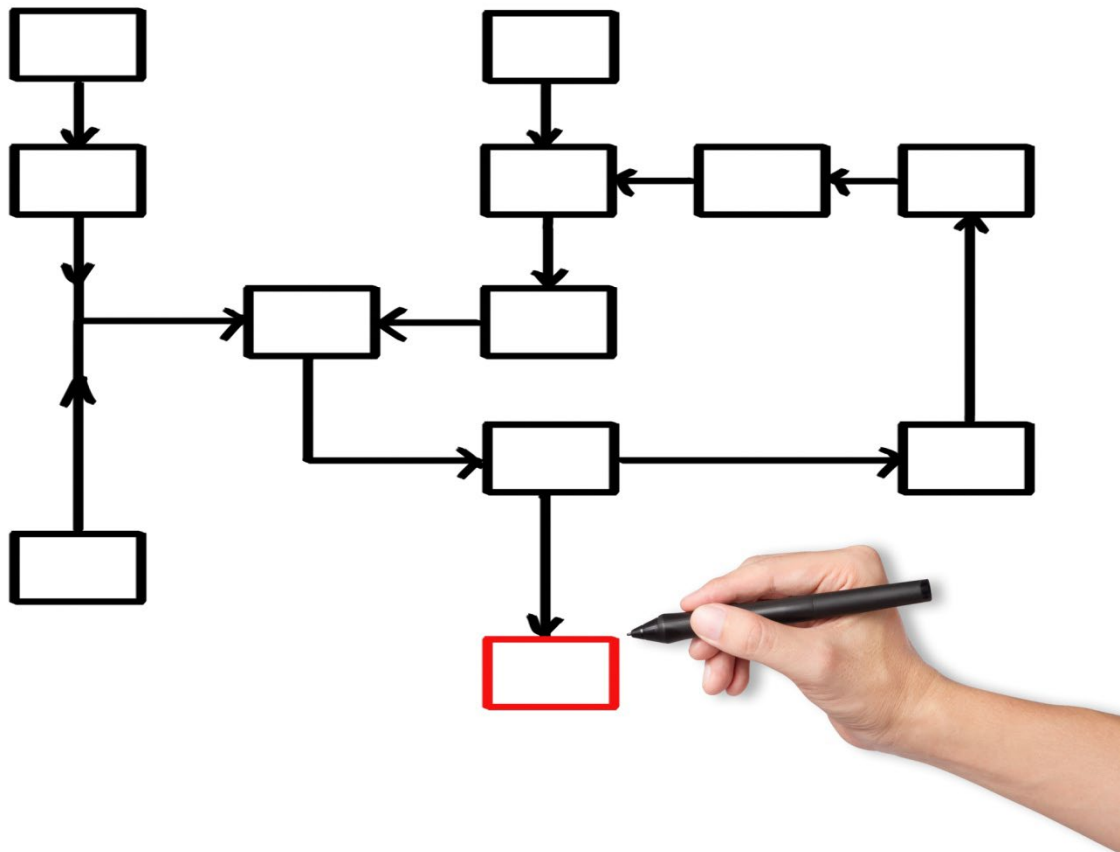


The Beacon Scholarship

A Theory of Change Analysis



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Introduction and Executive Summary

The Beacon scholarship has already begun to have an impact on developing young leaders through its two primary interventions: The Beacon Scholarship for Schools and The Beacon Scholarship for University. So far, the program has partnered with 9 top international schools in Kenya, 2 leading universities in the UK, and 17 scholars to deliver its impact. Now in its development stage, the Beacon Scholarship seeks to formalize its youth development model and to assess the overall effectiveness of the individual components involved in this model. The following report is therefore positioned both as a validation exercise for the existing model, as well as an exploratory exercise that could lead to potential enhancements for the model in the future.

The report is composed of four primary sections:

- The **first** section, “Formalizing a Theory of Change,” aims to frame the Beacon’s current activities and aspirations into a comprehensive leadership model, represented by a Theory of Change.
- The **second** section, “Identifying Assumptions in the Theory of Change,” looks more closely at the model presented in Section 1, and investigates what would need to be true for the Beacon’s leadership model to be effective.
- The **third** section, “Researching Key Assumptions,” identifies five key questions that emerge from the enumeration of assumptions in Section 2 and, for each, conducts a review of the relevant academic and gray literature to better understand the validity of each question.
- The **fourth** section, “Applications to the Beacon Model,” synthesizes the three previous sections by identifying concrete ways in which the existing Beacon model is validated by the preceding analysis, as well as directions that could be explored to enhance the model in the future.

The analysis found that the various components of the Beacon program, including the schools and university scholarships, the mentoring program, the emphasis on goal-setting, and the leadership workshops and service activities, contained a powerful and cohesive internal logic that is captured by the Theory of Change presented in Section 1. Furthermore, the identification and researching of key assumptions implicit in the Theory of Change found an abundance of evidence to validate the Beacon model, which is detailed in Section 4. The potential directions illuminated by the research which could be explored to enhance the model in the future did not, in general, entail a modification of the Beacon model itself, but rather showed avenues for enhancing the current model, such as adopting best practices for mentorship programming, or embedding the latest research on achievement goals into the Beacon Target Sheet.

Section 1: Formalizing a Theory of Change

A Theory of Change is a standard tool used by development organizations to show how a program seeks to achieve its overall objective. A Theory of Change is generally viewed as a model that implies *causality*, suggesting that each level of the model is causally related to the next. Specific causal links are indicated by arrows.

There are five levels in a standard Theory of Change:

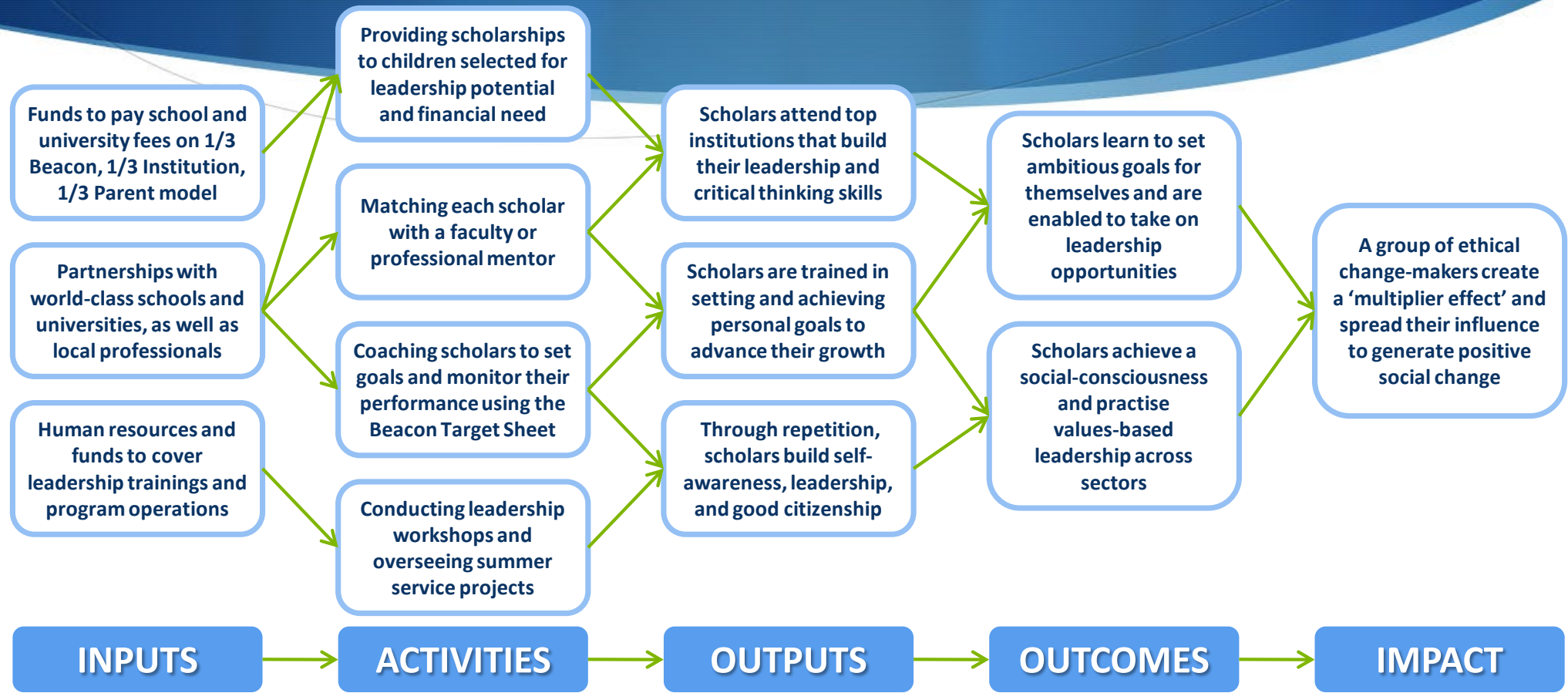
- 1) **Inputs:** the resources required to run the program
- 2) **Activities:** the specific interventions offered by the program
- 3) **Outputs:** the immediate (measurable) results of the program's activities
- 4) **Outcomes:** the intermediate benefits resulting from the program's activities
- 5) **Impact:** the long-term social goal the program is contributing to

One benefit of using the Theory of Change model are that it helps to clarify in a succinct way the internal logic of a given program, starting from the resources it will need, to the activities it will run, all the way to the impact it seeks to have on society. The Theory of Change is by no means intended to be done for a program once and for all—rather, it should be seen as a living model that can adapt over time to changing contexts or to discoveries made by the program as it grows and develops. The model presented here is intended to be purely *descriptive* of the Beacon's current programs, as opposed to *prescriptive* or *aspirational* regarding what it should or could be. This will provide a useful starting point for thinking about how, if at all, the model could adapt or change in the future.

Another key strength of the Theory of Change is that it is generally used as a basis for developing a comprehensive Monitoring, Evaluation, and Learning (MEL) strategy. A MEL strategy helps to support a Theory of Change with concrete data about the program's activities and its beneficiaries. This data can help to suggest whether the Theory of Change is achieving its goals and created its intended impact, and it can also be used as a learning mechanism to refine the program to ensure it is running as effective as possible at both the design and implementation levels. While the development of a comprehensive MEL strategy is not within the scope of the current report, the Theory of Change provided below could serve as a critical foundation to the development of this kind of strategy in the future.

The Theory of Change for the current Beacon program, which was developed in consultation with leaders of the Beacon program and was informed by the program's official literature, is provided on the following page.

Beacon Theory of Change



Section 2: Identifying Assumptions in the Theory of Change

Because the Theory of Change is a model that represents causal relationships, the key assumptions embedded in the model usually surround claims to causality. Most crucially, we want to know whether the causal relationships indicated at each level of the Theory of Change lead to the desired Impact.

Furthermore, because causal relationships in the Theory of Change model are indicated by arrows, and because the key assumptions of the model have to do with the validity of causal relationships, we investigate the assumptions of the model by investigating the arrows at each level. In particular, we will ask *what would need to be true* in order for there to be a cause and effect relationship between one level and the next. For example, what would need to be true in order to claim that a certain Activity led to a specific Output? These are the kinds of questions we will ask in identifying the assumptions of the Theory of Change presented in Section 1.

When investigating the causal relationships, we should recognize that there are usually multiple ways to achieve the same goal, and some methods may be more effective or efficient than others. While we are investigating assumptions, therefore, we need to identify assumptions to help determine if the program is *the best way* to achieve its desired Impact.

Assumptions between Inputs and Activities

Because Inputs are simply defined as the resources required to conduct the program's Activities, the only causal assumption made at this level is that the listed Inputs are in fact the resources needed to sustain the program's Activities. The relationships between Inputs and Activities are extremely direct and evident (e.g., in order to award scholarships, the program must first have funds to provide those scholarships), and therefore do not require extensive analysis to establish a causal link.

Apart from causality, the model assumes that the Inputs listed will continue to be available in requisite quantities in order to sustain the program's Activities over time, and to scale up and down as necessary. Further investigation of this assumption is, however, outside the scope of the current project as it relates to the program's fundraising and development strategy.

Assumptions between Activities and Outputs

As there are six arrows from Activities to Outputs, there are six major assumptions that need to be considered at this level. Because Outputs are defined as the *direct* intended results of the Activities, most of these assumptions have to do with *operational* (program implementation) as opposed to *ideological* (program design) issues. The six causal links followed by their associated conditions are:

1. Providing scholarships to children selected for leadership potential and financial need **leads to** scholars attending top institutions that build their leadership and critical thinking skills
 - a. There are reliable methods for collecting information about a child's leadership potential and financial need
 - b. The way the children's information is captured and reviewed validates that all information is truthful and accurate
 - c. Selected students will be eligible and practically able to attend the Beacon partner institutions (e.g., has admission, has the permission of parents, has sufficient

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- resources to supplement the scholarship, is able to travel, can get proper documentation, etc.)
- d. There are established criteria for determining educational institutions that have the capacity to build students' leadership and critical thinking skills
 - e. A primary barrier for children with leadership potential and financial need to attend top institutions is their inability to pay
 - f. Scholars with financial need may be uniquely positioned to develop as leaders
 - g. To the extent possible, scholars have supportive home environments that provide a solid foundation for their growth in school
 - h. Scholars are willing and able to identify and take on leadership opportunities at their respective schools and universities
2. Matching each scholar with a faculty or professional mentor **leads to** scholars attending top institutions that build their leadership and critical thinking skills
- a. Matching scholars with mentors can improve the chances that scholars perform well in school and continue their studies without interruption
 - b. Matching scholars with mentors helps to build their leadership and critical thinking skills in ways that supplement the traditional classroom experience
 - c. The structure of the mentorship in terms of the quantity and quality of meetings between mentors and mentees is sufficient to achieve the desired impact
 - d. Mentors are either committed to the project over the long-term, or scholars are able to be matched with new mentors in a seamless and uninterrupted fashion
 - e. Mentors are able to define their role in relation to the scholar's parents or guardians and, where appropriate, communicate with parents about their child's progress
3. Matching each scholar with a faculty or professional mentor **leads to** scholars being trained in setting and achieving personal goals to advance their growth
- a. Matching scholars with mentors helps scholars to be accountable to the goals they have set for themselves, and thereby increases the probability they will reach their targets
 - b. In practice, mentoring sessions are structured to help scholars with goal-setting and talk with scholars about how they are performing against targets
 - c. Mentors are sufficiently trained on coaching scholars and particularly know how to respond to situations in which a scholar is not hitting their targets—this made include training in stress management and identification of mental health issues
 - d. Mentors are aligned with the scholar's personal goals and maintain a largely non-directive role in providing education and career guidance
 - e. The identification and matching process ensures that mentors are sufficiently trained/experienced, fit well with their mentees in terms of personality and values, and that both parties (mentor and mentee) derive value from the relationship. Consideration should be given to the advantages of using African mentors.
 - f. Scholars are adequately trained on how to make the most of mentoring relationships, and feel empowered to speak out if the relationship is not working for them

4. Coaching scholars to set goals and monitor their performance using the Beacon Target Sheet **leads to** scholars being trained in setting and achieving personal goals to advance their growth
 - a. The Beacon Target Sheet is a useful tool for goal setting and evaluation in a range of areas
 - b. The way the Beacon Target Sheet is presented to and used with scholars allows them to understand the importance of goal-setting and not be scared or intimidated by it, especially at a young age
 - c. The actual coaching provided is well-informed, instructive, and ultimately appreciated and valued by scholars
 - d. The goals scholars set for themselves are challenging yet attainable, and they are coached not to set overly low goals they can easily attain or overly ambitious goals they are likely to fail
 - e. The use of the Beacon Target Sheet is to some extent flexible and does not become an source of extrinsic motivation, but rather remains an empowering way for scholars to keep themselves accountable to their own intrinsically motivated goals and aspirations—it remains in perspective of their long-term growth
 - f. The Beacon Target Sheet maintains the proper level of confidentiality and is never made public in a way that could lead to embarrassment

5. Coaching scholars to set goals and monitor their performance using the Beacon Target Sheet **leads to** scholars building, through repetition, self-awareness, leadership, and good citizenship
 - a. Starting with children early in life allows for sufficient repetition and habit-forming to achieve a fundamental change in their goal-setting habits
 - b. Self-awareness, leadership, and good citizenship are qualities that can be developed with repeated practice
 - c. The Beacon Target Sheet has reliable ways of targeting development in self-awareness, leadership, and good citizenship
 - d. The Beacon Target Sheet is used with sufficient frequency and is sufficiently appreciated by scholars to cause the formation of a goal-setting habit
 - e. Parents are aware of the Beacon Target Sheet and its objectives, and to the extent possible are empowered to support their children to achieve their goals

