

Adding Value in the Public Interest
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What is the value added from public administration and public policy education: To the students? Their employers? To organizations? To public service? To the strength of governance? Measuring educational outcomes is a useful way to assess how public service programs are working in the greater **public interest**. The socio-political-economic environment changes rapidly, and appropriate education needs to be responsive. Outcome measurement and analysis can help to inform important decisions about education and training by allowing us to evaluate and improve the performance of our educational programs. How are designated skills attained and developed? Why in a group of individuals with the same educational experience do some develop the designated skills and some do not? Envisioning the desired outcomes of public service education and measuring the extent to which they are achieved can help us evaluate what we do and how well we do it in order to assess and improve the quality of our programs and the contribution to service in the public interest.

Outcome measurement of public service education may be useful for a multitude of stakeholders, such as accrediting bodies, funders, program directors, and faculty. Analysis of outcomes can highlight critical weaknesses in curriculum, illuminate effective styles of teaching, and evaluate how well programs match with the external needs of both public and private employers (Cleary 1990; Mitchell 1991; Boyle and

Whitaker 2001; Champagne 2006). Outcome measurement can be used to evaluate the value added in expending resources in public service education as well as different areas of professional training. It is important to learn how much and how well students are learning in professional programs, and whether what they are learning prepares them well for the challenges they face in the workplace to ensure the relevance and currency of professional programs (Jennings 1989; Roberts 2001). Data on outcomes can be used to guide improvements in program curricula, constituting one form of quality enhancement of program implementation.

The objectives of this paper are to provide a logical framework underlying outcome measurement in public service education and illustrate how stakeholders might use this framework to address questions about the quality and usefulness of educational processes. This paper draws upon what we already know about outcome assessment for educational programs to offer a theory of change which elaborates the process through which programs add value to individuals, organizations, and governance, and suggests measurement strategies for the measurement and analysis of program outcomes. The presumed mission of public service education is to prepare students to serve the public, thus a discussion of public interest precedes presentation of the model.

Public Interest

The term “public” in public service connotes **a shared focus on adding value in the public interest**. Interpreting what the “public interest” will mean in a specific context may vary (see, e.g., Sorauf 1957; Schubert 1960; Downs 1962; Goodsell 1990), but in practice, the term is often synonymous with the notion of “general welfare,” or the “common good” or actions benefiting the “general public.” While difficult to define its

contents precisely, serving the public has a practical salience for employees of governments and nongovernmental organizations in countries across the world. Former Irish Information Commissioner, Kevin Murphy, defined the public interest in the following way:

In very general terms, I take it that the public interest is that which supports and promotes the good of society as a whole (as opposed to what serves the interests of individual members of society or of sectional interest groups). In this sense I take it that the term 'public interest' broadly equates with the term 'the common good' (Freedom of Information Act 2002).

The public interest is often contrasted with the concept of "private interest," recognizing that what is good for the general society encompasses more than simply benefits for particular individuals. It is also fairly easy to garner agreement on what is not in the public interest; for example, corruption, injustice, racism, authoritarianism, arbitrary actions, unethical decision making, and anti-social behavior are behaviors not in the public interest in any context. While it may be impossible to define exactly what is the public interest in a given policy situation, it is still useful as an "ideal" and a "process." As Gary Wamsley suggests:

In this vein, the "public interest" refers to a combination of several habits of mind in making decisions and making policy: attempting to deal with the *multiple* ramifications of an issue rather than a select few; seeking to incorporate the *long-range* view into deliberations, to balance a natural tendency toward excessive concern with short-term results; considering *competing* demands and requirements of affected individuals and groups, not one position; proceeding equipped with *more* knowledge and information rather than less; and recognizing that to say that the 'public interest' is problematic is not to say it is meaningless (Wamsley et.al., 1990: 40).

While the focus on the public is shared, the academic identity of public service programs has become less clearly defined in the last decade, in part due to the changing nature of the public sector during this period. Now there are Master of Business

Administration (MBA) programs with specialty fields in public service, and joint degrees at both the bachelors and masters level that blend public service education with business, health management, and cross-sectoral management. So while analysis of outcomes at the programmatic level sounds simple, clarifying what constitutes the program may itself be challenging. Therefore, this paper will discuss the outcomes of professional graduate programs, including the MPA, MPP, MBA, MSW, as well as other programs and training that focus on preparing students for careers in the nonprofit and public sector. While not specifically public service programs, many of these other professional degrees provide training and produce individuals that assume leadership roles in organizations involved in the networks serving the public.

