1),18-51. doi:10.1177/0193841X03256298
- Dyehouse, M., Bennett, D., Harbor, J., Childress, A., & Dark, M. (2009). A comparison of linear and systems thinking approaches for program evaluation illustrated using the Indiana Interdisciplinary GK-12. *Evaluation and Program Planning*, 32(3), 187-196. doi:10.1016/j.evalprogplan.2009.03.001
- Epstein, J., Collins, K., & Pancella, T. (2004). The Doubles: A Case Study on Developing a Technology-Based Substance Abuse Education Curriculum. *Evaluation Review*, 28(6), 539-563. doi:10.1177/0193841X04266047
- Fieldena, S.J., Ruscha, M.L., Masindaa, M.T., Sandsa, J., Frankisha, J., & Evoy, B. (2007). Key considerations for logic model development in research partnerships: A Canadian case study. *Evaluation and Program Planning*,30(2), 115-124. doi:10.1016/j.evalprogplan.2007.01.002
- Fleming, M.L., & Easton, J. (2009). Building environmental educators' evaluation capacity through distance education. *Evaluation and Program Planning*, 33(2), 172-177 . doi:10.1016/j.evalprogplan.2009.07.007
- Green, R.S., Ellis, P.M., & Lee, S.S. (2005). A city initiative to improve the quality of life for urban youth: how evaluation contributed to effective social programming. *Evaluation and Program Planning*, 28(1), 83-94. doi:10.1016/j.evalprogplan.2004.10.005
- Gugiu, P. C., & Rodriguez-Campos, L. (2007). Semi-structured interview protocol for constructing logic models. *Evaluation and Program Planning*, 30(4), 339-350. doi:10.1016/j.evalprogplan.2007.08.004
- Hampton, M., Fahlman, S.A., & Jeffery, B.L. (2005). A process evaluation of the Youth Educating About Health (YEAH) program: a peer-designed and peer-led sexual health education program. *The Canadian Journal of Human Sexuality*,129-141.
- Helitzer, D., Hollis, C., Urquieta de Hernandez, B., Sanders, M., Roybal, S., & Van Deusen, I. (2009). Evaluation for community-based programs: The integration of logic models and factor analysis. *Evaluation and Program Planning*,33(2), 223-233 . doi:10.1016/j.evalprogplan.2009.08.005

- James-Burdumy, S., Dynarski, M., & Deke, J. (2007). When Elementary Schools Stay Open Late: Results From the National Evaluation of the 21st Century Community Learning Centers Program. *Educational Evaluation and Policy Analysis, 29*(4), 296-319. doi:10.3102/0162373707309077
- Julian, D.A., Jones, A., & Deyo, D. (1995). Open systems evaluation and the logic model: Program planning and evaluation tools. *Evaluation and Program Planning, 18*(4), 333-341. doi:10.1016/0149-7189(95)00034-8
- Kaplan, S. A., & Garrett, K.E. (2005). The Use of Logic Models by Community-Based Initiatives. *Evaluation and Program Planning, 28*(2), 167-172. doi:10.1016/j.evalprogplan.200.09.002
- Kellogg Foundation, W.K. (2004). *Logic Model Development Guide*. Battle Creek, Michigan: W.K. Kellogg Foundation.
- Krueger, R. A. Focus Group Interviewing. *Richard A. Krueger*. Retrieved from <http://www.tc.umn.edu/~rkrueger/focus.html>
- Letiecq, B.L., & Bailey, S.J. (2004). Evaluating from the Outside: Conducting Cross-Cultural Evaluation Research on an American Indian Reservation. *Evaluation Review, 28*(4), 342-357. doi:10.1177/0193841X04265185
- Levison-Johnson, J., & Wenz-Gross, M. (2010). From complexity to reality: Providing useful frameworks for defining systems of care. *Evaluation and Program Planning, 33*(1), 56-58. doi:10.1016/j.evalprogplan.2009.05.005
- Liebow, E., Phelps, J., Van Houten, B., Rose, S., Orians, C., Cohen, J., Monroe, P., & Drew, C. H. (2009). Toward the assessment of scientific and public health impacts of the National Institute of Environmental Health Sciences extramural asthma research program using available data. *Environmental Health Perspectives, 117*(7), 1147-1154.
- McGlyn, E.A. (2003). Selecting Common Measures of Quality and System Performance. *Medical Care, 41*(1), I-39-I47. <http://www.jstor.org/stable/3767727>
- McLaughlin, J.A. and Jordan, G.B. (1999). Logic models: a tool for telling your programs performance story. *Evaluation and Program Planning, 22*(1), 65-72. doi:10.1016/S0149-7189(98)00042-1

