

Developing Leadership Capacity in College Students: Findings from a National Study

John P. Dugan and Susan R. Komives
Co-Principal Investigators

The Multi-Institutional Study for Leadership
A Project of National Clearinghouse for Leadership Programs

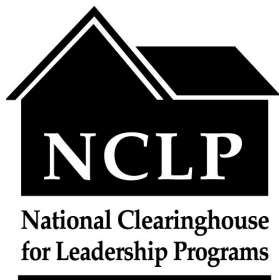
SPONSORED BY

National Clearinghouse for Leadership Programs
C. Charles Jackson Foundation
University of Maryland

American College Personnel Association Educational Leadership Foundation
National Association of Student Personnel Administrators Foundation



MULTI-INSTITUTIONAL
STUDY OF LEADERSHIP



National Clearinghouse for Leadership Programs
0110 Stamp Student Union
University of Maryland
College Park, MD 20742
www.nclp.umd.edu

Please cite as: Dugan, J. P., & Komives, S. R. (2007). *Developing leadership capacity in college students: Findings from a national study*. A Report from the Multi-Institutional Study of Leadership. College Park, MD: National Clearinghouse for Leadership Programs.

This publication is available in PDF format from www.nclp.umd.edu
To order additional copies of this publication or to find out about other NCLP publications, visit www.nclp.umd.edu or call 301.405.0799

Developing Leadership Capacity in College Students: Findings from a National Study

John P. Dugan and Susan R. Komives
Co-Principal Investigators

The Multi-Institutional Study for Leadership
A Project of National Clearinghouse for Leadership Programs

SPONSORED BY
National Clearinghouse for Leadership Programs
C. Charles Jackson Foundation
University of Maryland
American College Personnel Association Educational Leadership Foundation
National Association of Student Personnel Administrators Foundation

Acknowledgements

A project of this size happens only with the collaboration and energy from many partners. We acknowledge and thank the following partners for their role in this project.

- The Multi-Institutional Study of Leadership research team was a phenomenal group! This academic-student affairs partnership included full-time student affairs professionals, college student personnel graduate students, and faculty. The original team members were Kristan Cilente, Kirsten Freeman Fox, Sean Gehrke, Paige Haber, Renardo Hall, Katie Hershey, Ramsey Jabaji, Karol Martinez, Marlena Martinez, Jim Neumeister, Julie Owen, Jeremy Page, Tom Segar, Craig Slack, Nathan Slife, Jennifer Smist, and Wendy Wagner.
- The National Clearinghouse for Leadership Programs (NCLP) develops critical student leadership resources for leadership educators. NCLP's sponsorship of this project was central to its success and will host future iterations of the study.
- The University of Maryland is devoted to student leadership development. The Student Affairs division, specifically the Adele H. Stamp Student Union, Center for Campus Life professional staff, were foundational to project support.
- Special thanks to Dr. Tracy Tyree whose 1998 University of Maryland dissertation developed the Socially Responsible Leadership Scale used in this study. Her dissertation received the Melvane D. Hardee Dissertation of the Year Award from the National Association of Student Personnel Administrators.
- Thanks to Dr. Karen Kurotsuchi Inkelas for her generous sharing of key scales from the National Study of Living-Learning Programs.
- The support of key granting foundations made all the difference in supporting the original study specifically the American College Personnel Association's Educational Leadership Foundation, National Association of Student Personnel Administrators' Foundation, and the C. Charles Jackson Foundation.
- We learned a great deal from Scott Crawford and Brian Hempton from Survey Sciences Group who skillfully managed the MSL web administration.
- A special thanks to the many representatives from our participating institutions who dedicated time and energy to shepherding the project on their home campuses.

Finally, kudos to the members of the original ensemble who created the Social Change Model of Leadership Development that has transformed college student leadership development practices and provided the theoretical frame for the study – Alexander Astin, Helen Astin, KC Boatsman, Marguerite Bonus-Hammarth, Tony Chambers, Leonard Goldberg, Cynthia Johnson, Susan Komives, Emily Langdon, Carole Leland, Nance Lucas, Raechele Pope, Dennis Roberts, and Kathy Shellogg.

Preface

This report of the Multi-Institutional Study of Leadership (MSL) reflects key findings from an exciting multi-site, multi-year project. This report includes findings from over 50,000 students from 52 campuses who participated in this study in the Spring of 2006.

Findings from this study have been presented at various professional conferences since 2006. Presentations were made for the following national associations:

- American College Personnel Association,
- Association for the Study of Higher Education,
- Association of Leadership Educators,
- International Leadership Association,
- Leadership Educators Institute,
- National Association for Campus Activities,
- National Leadership Symposium, and
- National Association of Student Personnel Administrators.

Results are also documented in multiple issues of the NCLP's publication *Concepts & Connections*. These issues are available in PDF format via the NCLP web site (www.nclp.umd.edu). It is encouraging to see how these findings have aided leadership program design practices both at participating and non-participating institutions.

Readers are encouraged to look for a second MSL report about participating campuses and how the elements of their leadership programs (e.g., mission, staffing, theoretical frames) contribute to desired leadership outcomes. MSL team member, Julie Owen, is project director for that study—the MSL-Institutional Survey. Additionally, the MSL project will launch a second round of data collection in the near future. Information regarding how to participate in future studies can be found on the NCLP web site.

John P. Dugan
Loyola University Chicago

Susan R. Komives
University of Maryland

Table of Contents

Introduction	
Setting the Context	5
Focusing on Four Trends	6
The Challenge of College Student Leadership	8
The Multi-Institutional Study of Leadership Design	
Conceptual Model: College Impact Model (I-E-O)	9
Theoretical Model: Social Change Model of Leadership Development	9
Select Findings in the Assessment of Leadership Outcomes	
Leadership Outcomes	12
Change Over Time	12
Demographic and Pre-College Influences Matter	13
College Experiences Matter	14
Ten Recommendations to Enrich Campus Leadership Programs	17
Additional Resources	20
Participating Colleges and Universities	21
References	22
Exhibits	
Exhibit 1. The Social Change Model of Leadership Development	9
Exhibit 2. The Critical Values of the Social Change Model	10
Exhibit 3. Leadership Outcomes: Social Change Model of Leadership Values	12
Exhibit 4. Leadership Outcomes: Leadership Efficacy	12
Exhibit 5. Seniors Change Over Time on Social Change Model Values	12
Exhibit 6. Seniors Change Over Time on Leadership Efficacy	13
Exhibit 7. Social Change Model of Leadership Development Values by Gender	14
Exhibit 8. Leadership Efficacy by Gender	14
Exhibit 9. Involvement in College Groups	15
Exhibit 10. Participation in Community Service and Social Change Model Outcomes	15
Exhibit 11. Positional Leadership Roles in College	16