There has been attention given to outcome assessment in a variety of professional fields, including human resource development, business, education, economics, as well as public service. As Table 1 elaborates, the focus and inquiry of such investigations also varies.

Surveys are popular modes for data collection when the assessment is focused on student learning outcomes or when examining the quality of a specific program's curriculum (Cleary 1990; Mitchell 1990; Herbert and Reynolds 1998; Champagne 2006). Case studies have also been employed in outcome assessment, when the student outcomes for a single school, course, or degree program are examined (Boyle and Whitaker 2001; Williams 2002; Aristigueta and Gomes 2006). Less often, field experiments have been performed to analyze the effect of individual characteristics on intermediate outcomes, usually in the course of business training (Tracey et al. 2001; Schwoerer et al. 2005). Other methods have been discussed but rarely employed,

including testing, assessment centers, and teacher-centric evaluations (Jennings 1989; Beaumont 2005).

As displayed in Table 1, most of the research on public service educational outcomes in the last two decades has focused on student learning outcomes (Jennings, 1989; Cleary, 1990; Boyle and Whittaker, 1998; Williams, 2002; Nishishiba, et.al., 2005; Castleberry, 2006; Aristigueta and Gomes, 2006; and Yeager, et.al., 2007). Similarly, literature in economics, business, and education has also focused on these immediate outcomes (Carter 2002; Lee 2006; Yamarik 2007; Stone and Bailey 2007). The measurement of these student outcomes rarely goes past the surveying of students, alumni, and occasionally employers about the change in student knowledge, skills, and abilities from classroom and field learning experiences: characteristics that are also influenced by individual and institutional characteristics.

Drawing upon the research on outcomes of public service education, as well as other professional training programs, we have created a model to illuminate intended processes. Figure 1 displays a logic model for public service and other professional educational programs. Reading from left to right, the logical progress flows from the **support and resources** employed to provide public service education to specific **programmatic activities**, that are expected to result in the **outputs** of changed behaviors on the part of both public service faculty and students, that are expected to result in **outcomes**, including improved governmental operations and civic engagement, that are expected to contribute to strengthened governance and economic wellbeing in the society, thus benefiting the public interest. The entire process is embedded in the **socio-political-economic environment**, in other words, the way that the educational programs operate,

from the nature of their resources to their ability to improve governmental and societal conditions is expected to be shaped by the specific context in which they are established.

The framework provided here lays out the expected results flowing from public service education that adds value to the public interest, and recognizes that the relationships among the components of the model are typically recursive. For example, public service faculty members typically engage in a variety of activities outside of the formal classroom. They consult with governments and nongovernmental organizations, they document innovative methods to help support the diffusion of best practices, and they interact informally with practitioners. These activities also help the faculty members enhance their knowledge and skills, so that they can improve the education that they provide to students and the contributions they offer to practice. Similarly, students learn from the educational programs, and then they improve practice in the workplace. They continue to interact with faculty informally, or as adjunct faculty members in the programs, and they may even transition into fulltime teaching positions themselves. The arrows in the model suggest that such **feedback, or learning loops**, can serve to enrich the relevance of the education offered by public service programs to the needs of the government and civil society.

Examining the extent to which programs produce the intended outcomes presents an important focus for assessment of program quality. Attributing behavioral outcomes to educational training is certainly challenging. Donald Kirkpatrick's four tier model for evaluating educational outcomes has been the dominant conceptual framework used for over three decades (Kirkpatrick 1959; 1976; 1998). Kirkpatrick suggested that outcomes of educational training programs could be measured at four levels: first, the students'

perceptions of the quality/value/worth of the program at the conclusion of the program, typically captured in end-of-course or program feedback forms; second, actual use of the knowledge and skills in the workplace at least some months after completion of the program; third, positive changes in work processes that resulted from the students' employment of the skills and knowledge they learned; and fourth, increases in the productivity of the organizations where the program alumni worked. And Hamblin (1974) suggested a variation of this model by adding a fifth level of ultimate value. More recently, Phillips (1997) added to Kirkpatrick's four level training evaluation model with another level, return on investment, which calculates the monetary return of training programs (ROI). This could be compared to our last boxes in Figure 1 which suggest that a thriving economy contributes to strengthened governance and vice versa. Due to the resources and time required to follow-up program alumni, as well as the analytical challenges to attributing organizational changes to specific student/alumni contributions, evaluation of educational programs rarely goes further than Kirkpatrick's second level.