6. Conducting annual leadership workshops and overseeing summer service projects **leads to** scholars building, through repetition, self-awareness, leadership, and good citizenship
 - a. Self-awareness, leadership, and good citizenship are qualities that can be developed through trainings and service activities
 - b. Workshops and summer service projects have reliable ways of targeting development in self-awareness, leadership, and good citizenship
 - c. Scholars and parents understand and appreciate the value of workshops and service projects and they do not become viewed as mere requirements they must perform in order to stay in the program

- d. Scholars attend and participate in workshops and service projects, and there are ways to validate they have represented their service projects accurately in their reports
- e. Scholars are able to identify practical outlets for them to conduct meaningful service projects with adequate levels of support from the organizations or communities they are supporting

Assumptions between Outputs and Outcomes

As there are four arrows from Outputs to Outcomes, there are four major assumptions that need to be considered at this level. Because Outcomes are the intended *intermediate* results of the Outputs, most of these assumptions have to do with the ability of the program to lead to *behavior change* that lasts beyond the scholar's participation in the program's major activities. The four causal links followed by their associated conditions are:

1. Scholars attending top institutions that build their leadership and critical thinking skills **leads to** scholars learning to set ambitious goals for themselves and being enabled to take on leadership opportunities
 - a. Scholars are able to complete their studies at their various institutions in order to be eligible for many leadership positions
 - b. Scholars are motivated and inspired by their education experience, including the educational culture and their peers, to set lofty goals for their future
 - c. Through their educational institutions or due to the training they have received there, scholars are able to practically identify and take up post-graduation leadership opportunities
 - d. A primary barrier to young people taking on leadership opportunities is their lack of exposure to leadership and critical thinking skills they would get from top educational institutions
2. Scholars being trained in setting and achieving personal goals to advance their growth **leads to** scholars learning to set ambitious goals for themselves and being enabled to take on leadership opportunities
 - a. Scholars' training in goal-setting translates to a continuing goal-oriented mindset after the scholar completes the formal Beacon program
 - b. Scholars' goal-oriented mindset and record of past accomplishments qualifies them for leadership positions that may otherwise not been open to them
3. Scholars being trained in setting and achieving personal goals to advance their growth **leads to** scholars achieving a social-consciousness and practising values-based leadership across sectors
 - a. Scholars are able to apply the lessons they learned about values-based leadership in real-world contexts
 - b. Regular exposure to and intentional thinking about personal goals and objectives leads to an enhanced social-consciousness and ethical behaviour

4. Scholars building, through repetition, self-awareness, leadership, and good citizenship **leads to** scholars achieving a social-consciousness and practising values-based leadership across sectors
 - a. Starting with children early in life allows for sufficient repetition and habit-forming to achieve a fundamental change in their social consciousness and value system
 - b. The goals scholars set for themselves have a social component and make a habit of integrating thinking about the wellbeing of others into their regular goal-setting process

Assumptions between Outcomes and Impact

As there are two arrows from Outcomes to Impact, there are two major assumptions that need to be considered at this level. Because Impact is intended to be the ultimate *social aim* towards which the Outcomes are contributing, these assumptions have to do with the *core design philosophy* of how the program thinks about achieving social change. The two causal links followed by their associated conditions are:

1. Scholars learning to set ambitious goals for themselves and being enabled to take on leadership opportunities **leads to** a group of ethical change-makers spreading their influence through a 'multiplier effect' that generates positive social change
 - a. Primary barriers to the development of effective influencers are the lack of a goal-oriented mindset and practice, as well as an ability to identify and take up practical leadership opportunities
 - b. A primary barrier to positive social change is the absence of capable and ethical human resources
 - c. Scholars have adequate social networks (within and outside of the Beacon) and other career-enabling resources that will enable them to take up meaningful leadership opportunities in their respective fields
2. Scholars achieving a social-consciousness and practising values-based leadership across sectors **leads to** a group of ethical change-makers spreading their influence through a 'multiplier effect' that generates positive social change
 - a. A primary barrier to achieving positive social change is the lack of ethics and social-conscious among leaders and influencers
 - b. Scholars will have sufficient intellectual and economic freedoms to concentrate their full energies on making change in their area of interest
 - c. Scholars maintain a service-oriented mindset as they proceed to develop their careers.

Section 3: Researching Key Assumptions

From the preceding section on assumptions, there are several fundamental issues that emerge at the heart of the Beacon Theory of Change. Because these issues are critical to the success of the Beacon Scholarship, it is fitting that they be explored in greater depth, with relevant research to establish the strength, or validity, of the Beacon model. These six questions are:

1. Is there evidence to suggest that it is possible to identify leadership potential at a young age and, if so, what are some of the criteria used to determine this? Is there evidence to suggest that leadership development works best when it is “started young and repeated often”?
2. Is there evidence to suggest that graduating from a leading educational institution increases a student’s chance of taking up leadership opportunities?
3. What kinds of youth mentorship models exist and how do they complement the classroom experience to produce better educational outcomes and enhanced leadership development?
4. Is there evidence to suggest a link between goal-setting and leadership, especially in children? If so, which models for cultivating goal-setting are most effective and how are they implemented in order to retain intrinsic motivation?
5. Is it possible to develop leadership, self-awareness, and/or good citizenship through trainings and/or community service? If so, what are the best models for doing so?

The remainder of this section is dedicated to exploring the research on each of these questions. The next section will look at the implications of this research for the Beacon model.

Leadership from a Young Age

Is there evidence to suggest that it is possible to identify leadership potential at a young age and, if so, what are some of the criteria used to determine this? Is there evidence to suggest that leadership development works best when it is “started young and repeated often”?

Most sources acknowledge that the literature on youth leadership is not nearly as robust as that on adult leadership. While the literature “lacks even one large scale study that has followed a large cohort of high ability children examining early precursors of leadership,” the lack of rigorous empirical data has not prevented some informed theorizations of how best to identify leadership from a young age (Pfeiffer & Wechsler, 2013).

The particular body of literature that is interested in looking at identifying leadership potential from a young age revolves around “Leadership Giftedness.” According to Matthews (2004), “Leadership has been retained in the federal definition of giftedness, across major revisions, since its inclusion in the Marland Report (1972),” however “a consolidated theoretical framework for leadership giftedness has not yet materialized.” Especially since Gardner’s “theory of multiple intelligences” (1983), “contemporary theorists no longer view giftedness and high Intelligence Quotient (IQ) as synonymous” (Pfeiffer & Wechsler 2013).

Today, the National Society for the Gifted and Talented (NSGT) in the US lists six areas in which they look to identify giftedness:

1. Creative Thinking
2. General Intellectual Ability
3. Specific Intellectual Ability
4. Leadership
5. Psychomotor
6. Visual/ Performing Arts

The NSGT say that: “No child will be gifted in all six, but some may be in more than one area,” and that “Gifted students generally have unusual talent in one or occasionally two areas.” The specific qualities identified in the “Leadership” component of giftedness are:

- Assumes responsibility
- High expectations for self and others
- Fluent, concise self expression
- Foresees consequences and implications of decisions
- Good judgment in decision making
- Likes structure
- Well-liked by peers
- Self-confident
- Organized

Specific tools designed to measure leadership giftedness in children include the Gifted Rating Scales (GRS) and the Gifted Evaluation Scale (GES). Other metrics are identified in Karnes and Chauvin (2000).

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Pfeiffer and Wechsler (2013) summarize the contemporary view of giftedness applied to leadership in seven principles:

1. Early identification of giftedness remains important. However, early identification should never be based exclusively on one IQ score.
2. Gifted assessment should be multifaceted and multidimensional. General intellectual ability is one important factor, but other psychological measures and constructs should be included, with due consideration of characteristics associated with leadership behavior (e.g., verbal expressive skill).
3. The measures that we use to assess giftedness must change as a child gets older, more aligned with a domain-specific focus on leadership.
4. The goal of gifted education becomes finding ways to nurture and optimize bright students' development in one or more culturally-valued fields - in this instance, the development of leadership.
5. Not all children identified at an early age as gifted will continue on a success path or trajectory toward expertise; many will not distinguish themselves in their later years as gifted leaders
6. Many children not identified in the early years as gifted are late bloomers.
7. Gifted programs in the schools will be successful to the extent that they focus on domain-specific curricula which matches each student's unique abilities and interests.

Pfeiffer and Wechsler (2013) further suggest that while general ability may be related to IQ, they seem to support an "IQ threshold" view that says "one needs an IQ of at least 115 or 120 to be a successful leader," but not necessarily higher than that.

Additional relevant findings of Pfeiffer and Wechsler (2013) include their identification of creativity as a central aspect of leadership:

...there is the need of early identification of youth with uncommon general and specific abilities, personality characteristics and attitudes associated with leadership potential, and the importance of having an adult who can serve as a mentor. From a talent development model, the goal is promoting leadership competence and even expertise among a cadre of young adolescents who exhibit early precursors of leadership (Keating, 2004; Pfeiffer, 2009).

We do not believe that every youth can develop into a gifted leader. However, almost any adolescent, if provided appropriate opportunities and adequately motivated, can learn new, and refine existing, skills and values which are associated with effective leadership (Pfeiffer, 2001). For example, even young children can learn the nuances of social judgment and become more adept at recognizing the feelings of others. Some children, because of a combination of aptitude, personality, temperament, motivation, and passion for leadership and helping others, will develop into gifted leaders. Participation in community-based and youth leadership programs can provide unique opportunities for early exposure to leadership roles and observing important skills associated with leadership.

Schools represent the existing values in families and the community. **Creative students are often seen as non-conformers or questioning the status quo.** It is not difficult to understand why creativity is not encouraged; on the contrary, it often is suppressed in the elementary grades. In both the US and Brazil the level of creativity decreases over the course of schooling (Nakano & Wechsler, 2006; Torrance, 1979; Wechsler & Richmond, 1982). As mentioned earlier, **the emphasis on rote learning of facts and memorization does not encourage divergent thinking and intellectual risk taking.** Creative thinking styles in the classroom are often discouraged (Fleith, 2006; Siqueira & Wechsler, 2004).

Pfeiffer and Wechsler (2013) also write that they “view **creativity** as one component of the unfolding of talent in any culturally-valued field or domain, including leadership. The unfolding and nurturance of creativity, as part of gaining expertise and even distinguished status as a leader, recognizes eight components.” These **eight components** are:

1. IQ is never enough to reach a level of success and expertise as an effective leader. Of course, the same can be said in almost all fields. **Specific abilities, well-honed skills, social intelligence, and domain-specific competencies are critical if one hopes to move beyond competence toward expertise in any domain.** A model is presented in Figure 1 which incorporates ideas proposed by a number of leading authorities in the gifted and talent development fields, including Bloom (1985), Gagné (2005) and Subotnik (2003).

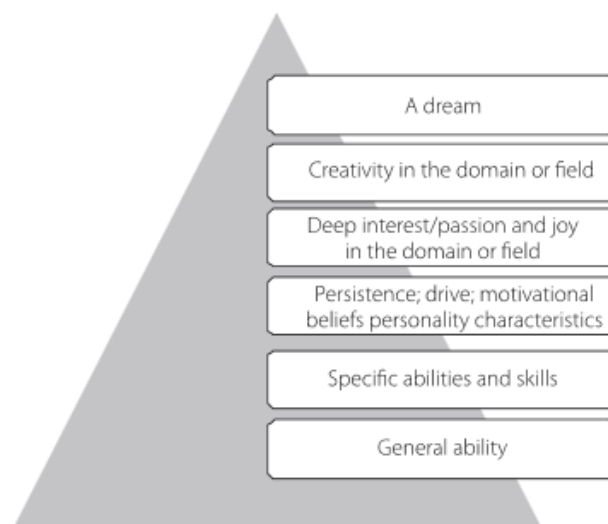


Figure 1. Factors critical to leadership development (Pfeiffer, 2012c).

2. **Bright students require a variety of structured and real-world learning experiences** before we can expect that they will display the imagination, originality, and resourcefulness – the hallmark of creative leadership.
3. The model depicts stages along **the talent development trajectory** that are influenced by person-environment interactions and marked by changes-really transformations-in thinking, attitude, motivation, and even personality. One expects to begin to see creative thinking and creative performance as the youngster moves from a level of competence to an elite or expert level in any field, including leadership.
4. If students of uncanny ability continue to successfully progress along the talent development trajectory to expertise and even eminent status as a leader, **the following factors become increasingly important: specific interpersonal skills, drive, persistence, self-confidence, passion for leading others, facilitative motivational beliefs, a willingness to listen and learn from others, and the dream of becoming a leader.**

5. Sustained interest in pursuing one's dream of becoming a leader and a commitment to excellence are critical to reach the highest levels; **creativity is much easier to nurture and encourage if the student is passionate about becoming a leader and has a "rage" to learn** (Piirto, 2008; Winner, 1996).
6. A substantial **investment of time** is necessary to reach the highest levels as a leader (Ericsson, Krampe & Tesch-Romer, 1993).
7. Only a select number of individuals reach the highest levels of eminent status in any domain or field, including leadership.
8. Finally, the model consists of four distinct stages with transitional or sub-stages. Each stage is marked by transformations (Pfeiffer, 2012c).
 - a. First, the child is exposed to knowledge, skills and experience in a specific field or domain-such as leadership, hopefully presented in an enjoyable and reinforcing fashion;
 - b. Second, over time the individual reaches a recognized threshold where they attain competence in the domain;
 - c. Third, the individual continues to gain further experience, guidance and instruction to the point where they reach a level of mastery or expertise in the domain-at this point, we observe clear evidence of domain-specific creativity;
 - d. Finally, further development, experience, and refinement of one's expertise can lead a very select few to a pre-eminent level of accomplishment as a leader. **Only the most promising are likely to attain a level of eminence as a creative leader.**

Personality traits have also been studied to see if there are correlations with leadership. Judge, Bono, Ilies, and Gerhardt (2002) used **the five-factor model of personality** (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism) and two leadership criteria (leadership emergence and leader effectiveness). They found a statistically significant correlation between personality and leadership, with **extraversion** being the most highly correlated. Conscientiousness and openness to experience were the next strongest correlates, with conscientiousness emerging as the strongest predictor of leadership in the multivariate analysis.

In an earlier study, Judge, Higgins, Thoresen, and Barrick (1999) also looked at general mental ability and its relation to the five-factor model as predictors of career success. They found "that conscientiousness positively predicted intrinsic and extrinsic career success, **neuroticism negatively predicted extrinsic success**, and general mental ability positively predicted extrinsic career success. Personality was related to career success controlling for general mental ability and, though adulthood measures of the Big Five traits were more strongly related to career success than were childhood measures, both contributed unique variance in explaining career success."

A major study on developing leadership giftedness was conducted by Roach et al. (1999), involving over 30,000 young people ages 8-28 at 120 different youth-based organizations across the US. They found the following features common among many of the most effective youth programs they studied:

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Figure 2

Features of Effective Youth Organizations

- high performance expectations of youth as resources (rather than problems)
 - multiple occasions to expect the unexpected and to learn to pose as well as solve problems
 - cycles of performance that include planning, preparation, performance, and evaluation
 - diverse talents and expertise of individuals counted upon for group benefit
 - engagement with minimal number of rules created for maximal impact
 - high demand learning to move toward performance before authentic assessors
 - individual responsibilities for development embedded within group expectations of excellence
 - proficiency with multiple symbol systems and fluency in communication skills
 - consistent call for self-assessment and accounting for and critiquing group performance
 - strong links to ways “real world” selects, judges, demands, and responds
 - high responsibility for both making and upholding rules
-

Additionally, they found that over the longitudinal study lasting a decade, youth who were active in highly effective youth development programs developed the following characteristics:

- Pro-civic/pro-social values
- Strong locus of control
- Independence in reading for pleasure, seeking out non-school classes and opportunities
- Motivation to seek bases for acquiring and adapting knowledge
- Self-images that place themselves as effective learners making use of higher education resources
- Stable high academic achievement
- Strong sense of self-efficacy for future tasks and goals
- Trust in the value of high-risk behaviors for learning and performing
- Sense of commitment to community service and volunteering
- Desire to work to correct economic inequalities

Apart from the literature on leadership giftedness, Murphy and Johnson (2011) identify two main reasons why “early experiences create the foundation for future leadership development to build on.” They write:

First, it is possible that development occurs more readily in childhood and adolescence than in adulthood because one's behavior, personality, and skills are more malleable at a young age than in adulthood. Indeed, researchers have argued for the likelihood that some skills may be more important to develop early on (Avolio & Vogelgesang, 2011; Gardner, 2011). We argue that early points in life represent a **sensitive period** for development. Unlike a crucial period (which is a period by which an ability must be developed or it cannot occur), sensitive periods reflect a time in life when skills are more easily and rapidly developed (Bornstein, 1989). Moreover, development that occurs in this sensitive period need not be seen immediately; instead, the effects of early influences may only become easily observed in adulthood (Bornstein, 1989). A sensitive period does not preclude future development from being influential, nor does it guarantee successful development. **Rather, receiving adequate development during the sensitive period (when greatest**

change is occurring) sets the stage for future development to occur, barring unforeseen influences.