Developing Leadership Capacity in College Students:

Findings from a National Study

Setting the Context

Since the early 1990s, the increasing attention on college student leadership development has been exciting! Many trends converged in the last 15 years to support a renewed focus on developing critical leadership outcomes in students, and this movement has only gained momentum in recent years as the emphasis on accountability for learning has increased. Some of these trends include:

- the paradigm shift in leadership theory and philosophy to relational, reciprocal models (Burns, 1978; Komives, Lucas, & McMahon, 1998, 2007; Northouse, 2007; Rost, 1991);
- the growing emphasis in business and industry on teams and collaborative practices (Lipman-Blumen, 1996; Pearce & Conger, 2003);
- the college learning and developmental outcomes movement (Association of American Colleges & Universities, 2007; National Association of Student Personnel Administrators & American College Personnel Association [NASPA & ACPA], 2004; U.S. Department of Education, 2006);
- the volunteerism, service learning, and civic engagement movement (Colby, Ehrlich, Beaumont, & Stephens, 2003; Jacoby & Associates, 1996);
- the empowerment of social identity groups and their distinct leadership needs (Bordas, 2007; Hoppe, 1998; Kezar, 2000);
- the development of new leadership models for college students (Higher Education Research Institute [HERI], 1996; Komives, Longenecker, Owen, Mainella, & Osteen, 2006; Komives et al., 1998; Posner, 2004; Posner & Brodsky, 1992);
- the professionalization of the student leadership educator role (Komives, Dugan, Owen, Slack, & Wagner, 2006); and
- the emergence of new leadership associations, conferences, and resources for leadership educators (e.g., the International Leadership Association (ILA), the National Clearinghouse for Leadership Programs (NCLP), the Association of Leadership Educators (ALE), the Leadership Educator's Institute, the National Leadership Symposium, the *Journal of Leadership and Organizational Studies*, and more).

All of these trends converge in the form of an institutional, and societal, mandate that calls for institutions of higher education to purposefully develop socially responsible leaders. There is a growing recognition that this task is the responsibility of all members of the campus community, not just those teaching leadership courses or those working with co-curricular leadership programs.

Focusing on Four Trends

Of these trends, four in particular have led to the formalization of leadership programs in higher education.

Expansion of Curricular and Co-curricular Leadership Programs

Campus leadership practices expanded exponentially in the 1990s to include the first undergraduate leadership major at the Jepson School of Leadership Studies at the University of Richmond and a plethora of leadership certificate programs and academic minors at other institutions. Leadership educators also began offering a wide array of co-curricular leadership programs open to interested students such as emerging leaders. These programs often complemented existing positional leader training programs. Estimates indicated approximately 700 leadership programs existed on college campuses during this time period (Schwartz, Axtman, & Freeman, 1998). More recently, that number is thought to have risen to over 1,000 programs nationally (Scott, 2004).

Focused Theoretical and Conceptual Leadership Models

As practice began to reflect evolving theoretical conceptualizations of leadership, researchers and theorists posited leadership models and theories that specifically targeted the developmental needs of college students. These models included the Relational Leadership Model (Komives et al., 1998, 2007) and the Social Change Model of Leadership Development (HERI, 1996) along with student adaptations of the Servant Leadership Model (Greenleaf, 1977) and the Leadership Challenge (Kouzes & Posner, 2002).

Professionalization in Leadership Education

Another influential trend involves the professionalization of the leadership educator role and the emergence of national organizations to support individuals in these positions. As practices began to expand, more institutions hired faculty, student affairs educators, and other administrative staff specifically to support programs and work directly with students in the area of leadership development. Organizations such as the NCLP, ALE, and the James MacGregor Burns Academy of Leadership as well as targeted conferences such as the University of Richmond's Leadership Educators Conference and the NCLP's National Leadership Symposium offered support and opportunities to engage in discussion about how to evolve student leadership practices. A number of books targeted college students and leadership studies (see Northouse, 2007 or Hughes, Ginnett, & Curphy, 1993) and the Council for the Advancement of Standards in Higher Education (CAS) provided further validation of the important role of leadership education in college with the publication of professional standards for leadership programs (CAS, 2003). ILA is currently reviewing curricular leadership standards.

Leadership Research

Finally, the assessment of leadership outcomes followed the proliferation of programs and integration of theoretical influences. Building on a growing body of generic leadership research, scholars became interested in student leadership outcomes. *Leadership in the Making* (Zimmerman-Oster & Burkhardt, 1999) established the important role of campus leadership programs in fostering student leadership. Kouzes and Posner's Leadership Practices Inventory (Posner, 2004) was adapted for the college student context. However, student leadership was largely not studied from a theoretical frame. Tracy Tyree's (1998) Socially Responsible Leadership Scale was developed to address the need for a theoretically-based instrument to measure college students' leadership development. Designed to measure the values of the Social Change Model of Leadership Development, the instrument largely went unused in broad research examining the influence of higher education on college student leadership.

Where are we now?

The coalescence of trends in the last 15 years has greatly shaped the nature of contemporary leadership education programs providing both a justification for their need and a loose structure from which to evolve. However, as yet, little research has integrated theoretical understandings of the college student leadership phenomena to comprehensively explore how the higher education environment shapes the developmental process. A great need exists to understand better the unique nature of college student leadership development as well as how the collegiate experience contributes to that process.

The Challenge of Contemporary College Student Leadership

Psychologist Patricia King (1997) asserted, “Helping students develop the integrity and strength of character that prepare them for leadership may be one of the most challenging and important goals of higher education” (p. 87).

“Helping students develop the integrity and strength of character that prepare them for leadership may be one of the most challenging and important goals of higher education” (King, 1997, p. 87). Increasingly, higher education is being turned to as a source for potential change given its significant role in developing leadership capacity among today’s youth (Astin, 1993; Astin & Astin, 2000; Morse, 1989, 2004).