Theory of Change Model

We offer a Theory of Change model that moves beyond Kirkpatrick's framework, and more importantly, identifies the steps—which we term enabling characteristics—that facilitate the movement from immediate to intermediate to longer term learning outcomes (Figure 2). Our enabling characteristics reflect Holton's (1996) suggestion that Kirkpatrick's four level model fails provide a mechanism for linkage between the levels. Our notion of assessing immediate, intermediate, and longer term outcomes as three distinct but interrelated units is in some ways similar to Jennings' (1989) conception of three different approaches to MPA program outcomes. His approaches are the value-

added approach, the career success approach, and the impact approach. The value-added approach focuses on changes in knowledge and skills, and is similar to the immediate outcomes in Figure 1. The career success approach assesses individual progress in careers, or intermediate outcomes. Finally, the impact approach looks at “the impact of graduates on their organizations and the public service” (Jennings 1989, 442). As seen in Figure 1, our longer term outcomes focus on organizational performance as a whole rather than the impact of individuals on organizations. Furthermore, moving beyond Jennings, this model also works to elaborate and discuss the enabling characteristics which link the three different steps of outcomes that we identify.

In our theory of change model, the initial **inputs** are characteristics that affect outcomes. These initial inputs include individual and institutional characteristics, such as resources, geographic locality, and integrity. Inputs are not independent, the institution and the individual interact. These inputs will affect **activities**, classroom learning and field learning experiences, as individual characteristics will affect an individual’s experiences in an institutional environment and an institutional environment will affect the opportunities offered to individuals. Learning activities are interrelated, as what is used in the classroom can be employed in the field and vice versa. These learning activities feed into **immediate outcomes**, or the knowledge, skills, and abilities that an individual possesses at the immediate completion of a course or program. These knowledge, skills, and abilities are related to the individual’s perception of their education, as well. Between immediate outcomes and **intermediate outcomes** of individual job performance is a key step in our theory of change model: **enabling individual characteristics**. These characteristics will enable (or impede) an individual

from applying their knowledge, skills, and abilities to the workplace. Figure 2 lists some of these important characteristics. Similarly, between intermediate outcomes and **longer term outcomes**, exists **enabling organizational characteristics**. These characteristics enable individual performances on the job to aggregate to shape organizational performance, and are listed in Figure 2.

Enabling characteristics have rarely been discussed. Kirkpatrick (1998) notes that in his four level framework that you can't just skip between one level and the next to evaluate what seems most important. This theory of change model explains (through enabling individual characteristics) what links knowledge, skills, and abilities and other immediate outcomes to individual performance, as well as what links individual performance on the job to organizational performance as a whole (enabling organizational characteristics). Enabling characteristics help to explain not only the link between knowledge, skills, and abilities and individual performance, but the reverse: why, at times, individuals with the designated skills simply don't perform on the job. Similarly, enabling characteristics can explain why a set of individual performances may not be directly analogous to the same level of organizational performance. Enabling characteristics move outcome measurement from a simple to a more complex logic model. In business and training literature, many of the enabling characteristics are frequently called transfer characteristics. For example, Ford et al (1992) discusses individual enabling characteristics of self-efficacy and ability and organizational characteristics of culture as transfer characteristics (also see Brown and Reed 2002).

Most analyses have focused on inputs and immediate outcomes while fewer have elaborated on the enabling factors, and intermediate or longer term outcomes which are

instrumental in our theory of change. There are a few foci in this literature that are of particular interest here because of their prominence in the literature and their potential relevance to our theory of change. First, is **self-efficacy**. Defined one way, self-efficacy is the self confidence “central to the willingness to act in an entrepreneurial way, to identify and seize opportunities” (Lucas and Cooper 2004, 4). Self-efficacy is an enabling factor that is linked to individual innovation and achievement in the workplace. A person’s self-efficacy is impacted by “their perceived abilities and skills with respect to that are of activity” (Lucas and Cooper 2004, 4). Self-efficacy is a critical lynchpin in our logic model, as it is an important enabling characteristic between immediate and intermediate outcomes. Levels of self-efficacy can help explain why even when content is learned, it may not be applied.

Brinkerhoff and Apking (2001) suggest that skills need to be applied, feedback needs to be received, and the individual must reflect on their learning in order for knowledge and skills to be applied as well as learned. Knowles (1990) and Brinkerhoff and Apking (2001) contend that a process beyond simply content based learning is particularly important for adult learners, as they feel the need to link and apply their knowledge to something relevant to themselves. Enhanced self-efficacy can also affect longer term outcomes if the learning culture of the organization enables and promotes such behavioral characteristics in its employees. Assessment of self-efficacy may be especially useful in understanding how specific educational strategies can enhance students’ application of knowledge and skills.