Second, one's development to eventually become a leader is a self-reinforcing process. For example, as one gains greater leadership efficacy, or confidence in one's ability to lead a group, that individual is more likely to engage in leadership experiences, which will serve to increase the individual's leadership efficacy (Hannah, Avolio, Luthans, & Harms, 2008). Likewise, when one has leadership experience, others expect him or her to be a leader, creating a self-fulfilling prophecy effect for that leader (e.g., Eden, 1993). A self-fulfilling prophecy is when others' high expectations for another cause that individual to meet those high expectations because of increased attention, access to resources, or self-efficacy (Eden, 1993). Therefore, analogous to a snowball effect, small developmental experiences at an early age (when the snowball is small) can have a profound impact on future development outcomes, given the reinforcing nature of leader development.

This suggests that leadership is best when started young and repeated often because first, childhood represents a "sensitive period" for positive development, and second, because starting earlier helps for leadership experiences and opportunities to be repeated and amplified through a "snowball" effect over time.

Murphy and Johnson (2011) thus propose the following leadership development model that shows how leadership develops over time:

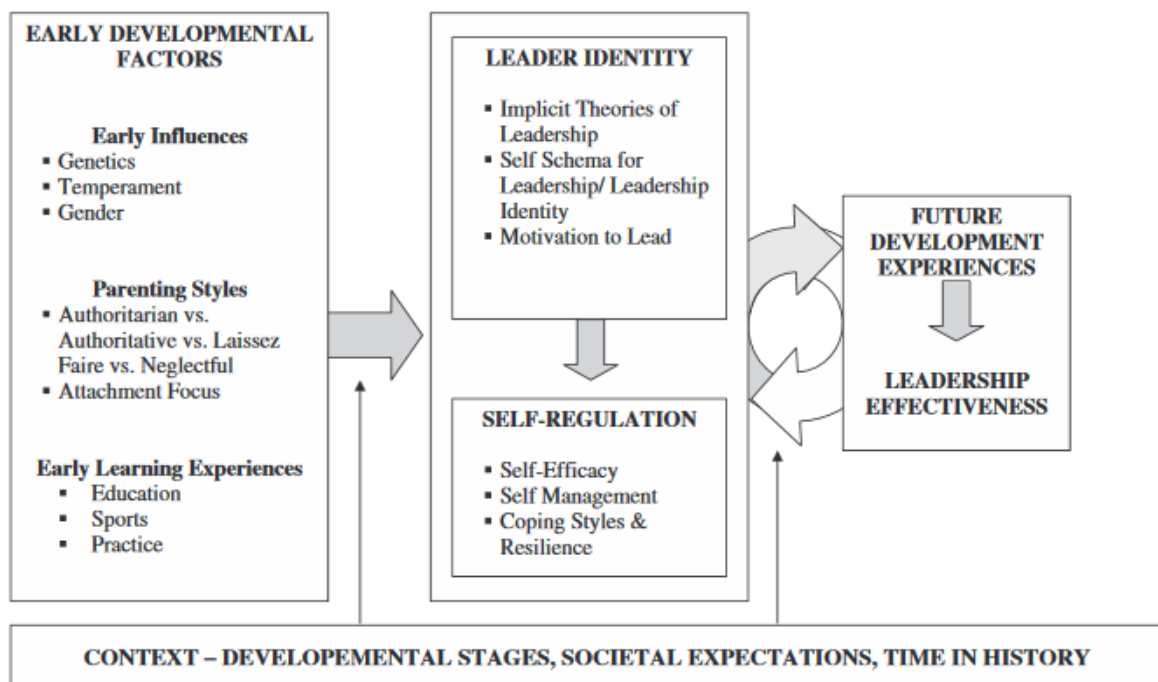


Fig. 1. A life span approach to leader development.

Murphy suggests different leadership tasks and skills that develop at various ages (Murphy, 2011):

Age range	New leadership tasks and skills
Preschool years (ages 2-5)	<ul style="list-style-type: none"> ■ Influencing others ■ Getting others to like you ■ Communicating wishes ■ Increased need for emotional intelligence in interactions with others (reading the emotions of others, and delaying gratification)
Elementary school (ages 6-11)	<ul style="list-style-type: none"> ■ Coordinating others in teams ■ Early school leadership tasks (e.g., classroom monitor, or teacher's helper) ■ Fundraising (e.g., selling candy, etc.) ■ Public speaking to express ideas ■ Increased need for social intelligence in interactions with others (understanding social situations and acting appropriately)
Middle school-early adolescence (ages 12-14)	<ul style="list-style-type: none"> ■ Coordinating teams for fundraising or student projects ■ Self management (e.g., goal setting, self-observation & evaluation) ■ Serving in elected office and other student government activities ■ Public speaking as a leader to gain support for a cause
High school-late adolescence (ages 15-19)	<ul style="list-style-type: none"> ■ Organizing complex projects ■ Motivating team members ■ Organizational skills required by after school or summer jobs ■ Working with others to complete a work product in after school or summer jobs
College-young adulthood (ages 19-22)	<ul style="list-style-type: none"> ■ Establishing grassroots organizations ■ Complex supervisory skills required during internships ■ Serving as a leader with multiple constituents

The tasks important at an earlier age are still appropriate at older ages. The tasks listed for older ages are those more unique to that developmental stage.

The Center for Creative Leadership ran a survey in 2012 where they received “responses from 462 individuals from all sectors of the economy, at all organizational levels, and across the age range,” primarily from the US (Van Velsor & Wright, 2015). They asked: “At what age do you think leadership development should begin?” and received the following response:

At what age do you think leadership development should begin?

5 years old or younger	21%
Ages 6-10	29%
Ages 11-17	40%
Ages 18-21	7%
Over 21	4%

This suggests that many professionals believe that leadership development begins young.

A study by Zimmerman-Oster and Burkhardt (2000) examined a number of leadership development programs in US colleges and universities. They identified four hallmarks of successful programs:

- 1) Context: The most successful leadership development programs are effectively situated within a specific context.
- 2) Philosophy: Successful leadership development programs tend to share a common intellectual framework.
- 3) Sustainability: Successful leadership development programs have certain characteristics that help ensure they can be sustained over time.
- 4) Common Practices: Many of the successful leadership development programs share common activities and methods of providing leadership development.

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All of these elements are outlined in more detail in their report (Zimmerman-Oster & Burkhardt, 2000). The common practices of effective programs were (also each outlined in more detail in the report):

- Self-Assessment and Reflection
- Skill Building
- Problem Solving
- Intercultural Issues
- Service Learning and Servant Leadership
- Outdoor Activities
- Student Leadership of Programs
- Mentoring
- Community Involvement
- Public Policy
- Targeted Training and Development
- Faculty Incentives
- Student Recognition
- Cocurricular Transcripts and Portfolio Development
- Capstone Experiences

The National Alliance for Secondary Education and Transition (NASSET) and the National Collaborative on Workforce and Disability (NCWD) created the following table on the “Organizational and Programmatic Components of Effective Youth Programs” based on numerous studies and academic research:

Chart B. Organizational & Program Components	
Organizational Level	
Components of Youth Development Programs	Additional Components of Youth Leadership Programs
<ul style="list-style-type: none"> • Clear mission and goals • Staff are trained, professional, supportive, committed, and youth-friendly • Safe and structured environment 	<ul style="list-style-type: none"> • Youth involvement at all levels including administration and the Board of Directors
<ul style="list-style-type: none"> • Connections to community and other youth-serving organizations 	
Programmatic Level	
Components of Youth Development Programs	Additional Components of Youth Leadership Programs
<ul style="list-style-type: none"> • Focus on each young person’s individual needs, assets, and interests 	
<ul style="list-style-type: none"> • Hands-on experiential and varied activities • Youth involvement in developing and implementing activities 	<ul style="list-style-type: none"> • Hands-on involvement at all programmatic levels such as planning, budgeting, implementing, and evaluating programs
<ul style="list-style-type: none"> • Opportunities for success • Opportunities to try new roles • Youth leadership 	<ul style="list-style-type: none"> • Multiple opportunities to develop and practice leadership skills • Varied, progressive leadership roles for youth: small group, large group, event, program
<ul style="list-style-type: none"> • Mentoring/role models 	
<ul style="list-style-type: none"> • Personal responsibility 	
<ul style="list-style-type: none"> • Family involvement and support 	
<ul style="list-style-type: none"> • Opportunities for youth to develop self-awareness, identity, and values 	<ul style="list-style-type: none"> • Education on community & program values and history

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Additionally, they formulated the following national standards for “Youth Development and Youth Leadership”:

3.1 Youth acquire the skills, behaviors, and attitudes that enable them to learn and grow in self-knowledge, social interaction, and physical and emotional health.

- 3.1.1 Youth have **opportunities to experiment** with various roles and identities without being labeled irrevocably or having to commit themselves concerning future choices.
- 3.1.2 Youth participate in the creative arts, physical education, and health education programs in school and community.
- 3.1.3 Youth have accurate information about human sexuality and have the opportunity to assess and question their sexual attitudes.
- 3.1.4 Youth develop **interpersonal skills**, including communication, decision-making, assertiveness, and peer refusal skills, as well as the ability to create healthy relationships.
- 3.1.5 Youth interact with peers and acquire a sense of belonging.
- 3.1.6 Youth participate in a range of teamwork and networking experiences.
- 3.1.7 Youth have significant **positive relationships with mentors, positive role models, and other nurturing adults**.

3.2 Youth understand the relationship between their individual strengths and desires and their future goals and have the skills to act on that understanding.

- 3.2.1 Youth develop ethics, values, and reasoning skills.
- 3.2.2 Youth develop individual strengths.
- 3.2.3 Each youth demonstrates the ability to set goals and develop a plan.
- 3.2.4 Youth participate in varied activities that encourage the development of self-determination and self-advocacy skills.

3.3 Youth have the knowledge and skills to demonstrate leadership and participate in community life.

- 3.3.1 Youth learn specific knowledge and skills related to leadership and explore leadership styles.
- 3.3.2 Youth learn the history, values, and beliefs of their communities.
- 3.3.3 Youth demonstrate awareness, understanding, and knowledge of other cultures and societies and show respect for all people.
- 3.3.4 Youth engage in **experiential learning** and have opportunities for genuine leadership, taking primary responsibility for developing plans, carrying out decisions, and solving problems.
- 3.3.5 Youth participate in **service to others** – in their community, their country, and their world.
- 3.3.6 Youth identify and access resources in their community.

3.4 Youth demonstrate the ability to make informed decisions for themselves.

- 3.4.1 Youth practice self-management and responsible decision-making that reflects healthy choices.
- 3.4.2 Youth demonstrate independent-living skills.

Leadership Opportunities and Formal Education

Is there evidence to suggest that graduating from a leading educational institution increases a student's chance of taking up leadership opportunities?

Education has been central to the theory of human capital since the very inception of that theory, most notably advanced by Nobel-prize winning economist Gary Becker in his 1964 work, *Human Capital: A Theoretic and Empirical Analysis, with Special Reference to Education*. In the book, Becker showed how human capital could be seen as an investment in people, one that would create positive returns on investment if done well.

Applying research on human capital to the arena of leadership is not always straightforward, however. Given the vast number of different definitions of leadership as well as the many ways in which leadership is expressed, it is helpful in looking at the empirical research to find objective metrics which can serve as a proxy for leadership. These objective metrics often take the form of career success, which can be measured both objectively (in terms of salary, promotions, etc.) as well as subjectively (in terms of career satisfaction on the part of the person him or herself).

As Brungardt (1997) explains, "At this time however, very little research has been conducted to study the role formal education might play in leadership development. The research that is available shows that formal education does positively correlate with achievement of recognized leadership positions. Generally, the higher the level of education directly relates to higher levels of managerial positions (Bass, 1990). However, it is important to recognize that this positive relationship between education and leadership does not reflect or support causation. The central question remains unanswered – how does formal education influence and contribute to leadership performance?"

Despite these challenges, Useem and Karabel (1986) identified three ways in which an educational institution may contribute to the human capital upon its graduates:

1. Scholastic capital (the amount of knowledge acquired)
2. Social capital (personal contacts, network ties, inculcation of achievement motivation)
3. Cultural capital (the value society places on symbols of prestige)

They found all three components help to explain how graduates get leadership positions. The quality of education itself significantly helped to benefit a graduate's leadership prospects, but even controlling for quality, they also found that *reputations* of educational institutions mattered in graduates' leadership prospects.

Judge, Cable, Boudreau, and Bretz (1995) conducted a noteworthy empirical study on the predictors of executive career success, using both objective and subjective measures. They found that "educational level, quality, prestige, and degree type all predicted financial success," although it did not predict subjective measures of career success. Their more detailed analysis showed that:

For the human capital variables, executives who earned their degree in business or in law, who had a graduate degree, and who earned their degree from an Ivy League or high-quality university, and who were evaluated as high in job and career accomplishments, earned more money than other executives. Each additional point in educational quality as measured by the 1.00 to 5.00 scale of the Gourman Report was associated with a predicted increase in cash compensation of \$2,291 per year.

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This finding is consistent with Ehrenberg (1989), who found that a one point increase in the Gout-man ratings for law schools led to a \$1,500 increase in starting salary for lawyers. Executives who graduated from an Ivy League university earned \$30,929 more per year than other executives, controlling for the quality of the university and the type of degree held. The pay advantages for those with business and law degrees were \$5,116 and \$30,328, respectively.

This provides further evidence to suggest that not only does a quality education increase earnings and the likelihood of being able to take on a leadership position, but also that going to the very best educational institutions with name recognition contributes to that aim as well. However, only their “motivations” and “organizational” variables, such as number of hours worked per week, number of evenings worked, ambition and promotion opportunities, organization size, and promotions, were related to subjective career success.

A meta-analysis conducted by Ng, Eby, Sorensen, and Feldman (2005) showed that education level was the best predictor of salary among the factors they researched (see Table 1 on following page). They also found that education level predicted promotion, though not as strongly as other factors (see Table 2 on following page).

There is also evidence to suggest that skills developed by education are related to career outcomes. In a study by Dai, De Meuse, and Tang (2013), analysis of two separate research studies showed that *learning agility* is highly correlated with financial success, CEO proximity, and career growth trajectory.

Brungardt (1997) suggests that, “At the collegiate level, many scholars believe that a liberal arts education is the best preparation for potential leaders. With higher education’s movement toward specialization, only the liberal arts background provides the broader educational experience essential to leadership (Gardner, 1990).” This may suggest that certain fields of study are more associated with leadership development than others, at least at the university level.