The education and development of students as leaders has long served as a central purpose for institutions of higher education as evidenced in mission statements and the increased presence of both curricular and co-curricular leadership development programs (Astin & Astin, 2000; Zimmerman-Oster & Burkhardt, 1999). Additionally, research indicates that students can and do increase their leadership skills during the college years (Pascarella & Terenzini, 2005) and that increases in leadership development in turn enhance the self-efficacy, civic engagement, character development, academic performance, and personal development of students (Benson & Saito, 2001; Fertman & Van Linden, 1999; Komives, Owen, Longersbeam, Mainella, & Osteen, 2005; Scales & Leffort, 1999; Sipe, Ma, & Gambone, 1998; Van Linden & Fertman, 1998). This would suggest that the purposeful development of these capacities might help to diminish what numerous authors (Ehrlich, 1999; Korten, 1998; Lappe & DuBois, 1994) have identified as a lack of leadership capacity and emerging leadership crisis in American society.

This evidence and the increasing importance of outcomes assessment in higher education situate leadership as a critical college outcome (NASPA & ACPA, 2004; U.S. Department of Education, 2006). However, researchers’ use of general measures of leadership development rather than those tied to specific models has contributed to a scarcity of empirical studies grounded in the theory that is supposed to inform purposeful practice (Posner, 2004). This has resulted in three overarching problems:

- a significant gap between theory and practice,
- an unclear picture of the leadership development needs of college students, and
- uncertainty regarding the influence of the college environment on leadership development outcomes.

If higher education institutions could begin to address these issues, the ability to enhance leadership development and the preparation of civically engaged citizens would increase dramatically.

The purpose of the MSL is to examine these exact questions as a means to increase the capacity of both leadership educators and institutions in developing the critical leadership skills in students that are so needed by society.

The Multi-Institutional Study Design

See NCLP's *Concepts & Connections 15 (1)* for a more detailed description of the design of the study including sampling strategy, pilot studies, procedures, and analytic techniques used in the MSL (www.nclp.umd.edu).

Conceptual Model: The IEO Model

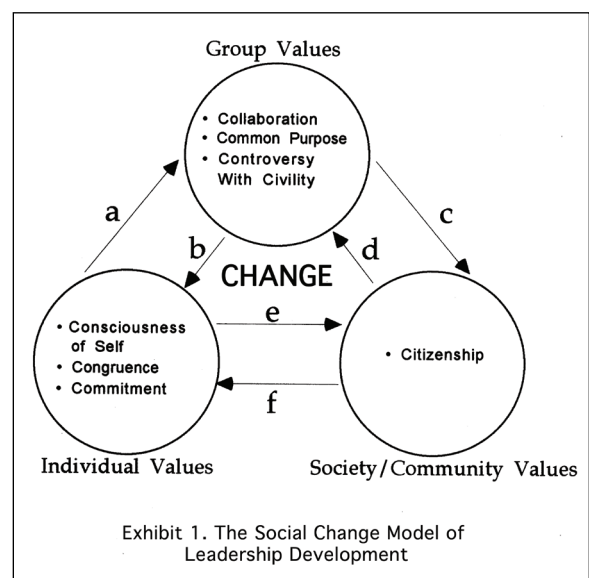
The MSL research team was interested in aspects of students' experiences in college that contributed to leadership outcomes. The conceptual model for the study was an adapted version of Astin's (1991) College Impact Model. The Inputs (I), Environments (E), and Outcomes (O) model controlled for what a student brings to campus (i.e., demographics, pre-college experiences, pre-college attitudes) and examined what aspects of the environment (i.e., distal aspects such as the type of institution as well as proximal aspects such as amount of involvement, leadership training, and discussions of socio-cultural issues) predicted various leadership outcomes. The study employed an adapted IEO format, given the research was cross-sectional with data collected at only one point, by using retrospective questions to capture data for pre-college variables.

Theoretical Model: The Social Change Model of Leadership Development

The Social Change Model of Leadership Development (HERI, 1996) provided the theoretical frame for this study as it was created specifically for college students and was consistent with the emerging leadership paradigm. This perspective, also referred to as the post-industrial paradigm, suggested that leadership is a relational, transformative, process-oriented, learned, and change-directed phenomenon (Rost, 1991). Likewise, the central principles associated with the Social Change Model (SCM) situated leadership as a purposeful, collaborative, values-based process that results in positive social change.

In the SCM, social responsibility and change for the common good were achieved through the development of eight core values targeted at enhancing students' levels of self-awareness and ability to work with

others. The values included: *Consciousness of Self, Congruence, Commitment, Common Purpose, Collaboration, Controversy with Civility, Citizenship, and Change*. These values functioned at the individual (i.e., *Consciousness of Self, Congruence, Commitment*), group (i.e., *Common Purpose, Collaboration, and Controversy with Civility*), and societal (i.e., *Citizenship*) levels.



The dynamic interaction across levels and between values (illustrated by the letters on each arrow) contributes to social change for the common good, the eighth critical value associated with this model (HERI, 1996). The SCM was selected as a theoretical frame for the MSL because of its broad applicability and identification as one of the most well known student leadership models (Kezar, Carducci, & Contreras-McGavin, 2006). A guidebook containing a much more comprehensive overview of the model and its core tenets is available through the NCLP; a student textbook based on the SCM will be available Summer 2008 from NCLP.

Exhibit 2. The Seven C's: The Critical Values of the Social Change Model

The Seven C's: The Critical Values of the Social Change Model	
INDIVIDUAL VALUES	
Consciousness of Self	Being self-aware of the beliefs, values, attitudes, and emotions that motivate you to take action. Being mindful, or aware of your current emotional state, behavior, and perceptual lenses.
Congruence	Acting in ways that are consistent with your values and beliefs. Thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty toward others.
Commitment	Having significant investment in an idea or person, both in terms of intensity and duration. Having the energy to serve the group and its goals. Commitment originates from within, but others can create an environment that supports an individual's passions.
GROUP VALUES	
Collaboration	Working with others in a common effort, sharing responsibility, authority, and accountability. Multiplying group effectiveness by capitalizing on various perspectives and talents, and on the power of diversity to generate creative solutions and actions.
Common Purpose	Having shared aims and values. Involving others in building a group's vision and purpose.
Controversy with Civility	Recognizing two fundamental realities of any creative effort: 1) that differences in viewpoint are inevitable, and 2) that such differences must be aired openly but with civility.
COMMUNITY VALUES	
Citizenship	Believing in a process whereby an individual and/or a group become responsibly connected to the community and to society through some activity. Recognizing that members of communities are not independent, but interdependent. Recognizing individuals and groups have responsibility for the welfare of others.
<i>Since it is a key assumption of the SCM that the ultimate goal of leadership is positive social change, "change" is considered to be at the "hub" of the model</i>	
Change	Believing in the importance of making a better world and a better society for oneself and others. Believing that individuals, groups and communities have the ability to work together to make that change.
<i>(Adapted from Higher Education Research Institute, 1996, p. 21; Tyree, 1998, p. 176; and Astin, 1996, p. 6-7)</i>	

From Wagner, W. (2006). The social change model of leadership: A brief overview. *Concepts & Connections*, 15 (1), 9. Used with permission from the National Clearinghouse for Leadership Programs.