Gecas (1989) suggests that self-efficacy must be measured in either the task or the domain, and field experiments provide a key type of data collection (Tracey et al

2001; Carter 2002; Lucas and Cooper 2004; Schwoerer et al 2005). So far, the literature has generally reviewed how individual characteristics or activities contribute to self-efficacy, including cognitive ability and various traits. Following the model presented in Figure 2, the next step would be to determine how the characteristic of self-efficacy is an enabling characteristic between immediate and intermediate outcomes, rather than an outcome in itself.

Second, **assessments of performance** in terms of workplace results of both graduate students and programs are important indicators of the links between immediate outcomes and intermediate and longer term outcomes (Aristigueta and Gomes 2006; Tam 2006, 2007; Boyle and Whitaker 2001; Cleary 1990). For graduates to contribute successfully in the workplace, sufficient or necessary enabling individual characteristics must exist for the immediate outcomes to equate to intermediate outcomes. The assessments of performance currently evaluate how individuals perform on the job; according to our model, the next step would be to examine how this individual job performance relates (or doesn't) to performance of the organization as a whole, through the enabling organizational characteristics. For example, is feedback readily available? Do employees feel comfortable taking risks?

Assessments of performance also directly relate to a third issue and popular focus in outcomes literature of **curriculum quality**. Outcomes research can also help to identify the most useful components in an academic curriculum, as well as how well the curriculum matches the needs of the external—non academic—world (see Cleary 1990; Mitchell 1991; Boyle and Whitaker 2001). However, research foci on curriculum quality do not reveal why, even with a curriculum that is judged to match the needs of the

external environment, some individuals and organizations succeed while others do not. For example, adult learners need to understand why they need to know that information, beyond the fact that it is simply on the curriculum. A focus on curriculum quality may not address these needs or examine the salient link between knowledge and organizational goals that students face in the workplace. (Brinkerhoff and Apking 2001). An evaluation model that assesses such enabling characteristics, as seen in Figure 2, should help to explore when and how curricula are successful (Salas and Cannon-Bowers 2001).

While there is much to be learned from previous research, there is much room for expansion and improvement in outcome measurement. Particularly, the enabling individual characteristics between immediate and intermediate outcomes, as well as the enabling organizational characteristics between intermediate and longer term outcomes require more attention. Furthermore, while survey methods and case studies of narrow programs and courses may be the most (or only) feasible way to conduct research, they are certainly not sufficient in measuring longer term outcomes.

Data Collection

Survey instruments are by far the most popular data collection tool in outcome measurement and evaluation. However, surveys rarely reach beyond Kirkpatrick's first level of analysis—much less review important traits such as enabling characteristics we identified in our theory of change (Lee and Pershing 2002; Brinkerhoff 1989). Improving the breadth and content of survey mechanisms can help to improve the quality and usefulness of the data collected. A survey should identify who most successfully used the public service education, attempt to discern the reasons for success, as well as identify

the breadth of the success throughout the group of alumni (Brinkerhoff and Apking, 2001).

In addition, the reliance on survey mechanisms limits learning on outcome measurement. Data on program quality should be collected via multiple data collection techniques. Jennings (1989) suggests testing and even assessment centers for evaluation. Experimentation can also lead past the conclusions of survey instruments. Field experiments can be difficult and time consuming to conduct in outcomes research (and this difficulty likely explains their lack of use), but can yield useful information (Schwoerer et al 2005; Carter 2002; Tracey et al 2002).

Comparison of evaluations of programs and or outputs and outcomes offered by different stakeholders can offer insight. Whatever the method used, data should be collected by various parties that have an interest in outcomes in public service education. Furthermore, observations of teaching and student and alumni performance, or even expert reviews can provide complementary information about outcomes that will help us learn about the value added from professional education. Data can be collected from both the recipients of public service education (the students) as well as those who participate in the consumption of public service education (the public, supervisors, and other stakeholders).

Meaningful Comparisons

Meaningful comparisons are essential to facilitate understanding of how well public service educational programs perform. Whether the focus is on the quality of classroom instruction, the resultant knowledge, skills, competencies and self efficacy of the alumni, or the contributions faculty and alumni make to the organizations with which

they work, all data gain meaning through appropriate comparison. Comparative analyses promote learning so that we can improve processes and readjust programmatic goals.