TABLE 1
Meta-Analytic Results of the Predictors of Salary

Predictors	<i>N</i>	<i>k</i>	<i>r_c</i>	<i>SD_c</i>	<i>Q</i>
Human capital					
Hours worked	15,428	22	.24*	.10	209.61*
Work centrality	9,101	17	.12*	.12	75.74
Job tenure	17,094	20	.07*	.14	361.66*
Organization tenure	39,562	39	.20*	.13	792.75*
Work experience	10,841	27	.27*	.13	260.05*
Willingness to transfer	3,156	6	.11*	.09	21.58*
International experience	4,869	4	.11*	.02	6.97
Education level	45,293	45	.29*	.14	1,126.93*
Career planning	522	2	.11*	.10	4.24
Political knowledge & skills	1,261	5	.29*	.05	4.60
Social capital	3,481	9	.17*	.14	67.56*
<i>Average correlation</i>			.21		
Organizational sponsorship					
Career sponsorship	3,406	10	.22*	.21	29.46*
Supervisor support	2,322	5	.05*	.13	24.14*
Training & skill development opportunities	9,670	7	.24*	.15	278.01*
Organizational resources	8,204	18	.07*	.13	159.66*
<i>Average correlation</i>			.13		
Socio-demographics					
Gender (<i>male</i> = 1, <i>female</i> = 0)	33,211	51	.18*	.11	519.21*
Race (<i>White</i> = 1, <i>non-White</i> = 0)	6,443	13	.11*	.12	115.10*
Marital status (<i>married</i> = 1, <i>unmarried</i> = 0)	23,303	29	.16*	.09	252.86*
Age	40,197	52	.26*	.16	1,249.90*
<i>Average correlation</i>			.20		
Stable individual differences					
Neuroticism	6,433	7	-.12*	.03	12.38
Conscientiousness	6,286	6	.07*	.10	55.95*
Extroversion	6,610	7	.10*	.05	27.00*
Agreeableness	6,286	6	-.10*	.01	2.23
Openness to experience	6,800	7	.04*	.04	9.94*
Proactivity	1,006	4	.11*	.13	11.69*
Locus of control	2,495	7	.06*	.11	21.91*
Cognitive ability	9,560	8	.27*	.07	69.49*
<i>Average correlation</i>			.11		

Notes. Average correlation is represented by the absolute value. *N* = cumulative sample size; *k* = number of studies cumulated; *r_c* = sample size weighted corrected correlation; and *Q* = *Q* statistics.

**p* < .05.

TABLE 2
Meta-Analytic Results of the Predictors of Promotion

Predictors	<i>N</i>	<i>k</i>	<i>r_c</i>	<i>SD_c</i>	<i>Q</i>
Human capital					
Hours worked	12,077	10	.13*	.05	36.22*
Work centrality	5,258	5	.04*	.04	11.84*
Job tenure	11,393	10	-.02*	.07	62.96*
Organization tenure	17,725	17	.03*	.22	993.14*
Work experience	5,400	10	.06*	.26	402.62*
Willingness to transfer	3,982	5	.03*	.14	56.51*
International experience	4,768	3	.12*	.00	1.11
Education level	9,571	26	.05*	.08	95.72*
Political knowledge & skills	432	2	.07	.00	.04
Social capital	2,605	7	.15*	.06	10.67
<i>Average correlation</i>			.06		
Organizational sponsorship					
Career sponsorship	4,828	10	.12*	.08	33.53*
Supervisor support	1,235	6	.02	.00	2.68
Training & skill development opportunities	6,503	6	.23*	.21	391.39*
Organizational resources	18,780	14	.06*	.02	23.07*
<i>Average correlation</i>			.10		
Socio-demographics					
Gender (<i>male</i> = 1, <i>female</i> = 0)	19,545	29	.08*	.07	127.65*
Race (<i>White</i> = 1, <i>non-White</i> = 0)	11,148	11	.01	.03	24.84*
Marital status (<i>married</i> = 1, <i>unmarried</i> = 0)	26,708	16	.09*	.09	227.18*
Age	28,498	28	.02*	.21	1,334.28*
<i>Average correlation</i>			.05		
Stable individual differences					
Neuroticism	4,575	5	-.11*	.05	12.60*
Conscientiousness	4,428	4	.06*	.01	2.61
Extroversion	4,428	4	.18*	.06	8.82*
Agreeableness	4,428	4	-.05*	.00	.60
Openness to experience	4,942	5	.01	.02	7.23
Proactivity	676	2	.16*	.03	1.93
Locus of control	5,911	4	-.03	.03	6.44
<i>Average correlation</i>			.08		

Notes. Average correlation is represented by the absolute value. *N* = cumulative sample size; *k* = number of studies cumulated; *r_c* = sample size weighted corrected correlation; and *Q* = *Q* statistics.

**p* < .05.

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Seibert, Kraimer, and Liden (2001) further investigated the second form of capital presented by Useem and Karabel above, namely *social capital*. Seibert et al. (2001) cite Coleman's definition of social capital as "any aspect of social structure that creates value and facilitates the actions of the individuals within that social structure." They then proceed to investigate three distinct theories of social capital:

The first approach to the conceptualization of social capital, **weak tie theory** (Granovetter, 1973), focuses on the strength of the social tie used by a person in the process of finding a job. Granovetter argued that ties among members of a social clique are likely to be strong (defined as emotionally intense, frequent, and involving multiple types of relationships, such as those with friends, advisors, and coworkers). **The information possessed by any one member of the clique is likely to be either shared quickly or already redundant with the information possessed by the other members.** However, ties that reach outside of one's social clique are likely to be weak (that is, not emotionally intense, infrequent, and restricted to one narrow type of relationship) rather than strong. According to Granovetter (1973), weak ties are often a bridge between densely interconnected social cliques and thus provide a source of unique information and resources. Indeed, Granovetter (1973) **found that weak ties were more likely than strong ties to have been the source of information about job openings for the sample of job incumbents he interviewed.** Subsequent research has provided mixed support for the weak tie hypothesis (Bridges & Villemez, 1986; McPherson, Popielarz, & Drobnic, 1992; Murray, Rankin, & Magill, 1981).

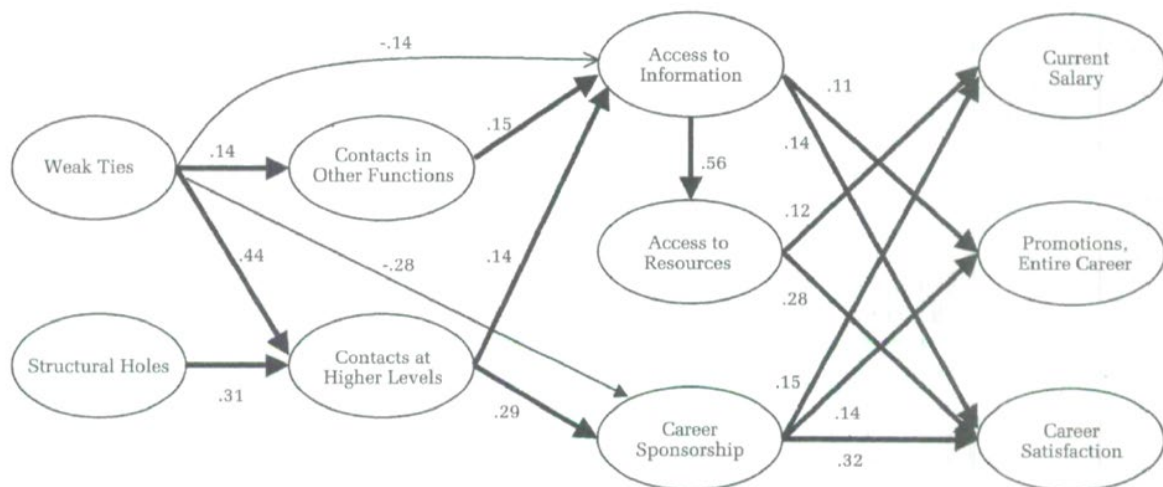
Burt's (1992) **structural holes approach** to social capital focuses not on the characteristics of ego's direct ties, but on the pattern of relations among the alters in ego's social network. A structural hole is said to exist between two alters who are not connected to each other. **According to structural holes theory, it is advantageous for ego to be connected to many alters who are themselves unconnected to the other alters in ego's network.** According to Burt's theory (1992, 1997), networks rich in structural holes provide an individual with three primary benefits: more unique and timely access to information, greater bargaining power and thus control over resources and outcomes, and greater visibility and career opportunities throughout the social system. Burt (1992) critiqued weak tie theory, pointing out that the structural hole concept gets at the bridging property of ties more directly than the weak tie concept and therefore provides a "stronger foundation for theory and a clearer guide for empirical research" (1992: 28). Initial empirical evidence has been supportive of structural holes theory but has also provided a number of boundary conditions limiting the range of the theory's application (Burt, 1992, 1997; Podolny & Baron, 1997; Sparrowe & Popielarz, 1995). To date, the role of the proposed explanatory processes--access to information, bargaining control, and referral--have not been empirically examined.

The third major theoretical approach to the conceptualization of social capital is **social resources theory** (e.g., Lin, Ensel, & Vaughn, 1981a, 1981b). Social resources theory focuses on the nature of the resources embedded within a network. Lin and

coauthors (1981a) argued that it is not the weakness of a tie per se that conveys advantage (nor, by extension, is it the bridging property of weak ties), but the fact that such ties are more likely to reach someone with the type of resource required for ego to fulfill his or her instrumental objectives. An alter who possesses characteristics or controls resources useful for the attainment of the ego's goals can be considered a social resource. For example, alters who provide career development advice and support are the relevant social resource when considering an ego's pursuit of instrumental career goals. Lin's research showed that tie strength was negatively related to the occupational prestige of the alter contacted (that is, weak ties reach higher-status alters) and that the alter's occupational prestige was in turn positively related to the prestige of the job secured by ego (Lin et al., 1981a, 1981b; see also De Graaf & Flap, 1988; Marsden & Hurlbert, 1988).

The authors of the study Seibert et al. (2001) seek to synthesize these three theories into an integrated view of social capital, which is defined by "both the different network structures that facilitate (or impede) access to social resources and the nature of the social resources embedded in the network." This led to the conceptualization of the following social capital model, with the results of their empirical analysis indicated by the labels for each arrow.

FIGURE 2
Results of Structural Equation Model^a



^a Fit: $\chi^2 = 165.25$, $df = 82$, $p < .01$; AGFI = .91, NFI = .92, CFI = .96. Parameter estimates are from the completely standardized solution and are significant at $p < .05$. Hypothesized relationships are represented by bold arrows, and relationships that were not hypothesized are represented by light arrows. Hypothesized paths that were not significant were eliminated from the model. Control variables and their paths are not shown for the sake of clarity. Current salary was a logarithm.

Their empirical research yielded the following model that supports the idea that social capital does correlate with salary, promotions, and career satisfaction, particularly as mediated through access to information, access to resources, and career sponsorship (mentorship and career support).

Since Spence's article "Job Market Signaling" (1972), researchers such as Weiss (1995) have been exploring the third form of capital presented by Useem and Karabel above, namely *cultural capital*. Cultural capital looks at the values society places on cultural symbols such as educational brands. This theory is usually referred to as *signalling*, suggesting that degrees are more of a "sorting mechanism" that signal to employers and to others in society the general level of competence or

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even the type of upbringing or cultural values reflected in a person who has been able to complete a certain degree. The idea that a degree provides financial returns unrelated to the knowledge or skills learned is referred to as the “sheepskin effect” (Hungerford & Solon, 1987). The signalling theory is generally seen as a competing or contrasting theory to the human capital theory (what Useem and Karabel refer to as “scholastic capital”), which emphasizes education as adding value to graduates primarily because it teaches students specific knowledge or skills.

There have been several empirical studies on signalling, including Groot and Oosterbeek (1994), Weiss (1995), Jaeger and Page (1996), Frazis (2002), Brown and Sessions (1999), and Chevalier, Harmon, Walker, and Zhu (2004). Findings from these various studies are mixed and contentious, some heavily supporting the human capital theory, while others seeming to suggest that the signalling theory can help explain certain variations that cannot be explained by the human capital theory alone. While the search for the root cause or causes of education’s value are therefore somewhat controversial, there is a consensus among researchers that education does lead to career success across an array of important objective metrics.

Mentorship Models

What kinds of youth mentorship models exist and how do they complement the classroom experience to produce better educational outcomes and enhanced leadership development?

Understanding the effectiveness of mentorship programs depends on the goals these programs set up to achieve. Different models for mentorship have different goals and are therefore to some extent difficult to compare from one to the other. Leadership, in particular, is difficult to measure and the links between mentorship and leadership are not significantly explored in the literature. Further, most studies are only short-term and have difficulty measuring the effects of mentorship over the longer term. Subjective measures of how one feels about mentorship experiences as well as some objective indicators such as academic performance are the focus of most studies. The link between educational outcomes and mentorship has been studied extensively and some of these findings are detailed below.

Karcher, Kuperminc, Portwood, Sipe, and Taylor (2006) provide a framework for defining different mentorship programs, based on the context, structure, and goals of the mentoring program. They suggest a few different variations within each of these domains:

1. Contexts
 - a. Field-based mentoring
 - b. Site-based mentoring
2. Structures
 - a. Cross-age peer mentoring
 - b. Group mentoring
 - c. E-Mentoring
 - d. Intergenerational mentoring
3. Goals (see diagram on the following page)
 - a. Developmental mentoring
 - b. Instrumental mentoring

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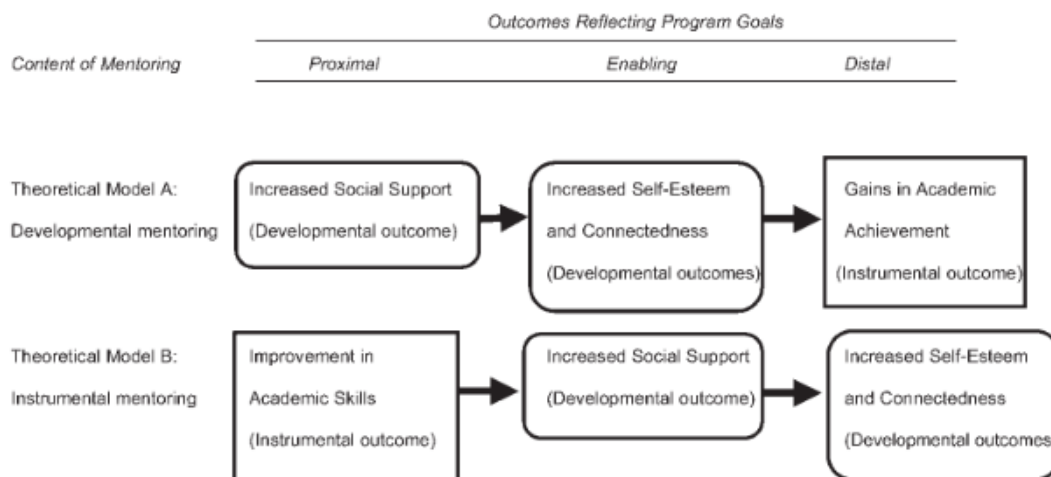


Figure 1. Program modeling the causal relationships between proximal and distal outcomes.

In addition to context, structure, and goals, they note that **infrastructure** (including screening, matching, training, and **ongoing support of mentors**) as well as *dosage* (amount, intensity, and duration of mentoring) are common elements important to define for any mentoring program (Karcher et al., 2006). All of these elements may be helpful in thinking about formalizing a structure for a mentorship program.

The first meta-analytic review of mentorship programs in the US was conducted by DuBois, Holloway, Valentine, and Cooper (2002) which reviewed 55 different evaluations of youth mentorship programs. Their analysis concluded that “Findings of this investigation provide support for the effectiveness of youth mentoring programs,” and that “Favorable effects of mentoring programs are similarly apparent across youth varying in demographic and background characteristics such as age, gender, race/ethnicity, and family structure and across differing types of outcomes that have been assessed using multiple sources of data.” However, they note that “**it may be most appropriate to expect the typical youth participating in a mentoring program to receive benefits that are quite modest in terms of absolute magnitude,**” and therefore that “numerous programmatic and other variables may be critical to attend to for the potential benefits of youth mentoring programs to be fully realized. The need for greater consideration of specific factors influencing effectiveness is underscored by the substantial overall heterogeneity in estimates of effect size observed in the present review and the numerous systematic sources of this variation that were able to be delineated in moderator analyses.” This suggests that the very existence of a mentorship program does not necessarily guarantee positive effects and that specific aspects of individual programs will make a large difference in allowing a mentorship program to have the greatest effect.

In attempting to identify features which have the most significant impact on mentorship programs, DuBois et al. (2002) found that “No single feature or characteristic of programs was indicated to be responsible for the positive trends in outcomes that were associated with greater degrees of utilization of either set of best practices. Several of the practices comprising the theory-based index did, however, emerge as significant individual moderators of effect size (and, hence, by definition also were included in the empirically based index), thus highlighting specific strategies that may be especially important for achieving desired results. These latter program features include **ongoing training for mentors, structured activities for mentors and youth as well as expectations for**

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frequency of contact, mechanisms for support and involvement of parents, and monitoring of overall program implementation. In multivariate analyses, these practices were further revealed to be represented consistently among the strongest predictors of greater reported positive effects for mentoring programs.” They also emphasized that many of the most impactful interventions for mentorship programs were targeted at the mentorship process itself, rather than activities related to pre-screening, pre-training, and matching mentors before engagements took place. This finding appeared somewhat counter-intuitive to the studies they looked at. They write: “It is noteworthy therefore that efforts directed toward this goal apparently have been relatively neglected in youth mentoring programs to date in lieu of a greater focus on preparatory procedures such as screening, initial training and orientation, and matching of youth and mentors. Illustratively, whereas initial training or orientation has been provided to mentors on a fairly routine basis (71% of studies in the present review), efforts to provide ongoing training once relationships have begun have been much less common (23% of studies).”