The ensemble described the Social Change Model approach to leadership as a purposeful, collaborative, values-based process that results in positive social change.

Campus and Student Samples

From over 150 institutions that indicated an interest in the study, 55 campuses were chosen for participation based on characteristics (e.g., Carnegie type, enrollment size, institutional control) purposefully selected to differentiate the sample and best represent the diverse higher education landscape in the United States. Of the 52 that completed the study (see Appendix A), those with enrollments of 4,000 or less used their total undergraduate populations while larger campuses employed a simple random sample. Campuses over 4,000 could also select 500 students for a comparison sample. Of approximately 165,000 students in the sample, over 63,000 completed the survey resulting in a return rate of 37%.

The MSL Instrument

The Socially Responsible Leadership Scale (SRLS) (Tyree, 1998) comprised the core of the MSL instrument. This 103-item instrument was reduced prior to pilot testing as well as after pilot testing to a 68-item version (Dugan, 2006c). Readers should note that the scale of *Change* in the SRLS measures transition or comfort with change, not social change as described in the actual model. Response options on these self-report scales ranged from (1) strongly disagree to (5) strongly agree. Reliability for the scales maintained consistency with results from other studies (Dugan, 2006a, 2006b; Rubin, 2000) and ranged from Chronbach alphas of .83 on *Commitment* to .76 on *Controversy with Civility*.

A scale for *Leadership Efficacy* drawing on the theoretical work of Bandura's (1997) Social Learning Theory was created by the MSL team and is used in many of the analyses detailed in this report. The items asked students to assess their confidence in their ability to engage in select leadership behaviors such as "working with a team on a group project" or "leading others."

Response options ranged from (1) not at all confident to (4) very confident. The Chronbach alpha level reported for this scale was .88.

The instrument also contained 14 demographic variables and 23 pre-college variables designed to capture student characteristics prior to college. This was supplemented with numerous variables designed to measure ways in which the student engaged with the college environment (e.g., mentoring, involvement, and academic experiences). Finally, additional outcome variables were added that related to leadership development including: cognitive development, appreciation of diversity, and leadership identity development. Thanks to the National Study of Living Learning Programs for use of several of their scales (Inkelas & Associates, 2004).

The Final Sample

The final sample used in much of the analyses detailed in this report was comprised of 50,378 students and did not include any responses collected from institutions' comparative samples. MSL data over-represented full-time students (94%, $n = 47,435$). Almost one-fourth of participants (24%, $n = 12,300$), indicated that they were transfer students and 15% ($n = 7,181$) indicated they were first-generation college students. Class standing was evenly distributed across all four years and the mean age of respondents was 21 years old ($SD = 4.78$). Females (62%, $n = 30,960$) were slightly over-represented compared to males (38%, $n = 19,183$), and 28% of participants identified as students of color ($n = 14,262$). Finally, 3% of participants identified as lesbian, gay, or bisexual ($n = 1,700$), and a total of 43 participants identified as transgendered. A non-respondent analysis was conducted at the institutional level to determine and account for biases that may be present in the data.

Select Findings in the Assessment of Leadership Outcomes

1. Leadership Outcomes

Students reported high scores on the value of *Commitment* ($m = 4.24$) and low scores on the value of *Change* ($m = 3.75$). An omnibus measure of socially responsible leadership (*Omnibus SRLS*) that accounts for all eight values of the SCM revealed a mean score of 3.96 ($SD = .38$). Students generally had confidence in their *Leadership Efficacy* ($m = 3.13$ on a 4-point scale). These general descriptive statistics painted an interesting picture of the current state of leadership development of college students. Participants reported neutrality approaching agreement (i.e., hovered around a score of four which is the equivalent of agreement) across the majority of the SCM values. This seemed to suggest that there was significant room to work with students on the development of critical leadership competencies.

2. Change over Time

Another way to examine this data was by looking at perceptions of student change over time. Paired samples t-tests determined if student scores changed between pre-college perceptions and perceptions during their senior year. Data for this analysis included

Exhibit 3. Leadership Outcomes: Social Change Model of Leadership Values

(5-point scale)	Mean	SD
Consciousness of Self	3.95	.51
Congruence	4.18	.46
Commitment	4.24	.47
Collaboration	3.98	.45
Common Purpose	4.04	.42
Controversy with Civility	3.84	.42
Citizenship	3.84	.46
Change	3.75	.47
Omnibus SRLS	3.96	.38

Exhibit 4. Leadership Outcome: Leadership Efficacy

(4-point scale)	Mean	SD
Leadership Efficacy	3.13	.63

Exhibit 5. Seniors Change Over Time on Social Change Model Values

Outcome ^a	Pre-College Perceived Score	Senior Year Score ^b	Effect Size ^c	Effect Size Interpretation
Consciousness of Self	3.48	4.01	.20	large
Congruence	4.01	4.22	.07	moderate
Commitment	4.24	4.28	.00	trivial
Collaboration	3.89	4.01	.03	small
Common Purpose	3.93	4.08	.05	small
Controversy with Civility	3.94	3.88	.01	trivial
Citizenship	3.70	3.88	.05	small
Change	3.55	3.80	.08	moderate
Omnibus SRLS	3.84	4.00	.10	moderate

^a 5-point scales

^b All significant at $p < .001$

^c Effect size is reported as eta squared.

Exhibit 6. Seniors Change Over Time on Leadership Efficacy

Outcome ^a	Pre-College Perceived Score	Senior Year Score ^b	Effect Size ^c	Effect Size Interpretation
Leadership Efficacy	2.84	3.24	.24	large

^a 4-point scales

^b All significant at $p < .001$

^c Effect size is reported as eta squared.

14,189 cases in which the participant identified as a senior. Scores on the *Omnibus SRLS* measure indicated that students significantly increased from a 3.84 pre-college score to a 4.0 score in the final semester of their senior year. The effect size was moderate to large. Results also indicated specific meaningful and positive changes in students' perceptions of leadership across the following SCM values: *Consciousness of Self*, *Congruence*, *Collaboration*, *Common Purpose*, *Citizenship*, and *Change*. Meaningful positive change also occurred

in terms of students' *Leadership Efficacy*. The greatest magnitudes of change were on the outcomes of *Consciousness of Self* and *Leadership Efficacy*. It is interesting to note that although students self-report their highest score on *Commitment*, it is one of the least changed variables during the college years. What was not known from this analysis was to what degree changes that did occur were a result of the college environment versus other influences.