- McLaughlin, J.A. and Jordan, G.B. (2004). Using Logic Models. In J.S. Wholey, H.P. Hatry & K.E. Newcomber (Eds.), *Handbook of Practical Program Evaluation* (pp. 7-32). San Francisco, CA: Jossey-Bass
- Medeiros, L.C., Nicholson Butkus, S., Chipman, H., Cox, R.H., Jones, L., Little, D. (2005). A Logic Model Framework for Community Nutrition Education. *Journal of Nutrition Education and Behavior*, 37(4) 197-202.
doi:10.1016/S1499-4046(06)60246-7
- Millar, A., Simeone, R.S., & Carnevale, J.T. (2001). Logic models: a systems tool for performance management. *Evaluation and Program Planning*, 24(1), 73-81.
doi:10.1016/S0149-7189(00)00048-3
- Nesman, T.M., Batsche, C., & Hernandez, M.(2007). Theory-based evaluation of a comprehensive Latino education initiative: An interactive evaluation approach. *Evaluation and Program Planning*, 30(3), 267-281.
doi:10.1016/j.evalprogplan.2007.04.004
- Noble, J.H., & Stretch, J.J. (2002). Grade-Induced Beliefs About Undergraduate Generalist Social Work Practice Competency. *Evaluation Review*,26(2), 213-236. doi:10.1177/0193841X02026002004
- Osborne, R.H., Elsworth, G.R., & Whitfield, K. (2007). The Health Education Impact Questionnaire (heiQ): An outcomes and evaluation measure for *patient education and self-management interventions for people with chronic conditions*. *Patient Education and Counseling*, 66(2), 192-201.
doi:10.1016/j.pec.2006.12.002
- Pumariega, A.J. (1996). Culturally competent outcome evaluation in systems of care for children's mental health. *Journal of Child and Family Studies*, 5(4), 389-393. doi: 10.1023/A:1016816005732
- Randolph, J. (2009). A Guide to Writing the Dissertation Literature Review. *Practical Assessment, Research & Evaluation*, 14(13).
<http://pareonline.net/getvn.asp?v=14&n=13>.
- Reed, C.S., & Brown, R.E. (2001). Outcome–asset impact model: linking outcomes and assets. *Evaluation and Program Planning*, 23(3), 287-295.
doi:10.1016/S0149-7189(01)00024-6

- Renger, R., (2006). Consequences to Federal Programs When the Logic-Modeling Process Is Not Followed With Fidelity. *American Journal of Evaluation*,27(4), 452-463. doi: 10.1177/1098214006293666
- Renger, R., & Hurley, C. (2006). From theory to practice: Lessons learned in the application of the ATM approach to developing logic models. *Evaluation and Program Planning*, 29(2), 106-119. doi:10.1016/j.evalprogplan.2006.01.004
- Renger, R., & Titcomb, A. (2002). A Three-Step Approach to Teaching Logic Models. *The American Journal of Evaluation*,23(4),493-503. doi:10.1016/S1098-2140(02)00230-8
- Saxton, M.L., Naumer, C.M., & Fisher, K.E. (2007). 2-1-1 Information services: Outcomes assessment, benefit-cost analysis, and policy issues. *Government Information Quarterly* 24(1), 186-215. doi:10.1016/j.giq.2006.02.013
- Schalock, R.L. & Bonham, G.S. (2003). Measuring outcomes and managing for results. *Evaluation and Program Planning*, 26(3), 63-71. doi:10.1016/S0149-7189(03)00027-2
- Scheirer, M.A., & Newcomer, K. (2001). Opportunities for program evaluators to facilitate performance-based management. *Evaluation and Program Planning*, 24(1), 63-71. doi:10.1016/S0149-7189(00)00047-1
- Scarinci, I.C., Johnson, R.E., Hardy, C., Marron, J., & Partridge, E.E. (2009). Planning and implementation of a participatory evaluation strategy: A viable approach in the evaluation of community-based participatory programs addressing cancer disparities. *Evaluation and Program Planning*, 32(3), 221-228. doi:10.1016/j.evalprogplan.2009.01.001
- Taylor-Powell, E. & Henert, E. (2008). *Developing a logic model: Teaching and training guide*. University of Wisconsin-Cooperative Extension. Retrieved from <http://uwex.edu/ces/pdane>
- Torvatn, H. (2008). Logic Modeling Methods in Program Evaluation. *American Journal of Evaluation*,27(4), 219-221. doi:10.1016/j.evalprogplan.2008.01.002
- Trochim, W. M., Marcus, S. E., Masse, Moser, R. P. & Weld, P. C. (2008). The Evaluation of Large Research Initiatives: A Participatory Integrative Mixed-Methods Approach. *American Journal of Evaluation*, 29(1), 8-28. doi:10.1177/1098214007309280

The United Way of America (1996). *Measuring program outcomes: A practical approach*. United Way of America.

Unrau, Y.A. (2001). Using client exit interviews to illuminate outcomes in program logic models: a case example. *Evaluation and Program Planning*, 24(4), 11-124. doi:10.1016/S0149-7189(01)00029-5