DuBois et al. (2002) also looked at the impact of mentor-mentee relationships. They found that: “A similarly strong linkage with beneficial outcomes is evident for the intensity and quality of relationships established between mentors and youth in programs. Although not included in their study due to methodological reasons, they note that previous research has suggested that **“multiple features of relationships, such as frequency of contact, emotional closeness, and longevity, each may make important and distinctive contributions to positive youth outcomes.”** Their research also showed that effects of mentorship programs were greater for both “at-risk” youth and youth from lower socioeconomic backgrounds. It also suggested that older mentors with more experience may be more effective: “One possibility suggested by the present findings is the recruitment of mentors whose backgrounds include prior experience and success in helping roles. Older adults, for example, although underrepresented currently in programs, often may be able to bring to the mentoring role valuable skills relating to child-rearing and other areas of life experience (Freedman, 1988; LoSciuto et al., 1996).”

Approximately a decade later, DuBois, Portillo, Rhodes, Silverthorn, and Valentine (2011) conducted another meta-analytic review of mentoring programs to see how the field had changed over time. Once again, their findings “[supported] the effectiveness of mentoring for improving outcomes across behavioral, social, emotional, and academic domains of young people’s development.” They also found that mentoring is effective throughout the life of a young person, writing that “benefits of participation in mentoring programs are apparent from early childhood to adolescence and thus not confined to a particular stage of development.” Perhaps contrary to their earlier study suggesting the use of older, experienced mentors, they found that “although programs typically have utilized adult volunteers and focused on cultivating one-to-one relationships, those that have engaged older peers as mentors or used group formats show comparable levels of effectiveness.” They once again found that most gains from mentorship programs are limited: “we find that gains on outcome measures for the typical young person in a mentoring program have been modest (equivalent to a difference of 9 percentile points from scores of nonmentored youth on the same measures).”

Once again, DuBois et al. (2011) found that several factors were closely related to program effectiveness. Specifically they found that mentorship programs are more effective when:

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- a) Participating youth have either had **pre-existing difficulties** (including problem behavior specifically) or been exposed to significant levels of environmental risk
- b) Evaluation samples have included **greater proportions of male youth**
- c) There has been a **good fit between the educational or occupational backgrounds of mentors and the goals of the program**
- d) Mentors and youth have been **paired based on similarity of interests**
- e) **Programs have been structured to support mentors** in assuming teaching or advocacy roles with youth

DuBois et al. (2011) write that in order for investments on mentorship programs to yield **optimal results**, the following areas of concern should be considered:

- a) Ensuring adherence to core practices (e.g., screening and training of mentors) that both research and common sense dictate to be essential elements of program quality
- b) Facilitating ongoing refinement and strengthening of programs using the available evidence as a guide
- c) Fostering stronger collaborations between practitioners and researchers as a framework for evidence-driven dissemination and growth within the field

DuBois et al. (2011) also strongly recommends that mentorship programs follow what they call “largely consensus guidelines for practice in the field,” which are included in the National Mentoring Partnership’s **“Elements of Effective Practice for Mentoring”** (MENTOR, 2015) guide. This guide outlines six core standards of practice: 1) Recruitment, 2) Screening, 3) Training, 4) Matching and Initiation, 5) Monitoring and Support, and 6) Closure.

Another useful and comprehensive resource in developing youth mentoring programs is “Foundations of Successful Youth Mentoring: Effective Strategies for Providing Quality Youth Mentoring in Schools and Communities” (2007) published by The Hamilton Fish Institute on School and Community Violence & The National Mentoring Center at Northwest Regional Educational Laboratory. The report details ways in which organizations can start a new mentoring program, design their mentoring services (including volunteer recruitment, orientation training, intake, screening, matching, and evaluation), as well as sustainability strategies for mentorship programs.

Jekielek, Moore, Hair, and Scarupa (2002) look at a number of large mentoring programs including Across Ages, Big Brothers Big Sisters, The Buddy System, BELONG, Career Beginnings, Campus Partners in Learning, The Hospital Youth Mentoring Program, Linking Lifetimes, RAISE, and Sponsor-A-Scholar. They found evidence of the following benefits of mentoring:

- a) Educational Achievement
 - a. Better attendance
 - b. Better chance of going on to higher education
 - c. Better attitudes toward school
- b) Health and Safety
 - a. Show promise in the prevention of substance abuse
 - b. Reduce *some* negative youth behaviors
- c) Social and Emotional Development
 - a. Promotes positive social attitudes and relationships

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Jekielek et al. (2002) also identified several characteristics of successful mentoring relationships:

- a) The longer the mentoring relationship, the better the outcome.
- b) Youth are more likely to benefit if mentors maintain frequent contact with them and know their families.
- c) Young people who perceive high-quality relationships with their mentors experience the best results.
- d) Overall, young people who are the most disadvantaged or at-risk seem to benefit the most from mentoring.

The specific practices they suggest to facilitate these positive relationships are:

- a) Mentoring programs need structure and planning to facilitate high levels of interaction between young people and their mentors
- b) Mentoring programs that are driven more by the needs and interests of youth – rather than the expectations of the adult volunteers – are more likely to succeed.

In another major study conducted by Herrera, Sipe, and McClanahan (2000), researchers looked at differences between Community-Based Mentoring (CBM) and School-Based Mentoring (SBM). They found that nine factors were found to be critical to positive mentoring relationships: (1) engaging in social activities; (2) engaging in academic activities; (3) number of hours per month spent together; (4) decision-making shared by mentor and mentee; (5) prematch training; (6) postmatch training; (7) mentor screening (only important relationship development in community-based programs); (8) matching; and (9) age of the mentee. These findings are detailed in the following table:

Table 10
Benchmarks for Developing Strong Relationships

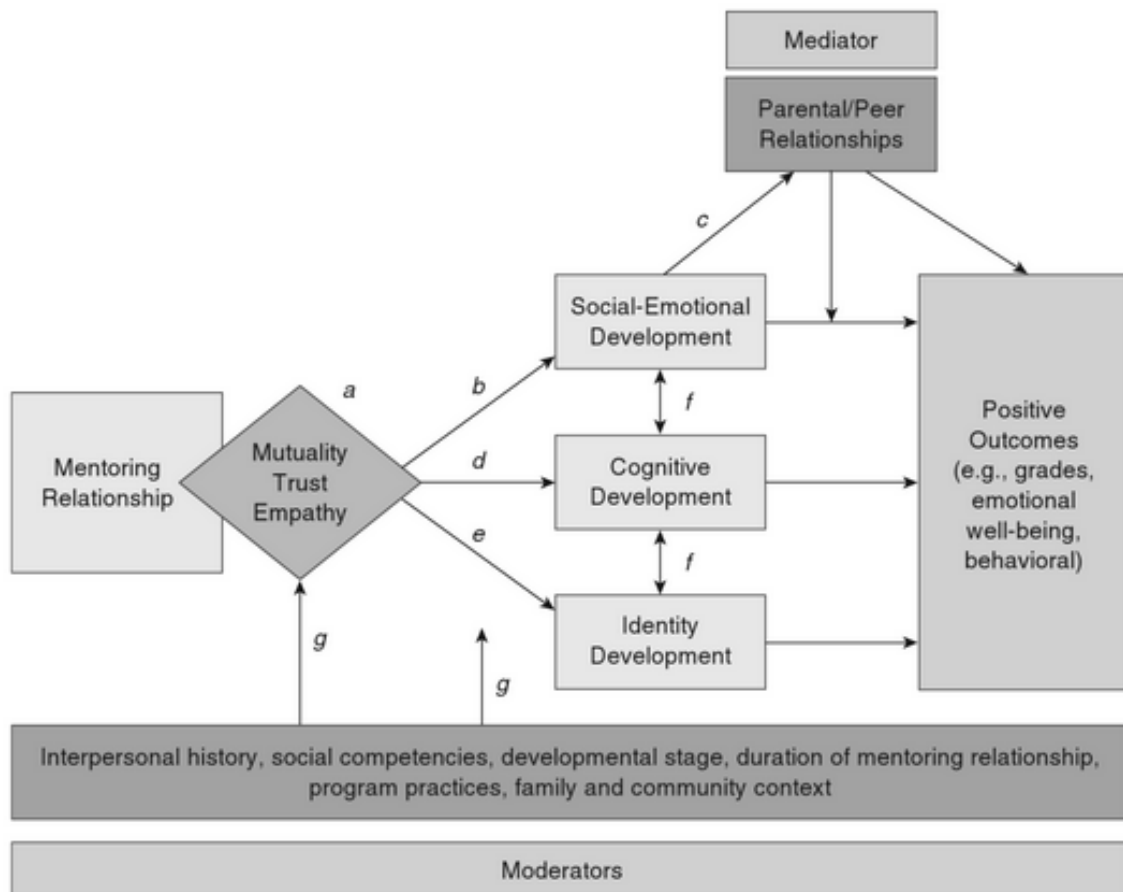
	<i>Mentors in the most close and supportive relationships:</i>	<i>Mentors in the least close and supportive relationships:</i>
Mentor and Youth Interactions		
Engage in social activities	"Some" or "A lot"	"None at all"
Engage in academic activities	"A little," "Some" or "A lot"	"None at all"
Extent of contact	Greater than 10 hours per month	Fewer than 3 hours per month
Choosing activities	Getting ideas from youth and then deciding together	Mentor decides or program prescribes
Program Practices		
Matching	Mentor and mentee share similar interests	Mentor and mentee do not share similar interests
Prematch orientation/ training	More than six hours	Fewer than two hours
Postmatch training and support from program staff	At least two hours of postmatch training or a minimum of monthly contact with program staff	No training after the match and less than monthly contact between staff and mentor
Screening (CB only)	The four standard screening procedures plus additional screening	Fewer than three of the four standard screening procedures
Youth Characteristics		
Mentee age	Elementary school age	High school age

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Herrera et al. (2000) emphasized that quality of mentoring relationships is more important than sheer quantity of hours spent together, writing: “We found that although spending more time with mentees is better than less time, even more important is what youth and mentors do together during that time. **In particular, engaging in social activities is key to developing close and supportive relationships.**”

A study by Grossman, Chan, Schwartz, and Rhodes (2012) sought to examine the effects of time on mentoring relationships, studying the Big Brothers Big Sisters program. Their study included over 1,100 youth and found that, “At the end of the year, youth in intact relationships showed significant academic improvement, while youth in matches that terminated prematurely showed no impact. Those who were re-matched after terminations showed negative impacts.” This suggests that longevity of mentoring relationships is critical to the effectiveness of mentoring program.

Rhodes (2005) provides the following model for mentorship:



The model is intended to show how the mentoring relationship contributes to social-emotional development, cognitive development, and identity development. This model is used in the research conducted by DuBois et al. (2011) mentioned above.

Leadership and Goal-Setting

Is there evidence to suggest a link between goal-setting and leadership, especially in children? If so, which models for cultivating goal-setting are most effective and how are they implemented in order to retain intrinsic motivation?

While it may now sound intuitive, the idea that conscious goals and intentions lead to improved task performance was first theorized by Edwin Locke in his 1968 paper, "Toward a Theory of Task Motivation and Incentives." This revolutionary theory started with three major findings:

- 1) Hard goals produce a higher level of performance (output) than easy goals
- 2) Specific hard goals produce a higher level of output than a goal of "do your best"
- 3) Behavioral intentions regulate choice behavior.

Since Locke's original theory, a vast amount of empirical and theoretical literature has attempted to further develop what has become known as "goal theory," and some of this research has attempted to refute Locke's original three findings.

Over the past several decades, Locke has remained a powerful thinker in the development of goal theory. A paper by Locke and Latham (2002) reviews the findings from the proceeding 35 years of research and investigation. He there identifies four mechanisms by which goal-setting affects performance:

- 1) **Goals serve a directive function**; they direct attention and effort toward goal-relevant activities and away from goal-irrelevant activities
- 2) **Goals have an energizing function**. High goals lead to greater effort than low goals.
- 3) **Goals affect persistence**. When participants are allowed to control the time they spend on a task, hard goals prolong effort
- 4) **Goals affect action indirectly by leading to the arousal**, discovery, and/or use of task-relevant knowledge and strategies

The paper (Locke & Latham, 2002) also identified a number of moderators that can impact the effectiveness of goal-setting:

- 1) **Goal Commitment**: **The goal-performance relationship is strongest when people are committed to their goals...** Two key categories of factors facilitating goal commitment are (a) factors that make goal attainment important to people, including the importance of the outcomes that they expect as a result of working to attain a goal, and (b) their belief that they can attain the goal (self-efficacy).
 - a. **Importance**: Making a public commitment to the goal enhances commitment, presumably because it makes one's actions a matter of integrity in one's own eyes and in those of others... **An alternative to assigning goals is to allow subordinates to participate in setting them**. The theory is that this would make goals more important to the person because one would, at least in part, own the goals... From a motivational perspective, an assigned goal is as effective as one that is set participatively provided that the purpose or rationale for the goal is given. However, if the goal is assigned tersely (e.g., "Do this...") without explanation, it leads to performance that is significantly lower than for a participatively set goal.

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- b. **Self-efficacy:** Self-efficacy enhances goal commitment. Leaders can raise the self-efficacy of their subordinates (a) by ensuring adequate training to increase mastery that provides success experiences, (b) by role modeling or finding models with whom the person can identify, and (c) through persuasive communication that expresses confidence that the person can attain the goal.
- 2) **Feedback:** For goals to be effective, people need **summary feedback** that reveals progress in relation to their goals. If they do not know how they are doing, it is difficult or impossible for them to adjust the level or direction of their effort or to adjust their performance strategies to match what the goal requires.
- 3) **Task Complexity:** As the complexity of the task increases and higher level skills and strategies have yet to become automatized, goal effects are dependent on the ability to discover appropriate task strategies... Another factor that may facilitate performance on new, complex tasks is the use of proximal goals. Latham and Seijts (1999), using a business game, found that **do-your-best goals were more effective than distal goals**, but when proximal outcome goals were set in addition to the distal outcome goal, self-efficacy and profits were significantly higher than in the do-your-best condition or in the condition where only a distal outcome goal had been set.

Locke and Latham (2002) also discuss how satisfaction impacts one's attitude towards continuing to set new goals. They write:

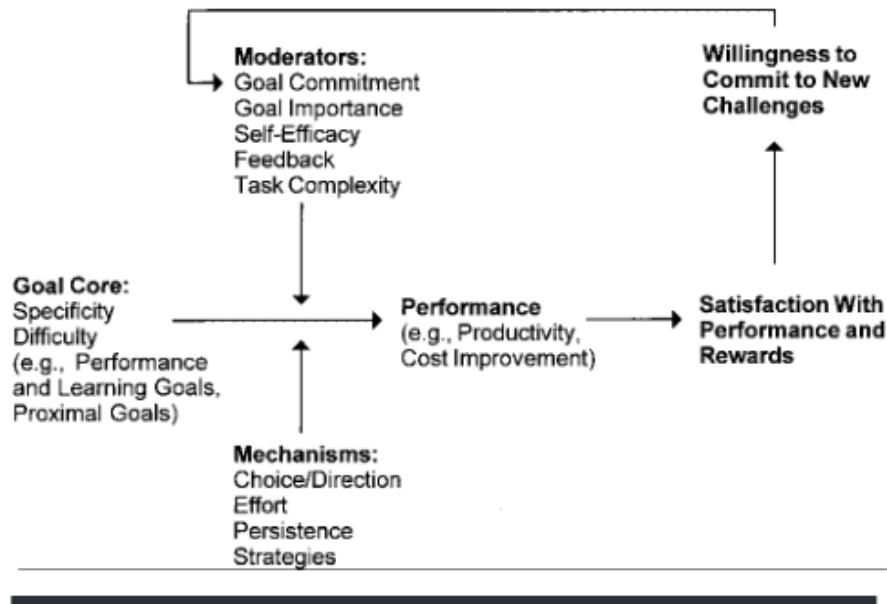
For any given trial, exceeding the goal provides increasing satisfaction as the positive discrepancy grows, and not reaching the goal creates increasing dissatisfaction as the negative discrepancy grows. Across trials, the more goal successes one has, the higher one's total satisfaction.