DEMOGRAPHIC AND PRE-COLLEGE INFLUENCES MATTER

Pre-college experiences and pre-college measures of each of the social change values predicted most of the variance in college leadership outcomes.

What students came to college with largely explained how they developed in college. Eighteen or more years of experience provided a strong foundational grounding on which college experiences built.

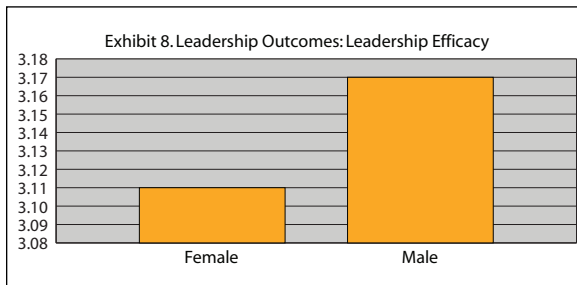
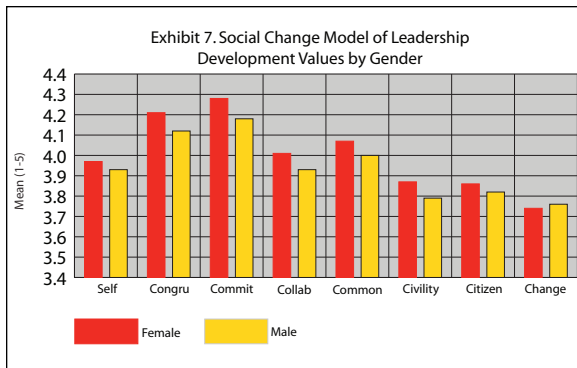
3. Pre-College Experience Matters

Students' pre-college experiences and pre-college measures of each of the social change values predicted most of the variance in college leadership outcomes. Demographics explained only 1% to 2% of college outcomes. Pre-college factors (e.g., leadership training experiences, involvement in high school student groups, volunteer service, varsity sports, and positional leadership roles) explained from 4% (*Congruence*) to 13% (*Leadership Efficacy*). The quasi-pretest item for the pre-college assessment of each of the leadership out-

comes predicted the most ranging from 6% (*Common Purpose*, *Controversy with Civility*) to 15% (*Commitment*, *Change*, *Leadership Efficacy*).

4. Leadership Shows Moderate Gender Differences

Women reported more skill with socially responsible leadership, scoring higher than men on all SCM scales except for *Change*. However, these differences were modest with meaningful, albeit small, effect sizes across the values of *Congruence*, *Commitment*, *Collaboration*, *Common Purpose*, and *Controversy with Civility*. Men reported higher *Leadership Efficacy*. In other words, women's leadership competence was higher than men's, but men reported more self-confidence in their leadership abilities than women.



5. Racial and Ethnic Groups Differ

Multivariate Analysis of Variance (MANOVA) determined whether there were significant mean differences across scales based on race. Significant differences

existed on the scales of *Consciousness of Self*, *Congruence*, *Commitment*, *Controversy with Civility*, *Citizenship*, and *Change*. Follow-up analyses revealed that African American students often anchored the top scores across the SCM values and Asian American students often anchored the lowest scores. The magnitude of difference was strongest (i.e., a moderate effect size) between Asian American and African American students on the values of *Consciousness of Self* and *Change*. Identification as an Asian American retained its influence on scores even after controlling for a variety of demographic, pre-college, and environmental variables.

6. Openness to Change is Greater for Marginalized Groups of Students

Gay/lesbian/bisexual students, first generation college students, African American, Native American, Latino, and multiracial students, and students enrolled in community colleges all scored higher on the SCM value of *Change* than their dominant-group peers. These differences were significant, although with small effect sizes. Students from these groups appeared to demonstrate greater aptitude and comfort with managing and navigating change. Interestingly, there was an opposite finding as it relates to gender. Men were more open to change than were women, which may be explained by socialization influences.

COLLEGE EXPERIENCES MATTER

Experiences in college accounted for 7% to 14% of the overall variance in leadership outcomes.

The findings that follow demonstrated the influence of the collegiate environment on college student leadership development. These are particularly relevant to higher education leadership educators as sources for direct intervention and influence. Experiences in college accounted for 7%–14% of the overall variance in leadership outcomes for students in this sample and exerted the greatest influence on the SCM values of *Citizenship* (14%), *Controversy with Civility* (11%), and *Common Purpose* (10%). This would suggest purposeful

interventions can make a difference in the developmental process of college students.

7. Discussions about Socio-Cultural Issues Matter a Great Deal

A major finding of the study was that discussions about socio-cultural issues matter a great deal. Conversations on socio-cultural issues included the frequency with which students talked about different lifestyles, multi-

Engaging in discussions about socio-cultural issues was the single strongest environmental predictor of growth across the Social Change Model values as well as self-efficacy for leadership.

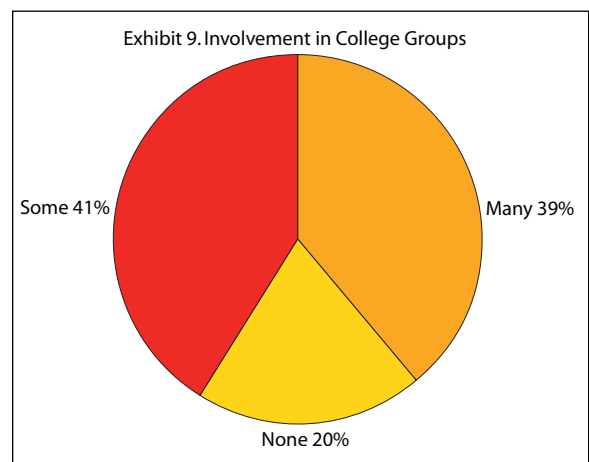
culturalism and diversity, major social issues such as peace, human rights, and justice and had discussions with students whose political opinions or personal values were very different from their own. Engaging in discussions about socio-cultural issues explained from 3% to 9% of the variance in leadership outcomes and was the single strongest environmental predictor of growth across the SCM values as well as *Leadership Efficacy*.

8. Mentoring Matters

About 70% of students reported being mentored by peers or by faculty. Approximately 50% reported mentoring from student affairs professionals or an employer, and about 33% reported being mentored by a member of the community. Faculty mentoring was one of the top three predictors across all SCM values except *Citizenship* and *Collaboration*. Employer mentoring was among the strongest predictors of *Leadership Efficacy*.