There are many possible approaches to employ in order to address the basic question: compared to what? It is always useful to track performance across time, typically starting with baseline data, or a preliminary assessment of implementation and outcomes. It is also important to disaggregate data we collect about students and student learning outcomes, for example, to learn about the effects our programs may have on different categories of students, or in preparing students for different career tracks.

Benchmarking, or comparing programmatic performance with other programs deemed to be successful on specific criteria can be useful as well. Selection of appropriate programs to serve as benchmarking partners can be challenging. For example, the performance of any public service program is affected by many contextual factors as well as resource constraints and institutional context. However, it may be useful to draw comparisons with programs perceived to be relatively “comparable” to make sense of data collected on programmatic processes or outputs. For example, benchmarking comparisons are frequently made by Master of Business Administration programs on measures of student and alumni satisfaction with the quality of learning environments, and employer evaluations of alumni competencies.

Measuring Quality

The primary observation about quality assessment offered here is that there are many facets of public service education that may be appraised, and multiple levels of analysis, useful comparisons, and modes of data collection to employ. The notion of quality, like programmatic performance, is a socially constructed concept that reflects the

values and assumptions of the evaluator. Reliability in data collection is necessary though not sufficient to establish credibility. Measurement of subjective concepts such as quality requires clear identification of the aspects of the entity to be evaluated, as well as the criteria that will be employed in the evaluation. The reliance on survey mechanisms is problematic for the quality of outcome research: the quality of surveys is often questionable. Lee and Pershing (2002) contend that survey mechanisms that are used in training evaluation are often incomplete and lack important components; they suggest that more systematic research be done on the design of these questionnaires. Surveys, as data collection instruments, can often assess perceptions and opinions more than actual performance (Jennings 1989). Therefore, simultaneous use of multiple methods of data collection can help to ensure that the quality of outcome research is consistent and credible. We need to measure the right things the right way consistently to ensure that outcomes research is credible and useful and to satisfactorily assess the value that professional education adds to the public interest. Table 2 offers some suggested modes of data collection for public service programs.

Conclusion

Measuring intermediate and longer term outcomes of public service education, including assessment of the results of faculty research and their interaction with practitioners, will be costly. However, it is important to conceptualize the multiple routes through which faculty and alumni add value in public service and civil society (Smith 2007). Developing a strategy for reviewing and assessing enabling factors will not be easy. But analyzing and attempting to explain longer term outcomes that are affected by

the immediate and intermediate outcomes and the enabling individual and organizational characteristics, is valuable, even if their measurement is costly.

Linking the outputs of professional education programs to longer term improvements in civil society and governance are probably not feasible, due to the difficulty of contributing causation when there are so many contextual factors that affect the quality of governance, but clarifying the longer term vision is still useful. Furthermore, the concept of enabling factors can help to determine why and when successful immediate or intermediate outcomes do not translate into successful outcomes in the longer term, as this may help to illuminate the effects of enabling factors.

Judging the quality of our contributions is not easy. There are no absolute standards that can be applied in a consistent fashion across the world. As a profession that aspires to provide value to society, it is fitting that our programs exemplify the values that we teach, such as integrity, fairness, equity and transparency. We can certainly apply these criteria as we assess the manner in which we operate our programs. Clarifying criteria for assessing how well we educate our students, create and transmit useful knowledge, and serve our governments and society is a worthy goal that should lead us to focus on both the quality of our programs and the value of the outcomes of our work.

Table 1: Meta-Analysis of Research on the Quality of Public Affairs Education

Source/Year	Field	Mode of Data Collection	Inquiry	Focus	Target Population	Data Provided
Schwoerer et al (2005)	Human Resource Development	Case Study, Field Experiment	Learning Outcomes and Self-Efficacy in Career	How does training impact self-efficacy outcomes?	New recruits— individuals hired for summer work for independent contractor.	Yes n=420
Carter (2002)	Human Resource Development	Field Experiment	Student Learning Outcomes and Self-Efficacy in Career	How can the relationship between cognitive ability and training methods be used to improve training outcomes?	Undergraduates in a introductory human resources management company.	Yes n=93
Tracey et al (2001)	Human Resource Development	Field Experiment, Survey	Learning Outcomes and Self-Efficacy in Career	How do individual characteristics impact/affect training and learning outcomes?	Private organization managers (hotel industry). Both managerial trainees and supervisors.	Yes n=420
Stone and Bailey (2007)	Business	Survey	Student Learning Outcomes	How well are conflict resolution skills used outside the class (self-efficacy)?	Juniors and Seniors in Business and Economics.	Yes n=140
Lucas and Cooper (2004)	Business	Survey	Student Learning Outcomes in Career	Does a student program improve entrepreneurial self-efficacy later?	Students at the University of Strathclyde	Yes n=55