There is a paradox here, however. How can people who produce the most, those with difficult goals, be the least satisfied? The answer is implicit in the question. **People with high goals produce more because they are dissatisfied with less.** The bar for their satisfaction is set at a high level. This is why they are motivated to do more than those with easy goals.

But why would people be motivated to set high goals? People can expect many psychological and practical outcomes from setting and attaining those goals.

This leads them to the following model of goal setting and performance (Locke & Latham, 2002):

Figure 4
Essential Elements of Goal-Setting Theory and the High-Performance Cycle



Starting in the late 1970s, Locke’s theories of goal-setting began to be applied directly to educational contexts. The history of the development of models for goal-setting in education is documented in Elliot, Murayama, and Pekrun (2011), and Elliot has become a leading figure in developing models up to the present. In particular, he details the development of what has become known as “achievement goal theory.” Elliot et al. (2011) write:

The achievement goal construct was developed in the late 1970s and early 1980s in independent and collaborative work by Carole Ames (1984), Carol Dweck (1986), Marty Maehr (Maehr & Nicholls, 1980), and John Nicholls (1984). Each of these theorists distinguished between two qualitatively distinct goals for achievement behavior, and the conceptualizations they offered were similar enough to be referred to together as “the dichotomous achievement goal model.” In this model, achievement goal is defined as the purpose for engaging in achievement behavior (Maehr, 1989), and the two goal types delineated are **mastery goals**, in which the purpose is to develop competence and task mastery, and performance goals, in which the purpose is to demonstrate competence (usually normative competence)...

In the 1990s and 2000s, Elliot and colleagues proposed a set of achievement goal models that extended the dichotomous model through the incorporation of avoidance, as well as approach, goals.

This resulted in the following 2 x 2 framework (Elliot & McGregor, 2001).

		Definition	
		Absolute/ intrapersonal (mastery)	Normative (performance)
Valence	Positive (approaching success)	Mastery- approach goal	Performance- approach goal
	Negative (avoiding failure)	Mastery- avoidance goal	Performance- avoidance goal

Figure 1. The 2 × 2 achievement goal framework. Definition and valence represent the two dimensions of competence. Absolute/intrapersonal and normative represent the two ways that competence can be defined; positive and negative represent the two ways that competence can be valenced.

These dimensions are further explained (Elliot & McGregor, 2001):

Competence is defined in terms of the referent or standard that is used in performance evaluation. Three different standards may be identified: absolute (the requirements of the task itself), intrapersonal (one's own past attainment or maximum potential attainment), and normative (the performance of others). That is, competence may be evaluated, and therefore defined, according to whether one has acquired understanding or **mastered a task** (an absolute standard), improved one's performance or fully developed one's knowledge or skills (an intrapersonal standards), or performed better than others (a normative standards). Absolute and intrapersonal competence share many conceptual and empirical similarities and often seem indistinguishable (e.g., learning new information represents both the mastering of a task and the development of one's knowledge). As such, in the present research we consider these standards jointly rather than individually.

Within this framework, Elliot and McGregor (2001) ran three different studies to test the causes and consequences of university students who set different kinds of goals for themselves. These studies produced the following results:

Table 8
Summary of Antecedent and Consequence Results: Studies 2 and 3

Type of result	Achievement goal			
	Mastery approach	Mastery avoidance	Performance approach	Performance avoidance
Antecedents	Overall need for achievement (+) Workmastery (+) Self-determination (+) Competence valuation (+) Perceived class engagement (+)	Fear of failure (+) Self-determination (-) Entity theory (+) Incremental theory (-) Mother person-focused NF (+) Father person-focused NF (+) Mother worry (+) Father worry (+) Competence valuation (+) Perceived class engagement (+)	Overall need for achievement (+) Competitiveness (+) Fear of failure (+) Father person-focused PF (+) Father conditional approval (+) Mother conditional approval (+) Competence valuation (+)	Fear of failure (+) Self-determination (-) Entity theory (+) Mother person-focused NF (+) Father person-focused NF (+) Mother worry (+) Competence valuation (+)
Consequences	Deep processing (+) Subsequent mastery-approach goals (+) Subsequent performance avoidance goals (-) Health center visits (-)	Disorganization (+) [State TA (+)] Worry (+) Emotionality (+) Subsequent mastery avoidance goals (+) Subsequent mastery approach goals (+) Subsequent performance approach goals (+)	[Surface processing (+)] Subsequent performance approach goals (+) Overall exam performance (+) MC performance (+) SE performance (+)	[Deep processing (-)] Surface processing (+) Disorganization (+) State TA (+) [Worry (+)] Emotionality Subsequent performance avoidance goals (+) Overall exam performance (-) MC performance (-) SE performance (-) Health center visits (+)

Note. (+) = positive relationship; (-) = negative relationship; TA = test anxiety; PF = positive feedback; NF = negative feedback; MC = multiple choice; SE = short answer/essay. All relationships are $p < .05$ at minimum except those in brackets, which are $p < .10$.

In general, then, mastery-approach goals were found to be associated with the most positive learning attitudes and with some of the most desirable learning outcomes. While performance-approach goals were associated with greater exam success than mastery-approach goals, this was accompanied by negative attitudes and stress such as fear of failure and parent-conditional approval. Both forms of avoidance goals were associated with negative causes and consequences.

Mark Girod, a professor at Western Oregon University, created a table outlining the characteristics of learners who set mastery as opposed to performance goals:

Characteristics of Learners with Mastery Versus Performance Goals

<u>Learners with Mastery Goals</u>	<u>Learners with Performance Goals (especially performance-avoidance goals)</u>
Are more likely to be interested in and intrinsically motivated to learn course material.	Are more likely to be extrinsically motivated (i.e., motivated by expectations of external reinforcement and punishment) and more likely to cheat to obtain good grades.
Believe that competence develops over time through practice and effort	Believe that competence is a stable characteristic (people are either competent or not) and think that people shouldn't have to try hard
Exhibit more self-regulated learning and behavior	Exhibit less self-regulation
Use learning strategies that promote comprehension	Use learning strategies that promote memorization and may procrastinate more
Choose tasks that maximize opportunities for learning and seek out challenges	Choose tasks that maximize opportunities for demonstrating competence and avoid tasks that make them look incompetent
Are more likely to undergo conceptual change	Are less likely to undergo conceptual change
React to easy tasks with feelings of boredom	React to success on easy tasks with feelings of pride or relief
Seek feedback that accurately describes their abilities and helps them improve	Seek feedback that flatters them
Willingly collaborates with peers to enhance learning	Collaborates when doing so helps them look competent
Interprets failure as a sign to work harder	Interprets failure as a sign of low ability and therefore predictive of future failure
Views errors as a normal part of learning and uses errors to improve	Views errors as a sign of failure and incompetence. Engages in self-handicapping as a way to justify failure
Views teacher as a resource	Views teacher as a judge, rewarder, or punisher
Are satisfied with performance as long as they make progress	Are satisfied only if they succeed
Are more likely to be enthusiastic about school and become activity involved in school activities	Are more likely to distance themselves from the school environment

More recently, however, Elliot has argued to expand his previous 2 x 2 model into a 3 x 2 model by separating the absolute and intrapersonal categories (Elliot et al., 2011):

		Definition		
		Absolute (task)	Intrapersonal (self)	Interpersonal (other)
Valence	Positive (approaching success)	Task-approach goal	Self-approach goal	Other-approach goal
	Negative (avoiding failure)	Task-avoidance goal	Self-avoidance goal	Other-avoidance goal

Figure 1. The 3 x 2 achievement goal model. Definition and valence represent the two dimensions of competence. Absolute, intrapersonal, and interpersonal represent the three ways that competence may be defined; positive and negative represent the two ways that competence may be valenced.

This model is composed of the following goals:

- a. A *task-approach* goal focused on the attainment of task-based competence (e.g., “Do the task correctly”)
- b. A *task-avoidance* goal focused on the avoidance of task-based incompetence (e.g., “Avoid doing the task incorrectly”)
- c. A *self-approach* goal focused on the attainment of self- based competence (e.g., “Do better than before”)
- d. A *self-avoidance* goal focused on the avoidance of self-based incompetence (e.g., “Avoid doing worse than before”)
- e. An *other-approach* goal focused on the attainment of other-based competence (e.g., “Do better than others”)
- f. An *other-avoidance* goal focused on the avoidance of other-based incompetence (e.g., “Avoid doing worse than others”)

These categories have since been widely used across the literature in order to research **what kinds of goal-setting are effective or ineffective for different kinds of goals**. For example, some may be more or less appropriate for simple versus more complex goals.

After looking at two empirical studies as well as previous research, the article concludes that:

There is considerable consensus in the achievement goal literature that administrators and teachers would do well to **facilitate the pursuit of development-approach and task-/self-approach goals and to discourage the pursuit of demonstration-avoidance and other-avoidance goals in the classroom...** The results of the present research support these recommendations but also suggest an important refinement. More specifically, the present findings highlight the need to **discourage the pursuit of other-avoidance goals and intriguingly point to the benefits of promoting task-approach over self-approach goals**. Clearly more research is needed before a definitive statement can be made on the merits of facilitating task-approach relative to self-approach goals in the classroom. For example, one important question in need of research is whether task-approach goals are beneficial for highly complex tasks in which successful completion is difficult to discern and somewhat subjective. Nevertheless, the present findings make salient the applied utility of the 3 x 2 model (Elliot et al., 2011).

Despite Elliot et al.'s (2011) advancement of the 3 x 2 model, much of the literature today still takes the 2 x 2 model shown above (Elliot & McGregor, 2001) as the default model for thinking about motivation and goal-setting in educational contexts.

Since Locke's development of achievement goal theory, other goal theorists have sought to expand the thinking about goals beyond achievement. Social goal theory, in particular, has sought to expand thinking about motivations for students to improve their academic performance based on social goals that may go beyond the interpersonal goals incorporated into achievement goal theory, “including students' desires to be popular, socially responsible, altruistic, obedient, and accepted” (Urdañ & Maehr, 1995). King and Watkins (2012) suggest that social goals may be even more salient

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for students coming from non-Western, collectivist cultures, as opposed to achievement or performance goals which emphasize relative social autonomy.

Mansfield (2012) continues to expand beyond achievement and social goals by identifying **four domains of goal-setting**: future goals, achievement goals, social goals, and personal well-being goals (see below).

TABLE 1
Goal Domains, Goals, and Definitions

<i>Goal domain</i>	<i>Goal</i>	<i>Definition</i>
Future goals	Extrinsically focused	Wanting to attain employment, have a particular career, and/or gain university entrance. Desiring money, respect, materialistic possessions, and/or recognition in the future (status).
	Intrinsically focused	Wanting positive future well-being (happiness, success, relationships). Wanting to make a positive contribution to the world/society (altruistic).
Achievement goals	Mastery	Wanting to learn and to improve knowledge/skills.
	Performance (grade)	Wanting to attain and/or maintain "good" marks or grades.
Social goals	Performance (approach)	Wanting to demonstrate higher academic performance than others.
	Relationship	Wanting to form positive and/or close interpersonal relationships with others.
	Approval	Wanting to attain approval from parents and/or teachers.
Personal well-being goals	Welfare	To assist others/to enhance the welfare of others in the community.
		Wanting to enhance self-confidence, self-esteem, and to be happy. To enjoy school and have fun. To support emotional and physical well-being.

Mansfield (2012) did not study which goals were more effective than others, but only which goals young people stated as reasons for why they wanted to achieve academically. Her findings were:

TABLE 2
Goal Domains, Goals, and Case Frequencies

<i>Goal domain</i>	<i># students</i>	<i>% students</i>	<i>Specific goal</i>	<i># students</i>	<i>% students</i>
Future	29	100%	Future extrinsic	29	100%
			Future intrinsic	13	45%
Achievement	16	55%	Mastery	6	21%
			Performance-grade	8	27%
			Performance approach	3	10%
Social	28	96%	Relationship	27	93%
			Approval	13	45%
			Welfare	6	21%
Personal well-being	22	76%			

Thus most students in the study reported that they wanted to perform well academically because of how their academic performance would affect their future career prospects and because they wanted to form positive interpersonal relationships with others in their school environment.

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Despite the abundance of theory and short-term experiments, there is very little research on the effectiveness of goal-setting in education over a medium or long-term period. One recent study that suggested, however, did provide some evidence for believing that goal-setting can have positive effects for academic achievement (Morisano, Hirsh, Peterson, Pihl, & Shore, 2010):

In the present study, we tested the effects of a single-session, intensive goal-setting program for undergraduate students experiencing academic difficulty. Compared with the control group, students who completed the goal-setting exercise experienced three benefits in the postintervention semester: (a) increased GPA, (b) higher probability of maintaining a full course load, and (c) reductions in self-reported negative affect. Given the paucity of successful interventions for improving academic performance in university students, the current study indicates that personal goal setting deserves greater attention as an effective technique for improving academic success.

Another study by Zimmerman, Bandura, and Martinez-Pons (1992) showed that students' grade goals were correlated with their final grade goals, and also that students' own grade goals were influenced by a variety of factors including parents' grade goals and self-efficacy for academic achievement (see diagram below).

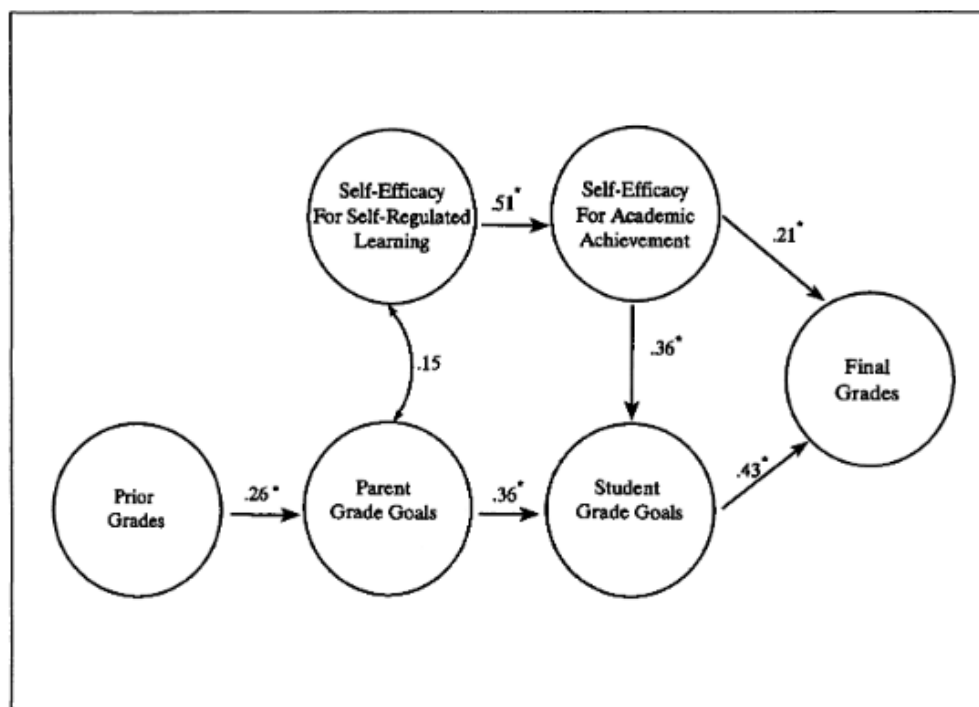


Figure 2. Path coefficients between variables in the sociocognitive model of students' self-motivation and class grades (* $p < .05$)

A further noteworthy review of literature on motivation in education contexts is found in Covington (2000). He discusses how motivation can be seen either as **drives** ("an internal state, need, or condition that impels individuals toward action") or as **goals** that "entice individuals toward action." This distinction roughly maps onto the distinction explained above between master and performance goals. Covington (2000) suggests the following interactions between goal-setting and academic achievement:

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This review examines the directions and recent progress in our understanding of the motivational dynamics of school achievement. As we will see, it is the interaction between (a) the kinds of social and academic goals that students bring to the classroom, (b) the motivating properties of these goals, and (c) the prevailing classroom reward structures that jointly influence the amount and quality of student learning, as well as the will to continue learning.

A related factor to consider when thinking about goal-setting is **how goal-setting affects motivation**. In particular, researchers have studied how *intrinsic* motivation is affected by extrinsic awards. Edward Deci has pioneered the field of studying intrinsic motivation, and found in one major meta-analysis (Deci, Koestner, & Ryan 1999) that “engagement-contingent, completion-contingent, and performance-contingent rewards significantly undermined free-choice intrinsic motivation, as did all rewards, all tangible rewards, and all expected rewards.”