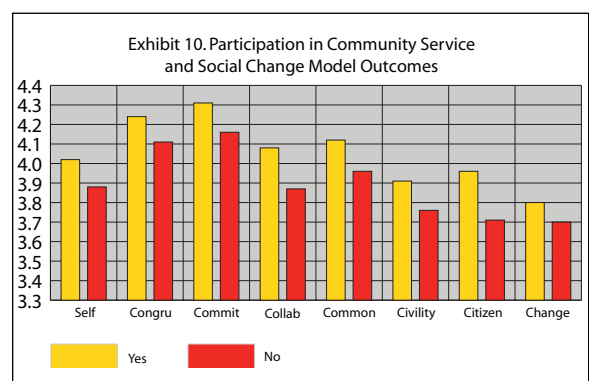
9. Campus Involvement Matters

Students that reported any level of involvement in campus clubs and organizations demonstrated significantly higher scores across all of the SCM values. Specifically, involvement had a moderate effect on *Collaboration*, *Common Purpose*, and *Citizenship*. Twenty percent of college seniors reported never having participated in any college organization while almost 40% reported heavy involvement in college organizations. Amount of involvement positively related to level of development. However, being involved in too many different types of organizations, referred to here as breadth of involvement, was negatively related to leadership outcomes. The survey also asked students to indicate if they were involved in 21 different categories of student organizations. More students reported involvement in intramurals than any other area (40%) followed by 36% of students who reported involvement in academic clubs and organizations.



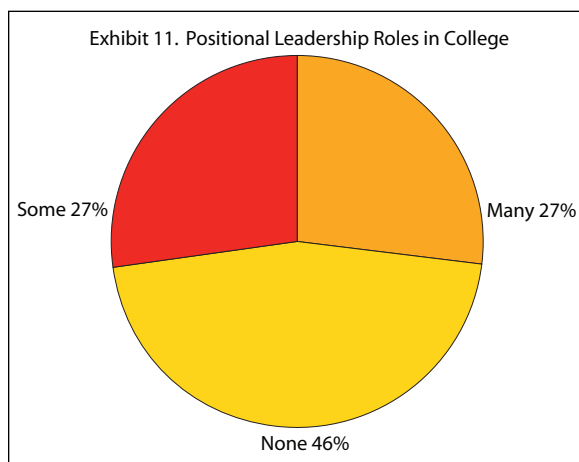
10. Service Matters

Over half (53%) of all college students reported participating in community service of some kind. Service had a positive influence with a moderate effect size on leadership outcomes. Regressions showed the strongest influence of service was on *Citizenship* and *Collaboration* and the amount of total variance explained by participation in community service was greater for men than for women.



11. Positional Leadership Roles Develop Leadership

It was no surprise that being in a positional leadership role (e.g., officer for a club or organization, captain of an athletic team, first chair in a musical group, section editor of the newspaper, or chairperson of a committee) taught leadership. Holding leadership positions in college organizations had a positive influence on all outcomes with the strongest effect size (i.e., moderate) on *Common Purpose* and *Citizenship*. Positional leadership roles were strong, positive predictors of *Leadership Efficacy* for both men and women as well, although the predictive power was greater for women than for men. However, an examination of more than 14,000 seniors showed that 46% never had the opportunity to serve in a positional leadership role while in college. Conversely, 27% of seniors reported holding many leadership positions, which may suggest the lack of equitable distribution of opportunities among students.



12. Formal Leadership Programs Matter

MSL divided formal leadership programs into three categories based on the duration of contact for the intervention. These categories included: short-term (e.g., one-time lecture, workshop), moderate-term (e.g., a single academic course, multi-session series), and long-term (e.g., leadership major or minor, certification program, or living learning program). Students who attended even one short-term program reported significantly higher leadership outcomes than those who had no training. However, 35% of students reported never having attended a leadership program of any duration. Short, moderate, and long-term programs generally had the same small to moderate magnitude of influence on outcomes when compared to no training, although moderate and long-term programs seemed to significantly enhance outcomes on the value of *Citizenship* in comparison to short-term experiences. Similarly, long-term experiences seemed to significantly enhance outcomes on *Change* in comparison with short-term experiences. Overall, outcomes associated with group and societal values (i.e., *Collaboration*, *Common Purpose*, *Controversy with Civility*, and *Citizenship*) demonstrated slightly higher effect sizes from participation in any type of formal leadership program. Although the effect size was small, seniors in academic leadership majors and minors were significantly higher on the *Omnibus SCM* measure than were seniors who had no leadership training and were significantly lower than seniors who participated in other long-term experiences. This finding potentially reflects divergent theoretical groundings that may be inconsistent with the leadership values posited by the SCM.

Short, moderate, and long-term experiences all had a significant effect on *Leadership Efficacy* in comparison with no training. Long-term experiences, however, demonstrated both the largest overall effect size (i.e., moderate) and contributed to significantly higher scores than both short and moderate-term programs on the measure of *Leadership Efficacy*.

Ten Recommendations to Enrich Campus Leadership Programs

1 Discuss Socio-Cultural Issues Everywhere

Engaging in conversations across difference was the single-strongest environmental predictor of leadership outcomes. Discussing differences of views and seeing diverse perspectives contributed to all leadership outcomes and many other collegiate outcomes as well! Leadership development programs should include opportunities for deliberate discussions on a wide range of issues. Students need to learn dialogue skills, listening skills, and need to be able to label personal beliefs and assumptions that guide their actions. Leadership educators should ensure that diversity discussions are included in both formal and informal leadership programs. Furthermore, discussions on socio-cultural issues should be woven throughout an educational experience, not simply as an insular component of an overall curriculum.

2 Get Students Involved in at Least One Organization

Students must work with others to truly learn leadership. Academic advisors, career counselors, resident assistants, peer leaders, and mentors should help students identify and join at least one group of interest to them. Invite students into organizations. Develop new member in-take processes that promote identity development, meaningful involvement, and membership persistence.

3 Get Students to at Least One Leadership Program

Students must recognize that leadership can be learned and developed. Offer numerous short-term or one-time leadership awareness programs to jumpstart the development process. Integrate leadership units in first-year courses. When designing long-term leadership programs, consider how the curriculum builds in complexity on short and moderate-term offerings.

4 Diffuse Leadership Programs Across the Institution

Take leadership training to places students are involved including recreational sports clubs, academic clubs, honor societies, service learning settings, and student employment. Consider ways in which leadership learning and meaningful conversations can be built into non-traditional forums such as study abroad, academic advising, and other points of student contact.