Source/Year	Field	Mode of Data Collection	Inquiry	Focus	Target Population	Data Provided
Michlitsch and Sidle (2002)	Business	Survey	Quality of Outcome Assessment	Frequency of employment and perceived effectiveness of learning outcomes.	Professors in U.S. Undergraduate Business Schools	Yes n=573
Yamarik (2007)	Economics	Survey	Student Learning Outcomes	What is the outcome difference between cooperative and lecture based learning?	Intermediate Macroeconomics Students	Yes n=93
Lee (2006)	Education	Survey	Student Learning Outcomes	How vicarious student experiences are affected by strategies that promote effective learning.	Introductory Education Technology Course— Large Midwestern University.	Yes n=65
Tam (2006, 2007)	Education	Survey	Quality of Outcome Assessment	Relationship between university experience and learning outcomes—is the university meeting its objectives?	Students at Lingnan University in Hong Kong	Yes, 2 samples n=706 n=988
Champagne (2006)	Health	Survey	Curriculum Quality	Assessment of service learning requirements.	Undergraduate Health Education Students	Yes n=12
Sullivan and Thomas (2007)	Psychology	Case Study, Survey	Student Learning Outcomes/ Curriculum Quality	Measuring and demonstrating that undergraduate curriculum results in positive learning outcomes.	Department of Psychology, Southern Illinois University Edwardsville	Yes, qualitative and survey of post-grads n=229

Source/Year	Field	Mode of Data Collection	Inquiry	Focus	Target Population	Data Provided
Fenwick (2002)	Various	Survey	Student Learning Outcomes in Career	How does a Master's program using problem-based learning develop skills?	MA at Harrington University (Canada)	Yes n=133 n=20 (follow up survey)
Yeager et al (2007)	Public Administration	Survey	Student Learning Outcomes in Career	Return on education investment.	MPA and MBA Graduates	Yes n=389
Aristigueta and Gomes (2006)	Public Administration	Case Study	Student Learning Outcomes	How to assess graduate program performance?	NASPAA Graduate Programs	Qualitative, University of Delaware Case Study
Castleberry (2006)	Public Administration	Survey	Student Learning Outcomes	Are students meeting objectives of program	MPA Graduates-Texas State University	Yes n=27
Beaumont (2005)	Public Administration	Testing/Teacher Evaluation	Quality of Outcome Assessment	How well is civic engagement assessed?	Civic Learning in Colleges	No
Nishishiba et al (2005)	Public Administration	Survey	Student Learning Outcomes in Career	What factors foster civic engagement?	MPA Graduates-Portland State University	Yes n=435
Williams (2002)	Public Administration	Case Study	Quality of Outcome Assessment	How appropriate and useful are outcome measures?	MPA Program-West Virginia University	No

Source/Year	Field	Mode of Data Collection	Inquiry	Focus	Target Population	Data Provided
Roberts (2001)	Public Administration	Survey	Employer Feedback	Stakeholder perceptions	MPA Graduates	Yes n=139
Boyle and Whitaker (2001)	Public Administration	Case Study	Curriculum Quality	How are MPA programs adapting with the transformation of governance?	Public Affairs Students-UNC Chapel Hill	Some, n=34 for graduates; anecdotal evidence
Hebert and Reynolds (1998)	Public Administration	Survey	Student Learning Outcomes	Are student learning outcomes better in cohort programs than in non-cohort programs?	12 MPA and Professional Degree Programs, 6 Cohort, 6 Non-cohort	Yes n=177 cohort n=165 non-cohort
Mitchell (1991)	Public Administration	Survey	Curriculum Quality	What types of skills are needed in public administration?	Public Authority Executives and Managers	Yes n=1243
Cleary (1990)	Public Administration	Survey	Curriculum Quality	How well program curriculum matches practical needs	All types of public administration master's degrees	Yes n=173
		Survey	Quality of Outcome Assessment	Perceptions of How Education has Contributed to Workplace Success	Public affairs and public administration students	No

Source/Year	Field	Mode of Data Collection	Inquiry	Focus	Target Population	Data Provided
Jennings (1989)	Public Administration	Testing/Teacher Evaluation	Quality of Outcome Assessment	Evaluating the Cognitive Development of Public Affairs Students	Public affairs and public administration students	No
		Assessment Center	Quality of Outcome Assessment	Evaluation of Student Performance in Employment	Public affairs and public administration students	No