Using a simple game as a test condition, Elliot and Harackiewicz (1994) found the following:

The results of this study revealed that the assignment of goals can both undermine and enhance intrinsic motivation for enjoyable activities. As anticipated, we found evidence that mastery-focused goals have a more positive effect on intrinsic motivation than do performance-focused goals. However, the effect that emerged most clearly, on two indicators of intrinsic motivation and two hypothesized mediators, was an interaction between the focus of evaluation of the assigned goals and individual differences in achievement orientation. **In general, individuals low in achievement orientation responded most positively to mastery goals, whereas performance goals proved optimal for achievement-oriented subjects.** Thus, the results strongly support our Person X Situation hypothesis that the effects of goals on intrinsic motivation are moderated by the focus of evaluation implicit in the assigned goals and by individual differences in achievement orientation.

This suggests that goal-setting will affect students’ intrinsic motivation in various ways, according to the achievement-orientation of the individual student, and that in general mastery goals are better for enhanced intrinsic motivation than performance goals.

While there is a parallel literature on habit formation in childhood, the literature between the fields of goal-setting and habit-formation is relatively unexplored. The primary connection seems to be the description of habits themselves as **“goal-directed automaticity.”**

Aarts and Dijksterhuis (2000) write: “Specifically, we conceive of habits as a form of goal-directed automatic behavior (cf. goal-dependent automaticity; Bargh, 1989). Habits are represented as links between a goal and actions that are instrumental in attaining this goal. The strength of such links is dependent on frequent co-activation of the goal and the relevant actions in the past. **The more often the activation of a goal leads to the performance of the same action under the same circumstances, the stronger the habit (i.e., the link between goal and action) will become.**”

This suggests that habits themselves involve an element of goal-setting. How goal-setting in particular becomes a habit over time has received less attention and may be best explored through the general literature of habit formation and automaticity.

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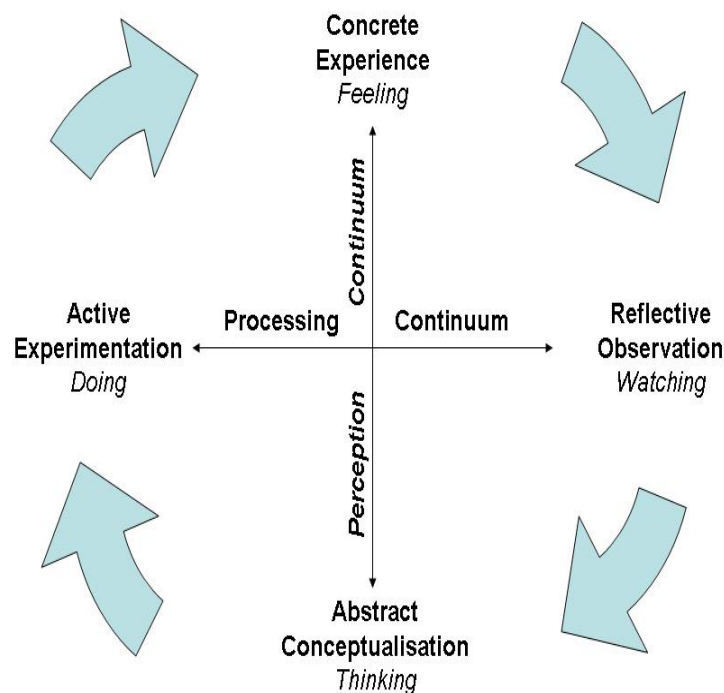
Leadership Trainings and Experiences

Is it possible to develop leadership, self-awareness, and/or good citizenship through trainings and/or community service? If so, what are the best models for doing so?

Experiential learning was first translated into an educational model by Kolb in 1984 (Kolb, 2014). He theorized that **experiential learning** has six principal characteristics:

- 1) Learning is best conceived as a process, not in terms of outcomes.
- 2) Learning is a continuous process grounded in experience.
- 3) Learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world (learning is by its very nature full of tension).
- 4) Learning is a holistic process of adaptation to the world.
- 5) Learning involves transactions between the person and the environment.
- 6) Learning is the process of creating knowledge that is the result of the transaction between social knowledge and personal knowledge.

From this, Kolb proposed that learning be conceived of as a cycle depicted in the figure below.

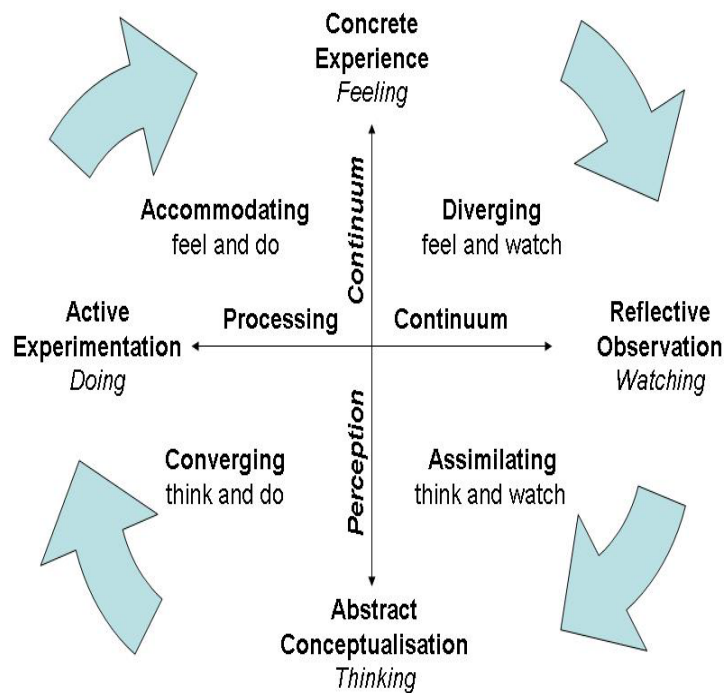


Kolb (2014) further defined these stages:

- Concrete experience (feeling): Learning from specific experiences and relating to people. Sensitive to other's feelings.
- Reflective observation (watching): Observing before making a judgment by viewing the environment from different perspectives. Looks for the meaning of things.
- Abstract conceptualization (thinking): Logical analysis of ideas and acting on intellectual understanding of a situation.
- Active experimentation (doing): Ability to get things done by influencing people and events through action. Includes risk-taking.

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Kolb (2014) then theorized that for each stage of the learning process, there is a unique learning style:



These learning styles are further defined as follows:

- **Diverging** (concrete, reflective) - Emphasizes the innovative and imaginative approach to doing things. Views concrete situations from many perspectives and adapts by observation rather than by action. Interested in people and tends to be feeling-oriented. Likes such activities as cooperative groups and brainstorming.
- **Assimilating** (abstract, reflective) - Pulls a number of different observations and thoughts into an integrated whole. Likes to reason inductively and create models and theories. Likes to design projects and experiments.
- **Converging** (abstract, active) - Emphasizes the practical application of ideas and solving problems. Likes decision-making, problem-solving, and the practical application of ideas. Prefers technical problems over interpersonal issues.
- **Accommodating** (concrete, active) - Uses trial and error rather than thought and reflection. Good at adapting to changing circumstances; solves problems in an intuitive, trial-and-error manner, such as discovery learning. Also tends to be at ease with people.

Kolb (2014) also theorized that there are **four conditions for experiential learning** to be successful:

- 1) The learner must be willing to be actively involved in the experience
- 2) The learner must be able to reflect on the experience
- 3) The learner must possess and use analytical skills to conceptualize the experience
- 4) The learner must possess decision-making and problem-solving skills in order to use the new ideas gained from the experience

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A study by Morgan and Streb (2002), surveyed over 200 high school students in the US about their experiences participating in a service learning program to see whether or not their participation had built citizenship in three areas: self-concept, political engagement, and attitudes towards out-groups (tolerance). They found: “When students have real responsibilities, challenging tasks, helped to plan the project, and made important decisions, involvement in service-learning projects had significant and substantive impacts on students’ increases in self-concept, political engagement, and attitudes toward out-groups.” This suggests that the more students are involved not only in conducting service activities, but also in planning them and making important decisions, the more valuable their service experiences will be.

A review of research on service learning and values education by Lovat and Clement (2016) found that:

Service learning has taken many forms but is characterized by a pedagogy that combines community service with reflection on action (Billig, 2000b; Furco, 2008). Five recent meta-analyses (Celio, Durlak, & Dymnicki, 2011; Conway, Amel, & Gerwien, 2009; Novak, Markey, & Allen, 2007; Warren, 2012; Yorio & Feifei, 2012) provide supporting evidence to long-held convictions that **service learning has beneficial effects for a diverse range of outcomes for students**. These effects include their personal, moral, social, and civic development, as well as their motivation for school-work evidenced by improvement in academic achievement. Service learning has been implemented across a broad spectrum of educational settings from kindergarten to a variety of adult educational settings. Regardless of the level, research has consistently revealed the above variety of beneficial outcomes for participants.

Lovat and Clement (2016) cite various studies that have shown that service-learning has a positive impact in the following domains:

- Attitudes toward social responsibilities and civic engagement
- Formation of social, personal, and civic responsibility
- Communicative competence and meaningful relationships with adults
- Growth in the kind of awareness that extends to empathic understanding, altruism, giving, and caring
- Breadth of students’ career aspirations and opportunities
- Future involvement in service activities and civic leadership
- **The maturation process from adolescence into adulthood**
- Breaking down cultural barriers and forming positive relationships with people beyond one’s usual social reach
- Reduction in health risks and/or at-risk behaviors
- Academic achievement and student motivation

Lovat and Clement (2016) also reviewed three recent meta-analyses which found the following:

More recent meta-analyses have added weight to observations that **service learning contributes to the development of sociality and civic responsibility in students** (Table 1). Three meta-analyses (Celio et al., 2011; Conway et al., 2009; Yorio & Feifei,

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2012), regardless of their different categorizations, identified the positive effects of service learning on social and civic engagement. For Conway et al., (2009), the strongest effect concerned **justice-oriented citizenship**. Celio et al., (2011) found that service learning produced beneficial effects in the **civic engagement and development of social skills among its participants**, and Yorio and Feifei (2012) reported that **service learning aided students' understanding of social issues**.

Table 1. Personal, Social, and Citizenship Outcomes of Service Learning (Compiled From Sources Included).

Source	Measures	Number of studies	<i>n</i>	Effect size
Conway, Amel, and Gerwien (2009)	Personal outcomes	58	6,103	Mean <i>d</i> = .21
	Moral development	4	93	Mean <i>d</i> = .34
	Social outcomes	37	3,271	Mean <i>d</i> = .28
	Beliefs, knowledge, or attitudes toward those served	15	656	Mean <i>d</i> = .44
	Citizenship outcomes	55	7,384	Mean <i>d</i> = .17
	Participatory citizenship	18	2,070	Mean <i>d</i> = .20
	Justice oriented citizenship	17	1,662	Mean <i>d</i> = .22
Celio, Durlak, and Dymnicki (2011)	Attitudes toward self	36	NS	ES = .28
	Civic engagement	28	NS	ES = .27
	Social skills	28	NS	ES = .30
Yorio and Feifei (2012)	Understanding social issues	34 ^a	4,165	Est. δ^b = .34

Note. NS = not supplied; ES = standardized mean difference.

^aFrom 30 publications.

^bRandom effects.

A further study by Lin (2015) looks at **three types of citizenship education** in American schools and suggests that certain approaches are more common at various levels of education:

This review critically evaluates three kinds of programmes related to citizenship education: (1) character education programmes, (2) political simulations and, (3) service-learning programmes. Students in the primary grades are mainly exposed to character education programmes, which emphasise the importance of developing ethical values. Political simulations are more common in high school civic courses, where students learn the importance of community-level civic engagement (e.g. volunteering). Service-learning programmes can help students in the secondary grades develop a broader range of civic engagement outcomes that pertain to the school and community-level context.

The design of specific models for service projects is less well-documented, especially because most of the literature surrounds service-learning courses that are provided as a part of an academic curriculum. In designing service-learning programs, **Jeffery Howard's best practices have become the most widely accepted standards** (Howard, 2001). However, most of these revolve around how to integrate learning into a school environment.

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There has also been relatively little scholarship on the effectiveness of leadership trainings towards youth leadership development. While there is a robust literature on the effectiveness of leadership trainings for improved organizational performance at the corporate level, this literature does not seem sufficiently relevant to youth programming which is more about changing attitudes, values, and competencies than to increasing profits or productivity. Roach et al. (1999) write:

Although a general feeling persists among practitioners that youth leadership training is a worthwhile endeavor, such programs often depend, at best, on implicit unexamined ideas about how young people develop leadership traits and what being a leader entails. At worst, youth leadership programs are described as an almost negative space into which practitioners project their own beliefs about what youth need, regardless of any clear evidence that specific leadership curricula result in transfer or synthesis of generalizable leadership behaviors. By working with untested concepts of youth leadership or approaches based on adult models, practitioners risk overlooking youth who may display leadership potential outside academic environments and alienate young people who may benefit from a deeper understanding of leadership.

While leadership training is almost always incorporated into youth leadership development programs, it is sometimes difficult to determine the effectiveness of trainings programs alone. One relatively older study by Hynes, Feldhusen, and Richardson (1978) evaluated a model specifically for youth leadership training based on three stages:

- Stage 1: Self-instructional materials are used to teach basic information about a leadership topic and brief
- Stage 2: Learners participate in group simulations designed to structure the application and synthesis of the basic leadership knowledge taught in Stage 1
- Stage 3: Learners complete individual projects designed to encourage personal involvement concerning what was learned from Stages 1 and 2

These three stages were presented in various leadership units according to the curriculum below.

Table 1
Overview of Instructional Materials

Unit	Stage 1	Stage 2	Stage 3
Introduction to leadership	Definitional overview	Mock class election	Personal goals
Planning and initiating	Developing agendas	Mock meeting	Personal agenda
Developing group goals	Goal clarification	Consensus task	LEAD program
Levels of leadership	Leadership chain	African enterprise	Ecology project
Skills of group leader	Leader skills	Problem solving	Creative leadership
Personal characteristics	Leader personality	Case studies	Situation leadership
Skills of a group member	Member skills	Role nominations	Role analysis
Developing cohesiveness	Cohesive groups	Cooperation game	Cooperation-competition
Effective committees	Committee organization	Committee project	Chairperson
Communication skills	Communication tips	Communication task	Taped communication
Group operations	Group policy	Hidden Agendas I	Hidden Agendas II
Outcomes of leadership	Leadership outcomes	Community project	Career planning

Note. The dependent measures for each stage were as follows: mastery test (Stage 1) teacher ratings and self-ratings (Stage 2), and the Consideration and Initiating Structure scales of the Ideal Leader Behavior Description Questionnaire (Stage 3).

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An evaluation was conducted to see how these stages would affect a learner's knowledge of leadership (Stage 1), leadership behavior (Stage 2), and leadership attitudes (Stage 3). The following results were obtained:

The results for Stage 1 showed conclusively that **students who studied the training materials knew more about leadership than students in the control group**... In contrast to the results for Stage 1, the results for Stage 2 did not support the hypothesis that leadership training would produce improved leadership behavior, and the results for Stage 3 did not show that leadership training changed leadership attitudes.

This suggests that trainings may have a limited role in changing actual leadership behaviours or attitudes, but may serve a function in increasing leadership skills or knowledge as a part of a holistic leadership development program.

A more recent review of literature on leadership education by Matthews (2004), found the following:

Because of [the] diversity of theories, underlying aspects of leadership that are probably very similar have been assigned different names by different researchers. However, it seems that limited consensus can be identified, suggesting which areas of leadership ability may be amenable to instruction and which areas may be less susceptible to such influence. Synthesizing existing research, **two youth leadership trait clusters that appear to be readily susceptible to instruction incorporate (a) interpersonal skills (Chan, 2000a) or persuasive ability (Smith et al., 1991) and (b) perceived self-efficacy (Chan), self-assuredness (Smith et al.), or self-knowledge (Roach et al., 1999)**. With somewhat more effort, knowledge base (Smith et al.) or verbal ability (at young ages; Perez et al., 1982) may be increased through instruction, although this combination is more diffuse when compared to the first two trait clusters.

Behaviors variously called motivation (Roach et al., 1999), conscientiousness (Chauvin & Karnes, 1983), or task orientation (Chan, 2000a) appear resistant to change through direct instruction, although Roach et al. suggested that development in this area may be more likely to occur as a consequence of sustained group effort toward a particular goal than through any specific curricular activities.