5 Focus on Members Not Just Positional Leaders

Introduce leadership as a process among members. Label effective member behaviors as leadership, not just good followership. Positional leadership is also important, but broaden the number of positions in any organization so more can experience positions of responsibility.

6 Discourage Too Much Breadth in Involvement

Being involved in too many different types of group experiences is counter-productive. More variety is not necessarily better. Help students focus on key organizations of interest. Encourage students to persist and go deep in at least one organization by connecting how group involvement experiences build on personal commitments, passions, and extend both collegiate goals and personal learning.

7 Develop Mentoring Relationships

Design processes for students to get personal attention from someone in the college environment. Faculty mentoring continually emerged as a significant predictor of positive leadership outcomes. In addition to engaging faculty members with co-curricular leadership programs, work directly with students to teach them how to develop individual relationships with faculty. Beyond faculty mentoring, develop peer-mentoring programs for older peers to intentionally link with new or younger students. Require developmental supervision for all on-campus student employment positions.

8 Design Distinct Programs for Specific Groups

Connect leadership to other social identities so students can explore their leadership practices and personal leadership identity. Use specific interventions that make a difference. For example, create a mentoring program for women or community service programs that engage men and Asian American students.

9 Align Students' Self-Perceptions of Leadership Competence and Confidence

Support students in adopting an accurate and healthy self-awareness regarding their leadership capacity. This involves helping students to better align their levels of self-efficacy for leadership with actual knowledge and skills.

10 Build Bridges with K-12 Educators

The competence and knowledge that students bring into college largely reflected what they take away from college in terms of leadership outcomes. Leadership educators in higher education would be well-served by building partnerships with the K-12 system. These partnerships could take a variety of forms ranging from peer leadership mentoring programs to hosting leadership conferences on college campuses. These connections have the potential to create important bridges between K-12 and higher education as well as serve as a catalyst in the leadership development process.

Additional Resources

- Astin, A. W., & Astin, H. S. (2000). *Leadership reconsidered: Engaging higher education in social change*. Battle Creek, MI: W. K. Kellogg Foundation.
- Astin, H. S. (1996, July–August). Leadership for social change. *About Campus*, 4–10.
- Higher Education Research Institute [HERI]. (1996). *A social change model of leadership development: Guidebook version III*. College Park, MD: National Clearinghouse for Leadership Programs.
- Komives, S. R., & Wagner, W. (Eds.). (in press). *Becoming a change agent: Applications from the social change model of leadership development*. College Park, MD: National Clearinghouse for Leadership Programs.
- Komives, S. R., Dugan, J., Owen, J. E., Slack, C., & Wagner, W. (Eds.). (2006). *Handbook for student leadership programs*. College Park, MD: National Clearinghouse for Leadership Programs.
- Komives, S. R., Lucas, N., & McMahon, T. (2007). *Exploring leadership: For college students who want to make a difference* (2nd ed.). San Francisco: Jossey Bass.
- Outcalt, C. L., Faris, S. K., & McMahon, K. N. (Eds.). (2000). *Developing non-hierarchical leadership on campus: Case studies and best practices in higher education*. Westport, CT: Greenwood Press.
- Zimmerman-Oster, K., & Burkhardt, J. C. (1999). *Leadership in the making: Impact and insights from leadership development programs in U. S. colleges and universities*. Battle Creek, MI: W. K. Kellogg Foundation.

Concepts & Connections (a publication of the National Clearinghouse for Leadership Programs available at www.nclp.umd.edu) featured MSL in its 2006–2007 volume.

Vol. 15 (1) MSL methods, MSL descriptive findings, the Social Change Model

Vol. 15 (2) Identity-based MSL findings
(e.g., gender, sexual orientation, race)

Vol. 15 (3) Training and Curricular Findings

Vol. 15 (4) Co-Curricular Findings (e.g., service, mentoring, involvement, discussions of socio-cultural issues)

Participating Colleges and Universities

Auburn University
Brigham Young University
California State University, Northridge
California State University, San Marcos
Clafin University
Colorado State University
DePaul University
Drake University
Drexel University
Elon University
Florida International University
Florida State University
Franklin College
Gallaudet University
George Mason University
Georgia State University
John Carroll University
Lehigh University
Marquette University
Meredith College
Metro State College
Miami University of Ohio
Monroe Community College
Montgomery College
Moravian College
Mount Union College
North Carolina State University
Northwestern University
Oregon State University
Portland State University
Rollins College
Simmons College
St. Norbert College
State University of New York at Geneseo
Susquehanna University
Syracuse University
Texas A & M University
Texas Woman's University
University of Arizona
University of Arkansas
University of California, Berkeley
University of Illinois at Urbana-Champaign
University of Maryland Baltimore County
University of Maryland College Park
University of Maryland Eastern Shore
University of Minnesota
University of Nevada Las Vegas
University of New Hampshire
University of North Carolina, Greensboro
University of North Dakota
University of Rochester
University of Tampa

References

- Association of American Colleges and Universities. (2007). *College learning for the new global century*. Washington, DC: Author.
- Astin, A. W. (1991). *Assessment for excellence*. New York: Macmillan.
- Astin, A. W. (1993). *What matters in college: Four critical years revisited*. San Francisco: Jossey-Bass.
- Astin, A. W., & Astin, H. S. (2000). *Leadership reconsidered: Engaging higher education in social change*. Battle Creek, MI: W. K. Kellogg Foundation.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Benson, P., & Saito, R. (2000). *The scientific foundations of youth development*. Minneapolis: Search Institute.
- Bordas, J. (2007). *Salsa, soul, and spirit: Leadership for a multi-cultural age*. San Francisco: Berrett-Koehler Publishers.
- Boyer, E. L. (1987). *College: The undergraduate experience in America*. New York: Harper & Row.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Colby, A., Ehrlich, R., Beaumont, E., & Stephens, J. (2003). Educating undergraduates for responsible citizenship. *Change*, 35 (6), 40-48.
- Council for the Advancement of Standards in Higher Education. (2006). Student leadership programs. *CAS professional standards for higher education* (6th ed.; pp. 320-328). Washington, DC: Author.
- Dugan, J. P. (2006a). Explorations using the social change model: Leadership development among college men and women. *Journal of College Student Development*, 47, 217-225.
- Dugan, J. P. (2006b). Involvement and leadership: A descriptive analysis of socially responsible leadership. *Journal of College Student Development*, 47, 335-343.
- Dugan, J. (2006c). *SRLS-Rev 2: The second revision of SRLS*. College Park, MD: National Clearinghouse for Leadership Programs.
- Ehrlich, T. (1999). Civic engagement and moral learning. *About Campus*, 4 (4), 5-9.
- Fertman, C. I., & Van Linden, J. A. (1999). Character education for developing youth leadership. *Education Digest*, 65 (4), 11-16.
- Greenleaf, R. G. (1977). *Servant leadership: A journey in the nature of legitimate power and greatness*. New York: Paulist.
- Higher Education Research Institute [HERI]. (1996). *A social change model of leadership development: Guidebook version III*. College Park, MD: National Clearinghouse for Leadership Programs.
- Hoppe, M. H. (1998). Cross-cultural issues in leadership development. In C. D. McCauley, R. S. Moxley & E. Van Velson (Eds.), *Handbook of leadership development: Center for creative leadership* (pp. 336-378). San Francisco: Jossey-Bass.