Table 2: Collecting Data on Student Learning Outcomes

Data Source	Collection Mode	Immediate Outcomes (Knowledge, Skills, Abilities)	Enabling Individual Characteristics	Intermediate Outcomes (Individual Alumni performance)	Enabling Organizational Characteristics	Longer Term Outcomes (Organizational Performance)
Institutional data from student applications (University)	Data Collection from Applications	X	X			
Client-oriented class projects (Clients)	Survey or Interview	X	X			
Portfolio assessment (Students/Faculty)	Faculty Feedback Instrument	X	X			
Capstone presentations (Alumni/Employers)	Survey or Interview	X	X	X		
Exit feedback (Graduating Students)	Survey, Focus Groups, or Interview	X	X			
Alumni feedback (Alumni)	Survey, Focus Groups, or Interview	X	X	X	X	X
Employer feedback and assessment (Employer)	Survey, Focus Groups, or Interview	X	X	X	X	X
Expert panel assessments (Alumni/Employer)	Reviews of Program and Alumni Career Performance	X	X	X	X	X

Figure 1: A Logic Model for Public Service Education

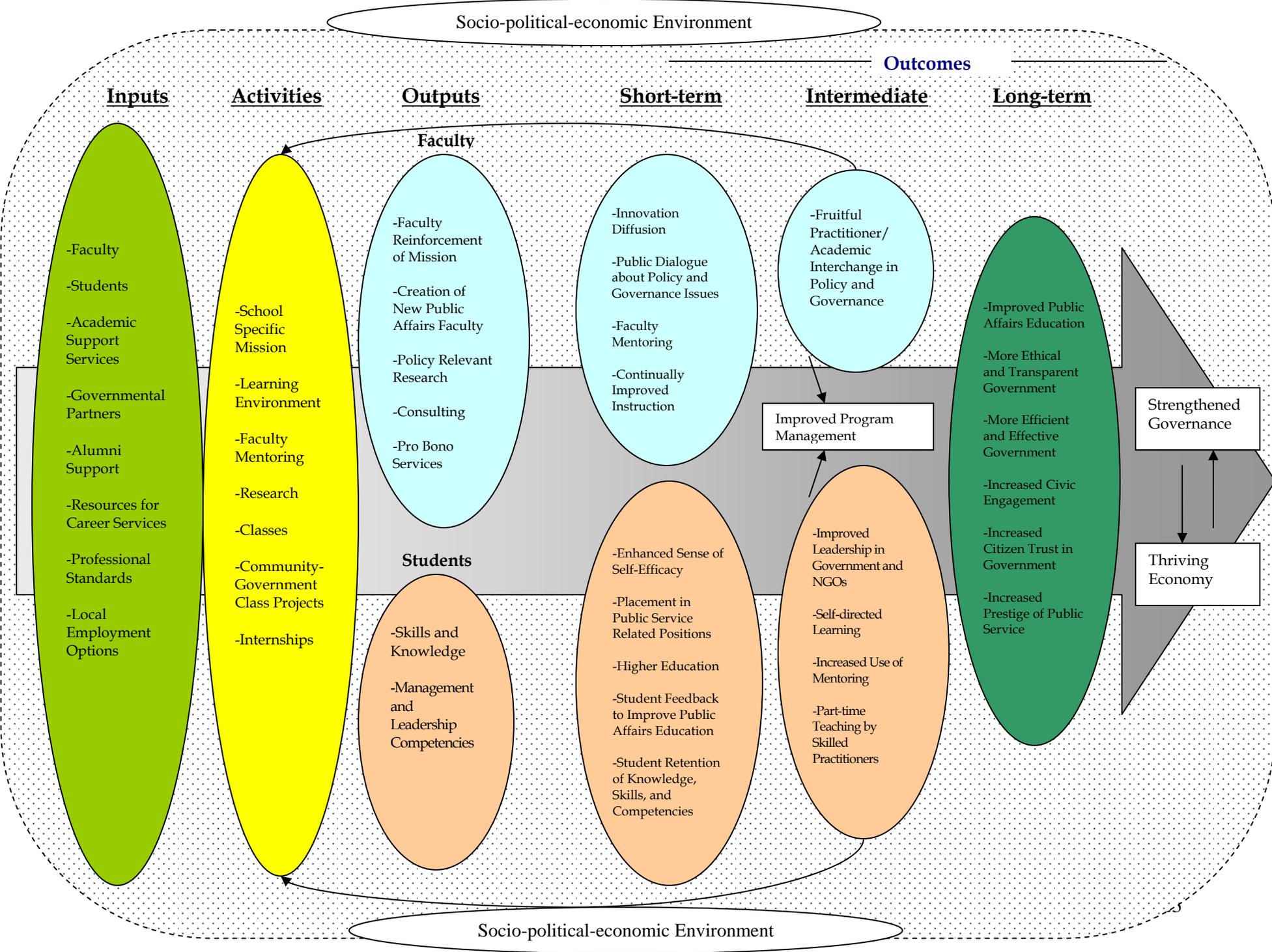
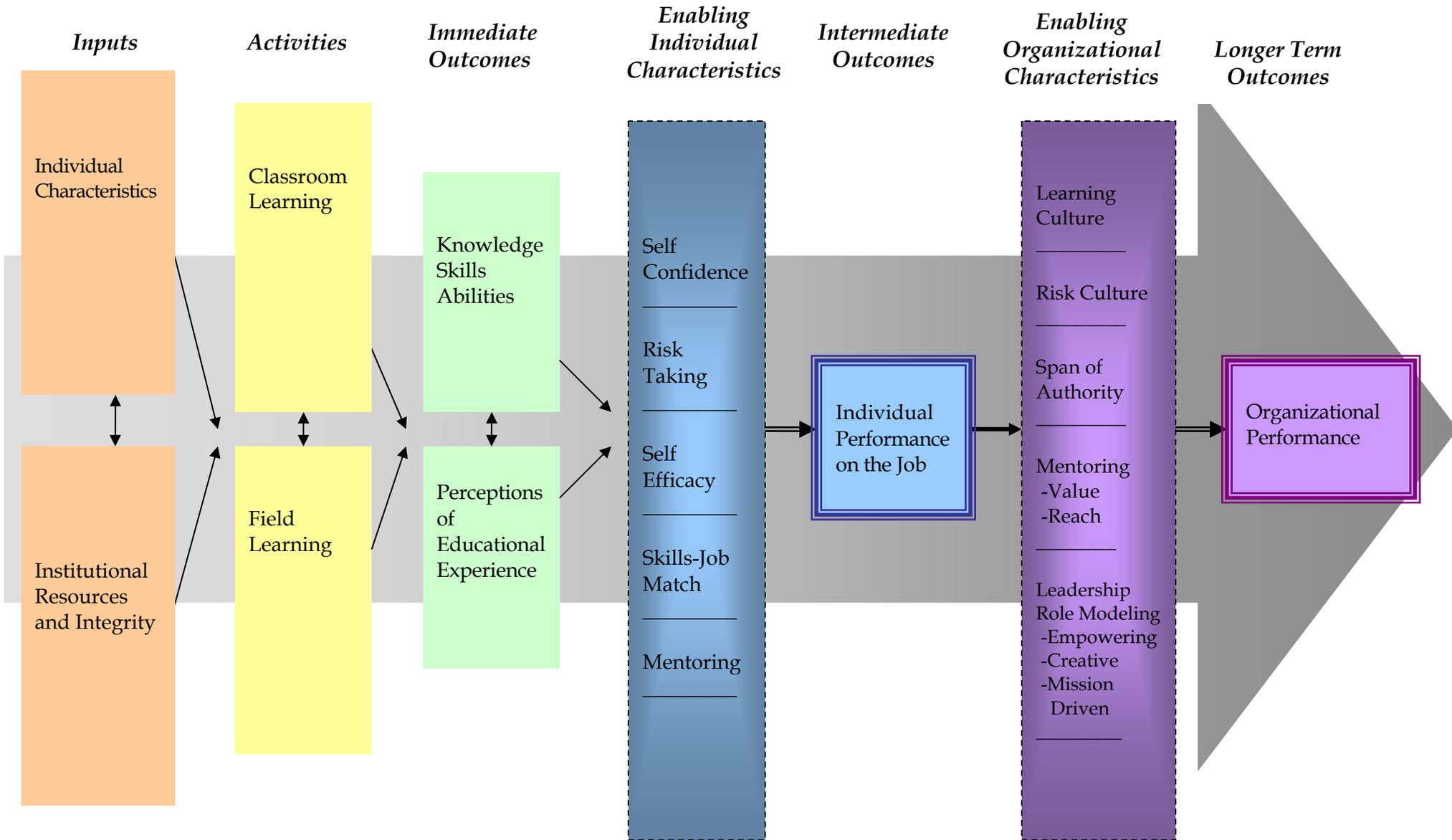


Figure 2: Theory of Change Model



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