This research perhaps expands the findings of Hynes et al. (1978) that leadership can be trained beyond concepts of leadership knowledge, but still suggests that there are significant limitations to leadership training that would aspire to affect aspects of leadership behaviours or motivation.

Section 4: Applications to the Beacon Model

The preceding analysis of the Beacon Scholarship's Theory of Change, assumptions, and a review of the relevant literature bearing on six key assumptions, has not only helped to formalize the Beacon model, but also to begin to validate that model.

This section contains a review of the ways in which the preceding research validates the Beacon model, and the ways in which the research reveals opportunities for enhancing the Beacon model.

Validating the Model

The research detailed in Section 3 serves to validate the Beacon model in the following respects:

- Starting **leadership development from a young age** provides unique benefits by taking advantage of a “sensitive period” in a child’s formative growth stages and because becoming a leader is often a self-reinforcing process, where as one gains confidence in one’s efficacy as a leader one continues to take on more and more leadership opportunities (Murphy & Johnson, 2011).
 - “...it is possible that development occurs more readily in childhood and adolescence than in adulthood because one's behavior, personality, and skills are more malleable at a young age than in adulthood... We argue that early points in life represent a **sensitive period** for development. Unlike a crucial period (which is a period by which an ability must be developed or it cannot occur), sensitive periods reflect a time in life when skills are more easily and rapidly developed... Second, one's development to eventually become a leader is a self-reinforcing process. For example, as one gains greater leadership efficacy, or confidence in one's ability to lead a group, that individual is more likely to engage in leadership experiences, which will serve to increase the individual's leadership efficacy” (Murphy & Johnson, 2011).
- Access to **top educational institutions** is associated (correlated) with objective career success (Judge et al., 1995; Ng et al., 2005).
 - “...educational level, quality, prestige, and degree type all predicted financial success... For the human capital variables, executives who earned their degree in business or in law, who had a graduate degree, and who earned their degree from an Ivy League or high-quality university, and who were evaluated as high in job and career accomplishments, earned more money than other executives” (Judge et al., 1995).
- **Youth mentorship programs** have the potential to improve outcomes across behavioural, social, emotional, and academic domains (DuBois et al., 2002; Jekielek et al., 2002; DuBois et al., 2011).
 - “Findings of this investigation provide support for the effectiveness of youth mentoring programs” (DuBois et al., 2002).
 - “Findings support the effectiveness of mentoring for improving outcomes across behavioral, social, emotional, and academic domains of young people’s development” (DuBois et al., 2011).
- **Goal-setting** can have a positive effect on academic achievement (Zimmerman et al. 1992; Morisano et al., 2010), and there is evidence to suggest that setting goals can also enhance

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performance more generally, including in other areas of leadership development (Locke et al., 2002; Elliot et al., 2011; King & Watkins, 2012; Mansfield, 2012).

- "...students who completed the goal-setting exercise experienced three benefits in the postintervention semester: (a) increased GPA, (b) higher probability of maintaining a full course load, and (c) reductions in self-reported negative affect" (Morisano et al., 2010).
- Participation in **service learning** programs can help youth develop various aspects of leadership, including improved self-concept, political engagement, and attitudes toward out-groups (Morgan & Streb, 2002), as well as improvement in academic achievement, and engagement in future service activities (Lovat & Clement, 2016).
 - "When students have real responsibilities, challenging tasks, helped to plan the project, and made important decisions, involvement in service-learning projects had significant and substantive impacts on students' increases in self-concept, political engagement, and attitudes toward out-groups" (Morgan & Streb, 2002).
 - "Five recent meta-analyses provide supporting evidence to long-held convictions that service learning has beneficial effects for a diverse range of outcomes for students. These effects include their personal, moral, social, and civic development, as well as their motivation for school-work evidenced by improvement in academic achievement. Service learning has been implemented across a broad spectrum of educational settings from kindergarten to a variety of adult educational settings. Regardless of the level, research has consistently revealed the above variety of beneficial outcomes for participants" (Lovat & Clement, 2016).
- Youth **leadership trainings** can help enhance young people's knowledge of core leadership concepts (Hynes et al., 1978) as well as some leadership skills such as interpersonal skills and persuasive and attitudes such as self-efficacy and self-assuredness (Matthews, 2004).
 - "... students who studied the training materials knew more about leadership than students in the control group" (Hynes et al., 1978).
 - "...it seems that limited consensus can be identified, suggesting which areas of leadership ability may be amenable to instruction and which areas may be less susceptible to such influence. Synthesizing existing research, two youth leadership trait clusters that appear to be readily susceptible to instruction incorporate (a) interpersonal skills or persuasive ability and (b) perceived self-efficacy, self-assuredness, or self-knowledge. With somewhat more effort, knowledge base or verbal ability (at young ages) may be increased through instruction, although this combination is more diffuse when compared to the first two trait clusters" (Matthews, 2004).

Enhancing the Model

The preceding analysis points to potential enhancements of the Beacon model outlined below. These potential enhancements should be viewed as informed possibilities that have been substantiated by academic research in various contexts and settings. However, the following considerations should not necessarily be taken as recommendations for immediate implementation. The applicability and potential benefits of the various aspects highlighted below to the Beacon program should be carefully assessed by program administrators and, where appropriate, carefully implemented in ways that have been determined to be of value, given the particular context, aims, and resources of the Beacon Scholarship. These possibilities remain therefore essentially at the *design* as opposed to the *implementation* level.

Scholar Selection

- Consideration could be given to using an instrument designed to measure **leadership giftedness** as a part of the Beacon selection process, such as the Gifted Rating Scales (GRS) or the Gifted Evaluation Scale (GES).
- Consideration could be given to testing for **general cognitive ability** as a part of the Beacon selection process. IQ could be one part of the selection determination, through identification should not be based exclusively on IQ or test scores. The program could consider using the “IQ threshold” view suggested in Pfeiffer and Wechsler (2013), meaning one should have an IQ of at least 115-120 but not necessarily higher than that. Administering IQ tests in Africa would need to ensure the tests are valid across regions and cultures.
- Because goal-setting is a core component of the program and because achievement orientation and perceptions of self-efficacy has been shown to be related to setting and achieving goals, consideration could be given to selecting scholars with high **achievement orientation** and **self-efficacy**.
- Based on the emphasis placed on **creativity** in the leadership development process by Pfeiffer and Wechsler (2013), testing for creativity could be helpful in selecting students. Both creativity and **critical thinking** are linked with the idea of challenging the status quo, which can lead to societal change.
- As **personality traits** have also been identified to correlate with leadership (Judge et al., 2002), selection could include metrics for the five-factor model of personality, with those scoring higher in extraversion, conscientiousness, and openness to experience given increased chances of selection.

Programmatic Considerations

Common practices of university leadership programs identified by Zimmermann-Oster and Burkhardt (2000) that could potentially have greater emphasis in the Beacon program include:

- **Skill building:** The chance to learn and practice personal and social skills is frequently provided through a series of seminars and workshops. These skill-building sessions address topics such as conflict resolution, creative thinking, cultural competence, personal efficacy, identity with community, decision making, communication, networking, and a greater understanding of social realities.
 - Skills could potentially be emphasized during the leadership workshops. Employability skills such as CV-writing, interviewing, and applying for jobs could be stressed at the university level.

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- **Intercultural Issues:** Leadership programs are meant to heighten intercultural awareness, understanding, and acceptance. Issues such as gender, race, class, and ethnicity are explored on both an individual and collective level.
 - Scholars could be encouraged to think about the intercultural issues involved in their service projects and write a section of their report on how their experiences helped them to better understand others with an emphasis on factors such as: tribe, gender, religion, disability, age, socioeconomic disadvantage, etc.
- **Student Leadership of Programs:** Many programs involve the students directly in their own administrative activities. Participants learn leadership skills as they develop, promote, implement, and evaluate their programs. This enhances the application of workshops and course-related learning to real-life settings.
 - Older scholars could be given the opportunity to help plan or give talks during the annual leadership workshops.
- **Student Recognition:** Successful leadership development programs create certificates, awards, and activities that provide students with incentives for participation. Celebrating success is a central component of these programs.
 - Scholars could earn badges or various types of progress awards as a positive reinforcement at various stages of the Beacon process, including meeting termly goals, meeting annual goals, certificates for completing workshops, and awards for exemplary service projects. Awards would need to be done so as to not affect intrinsic motivation for achieving the goals.
- **Capstone Experiences:** Capstone events are often used to crystallize students' leadership experiences. These events can take many forms course work, project governance, mentoring students who are new to the program, or other experiential activities.
 - Scholars could be encouraged to do a report or other project at critical points such as the completion of primary school, the completion of secondary school, and the completion of university. Recognition events could be held to celebrate their successes.

Course of Study

It has been suggested by Gardner (1990) and Brungardt (1997), among others, that at the university level, a **liberal arts education** is the best preparation for leaders. Today, this position seems likely to be fiercely contested; however, it may be useful to think about specific curricular relationships to leadership development. There may be certain disciplines that provide critical social frameworks for thinking about improving the status quo in society. These may include: sociology, anthropology, political science, philosophy, cultural studies, global studies, Africana studies, gender studies, and a number of other humanities and social sciences disciplines. Although all or even most Beacon scholars are not likely to specialize in these areas, they might be encouraged to take some of their elective courses in areas that can help them develop a critical perspective on social development.

The Stages of Youth Development

Of the three dimensions of youth development identified by Useem and Karabel (1986)—that is, scholastic capital (the amount of knowledge acquired), social capital (personal contacts, network ties, inculcation of achievement motivation), and cultural capital (the value society places on symbols of prestige), the Beacon model is most closely aligned with the first dimension: scholastic capital, which

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has also been called the human capital theory. This theory suggests that a young person's career outcomes are mostly influenced by the ways in which their knowledge, skills, and abilities (KSAs) are developed and honed by formal education, leadership programs, and other experiences.

Leveraging the human capital theory helps the Beacon program to justify starting its intervention from a young age. Looking at the Impact level of the Beacon's Theory of Change, we see that the program is targeted towards developing a group of ethical change-makers to generate positive social change. The program's decision to start their intervention from a young age suggests that one of the primary barriers to positive social change is the lack of human capital with the requisite KSAs to generate that change, and therefore justifies why the program would need to start cultivating these KSAs from a young age. The program's decision to start their intervention from a young age therefore depends heavily on the human capital theory of youth development, and in particular the idea that the kinds of KSAs, attitudes, mindsets, and other factors that are lacking in the human capital market are things that must be inculcated in children in their formative years, or at least are better inculcated during what Murphy and Johnson (2011) call the early "sensitive period" in youth development.

Two interrelated questions should be asked, however, before proceeding solely with the human capital theory of development. First, is the lack of human capital the primary barrier to transformative leadership, and second, is the development of human capital from a young age the primary gap in the youth leadership development value chain. While empirical evidence has shown that KSAs are important to career success, the other two dimensions of youth development identified by Useem and Karabel (social capital and cultural capital) may also be critical to the success of young people to take on leadership opportunities after completing formal education (Seibert et al., 2001; Weiss, 1995). As the Beacon program grows and begins to have students graduate from university, it should begin to develop concrete **transitions strategies**, which will involve a close inspection of these complementary factors which determine a young person's career and leadership outlook after graduation, specifically *social capital*. The model that emerges from the research of Seibert et al. (2001) would be a good place to begin considerations about social capital, specifically with a view to addressing the weak ties theory and the structural holes theory to ensure that scholars have the access to information, access to resources, and career sponsorship they need to take on real-world leadership positions after graduation.

In addition, more research would need to be conducted on the youth leadership development value chain to see if the lack of high-quality education for potential leaders from young age is a systematic gap, or whether there are already players in that space that can fill the gap more effectively than the Beacon Scholarship. Putting scholars into existing educational institutions suggests that quality institutions do exist, yet there is a gap because these schools do not generally educate potential leaders. If the program is not going to feature educational access for the disadvantaged in its Theory of Change, it needs to be very clear on the gap in the value chain it is addressing by providing scholarships.

Mentorship

Based on the findings of DuBois et al. (2002), DuBois et al. (2011), Jekielek et al. (2002), and Herrera et al. (2000), the following aspects could be given attention within the Beacon's mentoring program:

- Formal policies that are written down and distributed to students, parents, and mentors can help set expectations for all parties involved
- Finding the right match between scholar and mentor is important
 - Recruitment of mentors whose backgrounds include prior experience and success in helping roles leads to improved outcomes
 - Identifying mentors who will remain matched to their mentees for a long period of time will lead to improved outcomes
 - Consider the fit between the educational or occupational backgrounds of mentors and the goals of the program
 - Mentors and youth should be paired based on similarity of interests
- Pre-match/orientation training for mentors and mentees can help improve the results of the mentoring relationship
- Post-match/ongoing training for mentors are important to maintain positive results
- Providing structured activities for mentors and students can help the relationship grow and develop in meaningful ways
- Setting expectations for frequency of contact is important
- Mechanisms for support and involvement of parents should be established from the beginning
- The mentoring program should have a monitoring and evaluation mechanism to keep track of progress and take any learnings into account when feeding back in to program implementation
- Because mentoring relationships are most effective when they are seen as perceived by the student to be a high-quality relationship, mentors and students could provide evaluations of how the mentoring sessions are going so that the sessions can be improved where possible and, potentially, a new mentor can be assigned if it becomes evident that the match is not working.

Two comprehensive guides that may be consulted in the further development and formalization of the Beacon mentorship program are:

- **“Elements of Effective Practice for Mentoring”** published by MENTOR
- **“Foundations of Successful Youth Mentoring: Effective Strategies for Providing Quality Youth Mentoring in Schools and Communities”** published by The Hamilton Fish Institute on School and Community Violence & The National Mentoring Center at Northwest Regional Educational Laboratory.

Goal-setting

- The research done by Elliot et al. (1994) and Elliot and McGregor (2001), which has now become the standard of practice in education, suggest that scholars should be encouraged to set primarily **mastery-approach achievement goals**, as they are associated with higher levels of self-efficacy and maintain intrinsic motivation for thinking about *why* it is important to achieve a goal.

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- Mastery-approach goals relate each goal with the student's own interest and focus on one's own personal learning and development as opposed to comparing oneself to others. For example, setting a goal to learn a language because the student is interested in foreign peoples and cultures and would like to be able to speak with others and read literature in a foreign language, as opposed to because she wants to impress her peers, teachers, or parents, or because the student wants to get good grades. Mastery-approach goals therefore involve the *intention* behind the goal, which affects how the goal is determined and evaluated.
- The use of **mixed goals** which include future goals, achievement goals, social goals, and personal well-being goals, and varying the type of goals based on the individual goal-orientation of each scholar may help scholars make the most out of goal-setting (Mansfield, 2012).
- Scholars should also strike a balance between setting **proximal and distal goals**. Research by Latham and Seijts (1999) suggests that setting distal goals to achieve new, complex tasks are not effective unless broken down into a series of proximal goals. Locke et al., (2002) further suggests that a **feedback loop** is required in order for individuals to know how they are progressing on the goals they had set. Striking this balance between setting proximal and distal goals is not necessarily easy, and should be handled carefully with each individual scholar. However, in general, the more complex and new the task is, the more proximal goals should be set, while also keeping an eye on the overarching distal goal which allows scholars to remind themselves of their overall motivation for wanting to achieve each proximal goal.
- The **Beacon Target Sheet** may benefit from a revision based on this research, and mentors and scholars may require training on how to set the goals that will be the most beneficial to their individual growth.

Leadership Trainings

Trainings could be used to develop leadership skills in areas that have proven amenable to instruction, including interpersonal skills, persuasive ability, perceived self-efficacy, self-assuredness, and self-knowledge (Matthews, 2004).

Monitoring, Evaluation, and Learning

As the Beacon program continues to grow and develop, and especially as it attempts to extend its donor base, the need to formalize the program and its components will become increasingly important. In particular, the program will need to develop a comprehensive Monitoring, Evaluation, and Learning (MEL) strategy. This will include developing specific **indicators** for each component of the Theory of Change, and processes for data collection and reporting, including the identification and/or development of relevant **data tools/instruments**.

This process should go hand-in-hand with the **formalization** of the various programmatic components of the Beacon Scholarship, including the development or refinement of existing materials for: a scholarship award contract with conditions for renewal, a mentoring policy manual, a leadership training curriculum, and guidelines and/or an evaluation rubric for scholar service projects.

This Report is CONFIDENTIAL to the Beacon Equity Trust and is not to be shared without the express written consent of the Trustees of The Beacon Equity Trust.

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