- Hughes, R. L., Ginnett, R. C., & Curphy, G. J. (1993). *Leadership: Enhancing the lessons of experience*. Homewood, IL: Richard D. Irwin.
- Inkelas, K. K., & Associates. (2004). *National Study of Living-Learning Programs: 2004 report of findings*. Retrieved March 2, 2005, from http://www.livelearnstudy.net/images/NSLLP_2004_Final_Report.pdf
- Jacoby, B. C., & Associates. (1996). *Service-learning in higher education: Concepts and practices*. San Francisco: Jossey-Bass.
- Kezar, A. (2000). Pluralistic leadership: Bringing diverse voices to the table. *About Campus*, 5(3), 6–11.
- Kezar, A. J., Carducci, R., & Contreras-McGavin, M. (2006). *Rethinking the “L” word in higher education: The revolution in research on leadership*. ASHE Higher Education Report Vol. 31. No. 6. San Francisco: Jossey-Bass.
- King, P. M. (1997). Character and civic education: What does it take? *Educational Record*, 78 (3,4), 87-90.
- Komives, S. R., Dugan, J. P., Owen, J. E., Slack, C., & Wagner, W. (Eds). (2006). *Handbook for student leadership programs*. College Park, MD: National Clearinghouse for Leadership Programs.
- Komives, S. R., Longerbeam, S., Owen, J. O., Mainella, F. C., & Osteen, L. (2006). A leadership identity development model: Applications from a grounded theory. *Journal of College Student Development*, 47, 401-418.
- Komives, S. R., Lucas, N., McMahon, T. R. (1998). *Exploring leadership: For college students who want to make a difference*. San Francisco: Jossey-Bass.
- Komives, S. R., Lucas, N., McMahon, T. R. (2007). *Exploring leadership: For college students who want to make a difference* (2nd ed.). San Francisco: Jossey-Bass.
- Komives, S. R., Owen, J. E., Longerbeam, S., Mainella, F. C., & Osteen, L. (2005). Developing a leadership identity: A grounded theory. *Journal of College Student Development*, 6, 593-611.
- Korten, D. C. (1998). *Globalizing civil society: Reclaiming our right to power*. New York: Seven Stories Press.
- Kouzes, J. M., & Posner, B. Z. (2002). *The leadership challenge* (3rd ed.). San Francisco: Jossey-Bass.
- Lappe, F. M., & DuBois, P. M. (1994). *The quickening of America: Rebuilding our nation, remaking our lives*. San Francisco: Jossey-Bass.
- Lipman-Bluman, J. (1996). *Connective leadership: Managing in a changing world*. San Francisco: Jossey Bass.
- Morse, S. W. (1989). *Renewing civic capacity: Preparing college students for service and citizenship*. ASHE-ERIC Higher Education Report No. 8. Washington, DC: George Washington University.

- Morse, S. W. (2004). *Smart communities: How citizens and local leaders can use strategic thinking to build a brighter future*. San Francisco: Jossey-Bass.
- National Association of Student Personnel Administrators and American College Personnel Association. (2004). *Learning reconsidered: A campus-wide focus on the student experience*. Washington, DC: Authors.
- Northouse, P. G. (2007). *Leadership theory and practice* (4th ed.). Thousand Oaks, CA: Sage
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Pearce, C. L., & Conger, J. A. (Eds.). (2003). *Shared leadership: Reframing the hows and whys of leadership*. Thousand Oaks, CA: Sage.
- Posner, B. Z. (2004). A leadership development instrument for students: Updated. *Journal of College Student Development*, 45, 443-456.
- Posner, B. Z., & Brodsky, B. (1992). A leadership development instrument for college students. *Journal of College Student Development*, 33, 300-304.
- Rost, J. C. (1991). *Leadership for the twenty-first century*. Westport, CT: Praeger.
- Rubin, J. (2000). The emerging leaders: An evaluation of the social change model of leadership. *Dissertation Abstracts International*, 61(11), 4278. (AAT 9995826)
- Scales, P. & Leffert, N. (1999). *Developmental assets: A synthesis of the scientific research on adolescent development*. Minneapolis: Search Institute.
- Schwartz, M. K., Axtman, K. M., & Freeman, F. H. (Eds.). (1998). *Leadership education: A sourcebook of courses and programs* (7th ed.). Greensboro, NC: The Center for Creative Leadership.
- Scott, D. (2004, April 27). Are campus leadership programs developing the leaders society needs? *Netresults*.
- Sipe, C. L., Ma, P., & Gambone, M. A. (1998). *Support for youth: A profile of three communities*. Philadelphia, PA: Public/Private Ventures.
- Tyree, T. M. (1998). Designing an instrument to measure the socially responsible leadership using the social change model of leadership development. *Dissertation Abstracts International*, 59 (06), 1945. (AAT 9836493)
- U.S. Department of Education. (2006). *A test of leadership: Charting the future of U.S. higher education*. Washington, DC: Author.
- Van Linden, J. A., & Fertman, C. I. (1998). *Youth leadership: A guide to understanding leadership development in adolescents*. San Francisco: Jossey-Bass.
- Wagner, W. (2006). The social change model of leadership: A brief overview. *Concepts & Connections*, 15 (1), 9.
- Zimmerman-Oster, K., & Burkhardt, J. C. (1999). *Leadership in the making: Impact and insights from leadership development programs in U.S. colleges and universities*. Battle Creek, MI: W. K. Kellogg Foundation.





National Clearinghouse for Leadership Programs
0110 Stamp Student Union
University of Maryland
College Park, MD 20742
www.nclp.umd.edu