YOUTH LEADERSHIP DEVELOPMENT: PERCEPTIONS AND PREFERENCES OF URBAN STUDENTS ENROLLED IN A COMPREHENSIVE AGRICULTURE PROGRAM

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Abstract

This descriptive study explores the perceptions of and preferences for leadership development by students enrolled in a comprehensive urban agriculture program. A total of 284 students from the Chicago High School for Agricultural Sciences participated in the study. The results of the study showed that the average respondent was involved in a limited number of school organizations and no community organizations and received the opportunity to learn and practice leadership skills most frequently through sports, work, and FFA. Furthermore, respondents indicated that quality leadership activities should be organized, fun, interactive, and provide real-world application. Respondents also reported that they preferred training to occur within their school, through national workshops, or via international experiences. These findings are instrumental in the discussion of students' awareness of the importance of leadership in their everyday lives, how they currently learn and practice leadership skills, and what quality factors should be considered when developing future leadership experiences.

Introduction and Conceptual Framework

Over the past several years, the educational field has seen a shift in the academic environment in secondary schools. It has been noted that adolescents today are deemed less respectful of authority, have lower attention spans, and are less engaged in the learning process (Finn & Rock, 1997; Modell & Elder, 2002). There has been a growing concern that high school students become disengaged from school and post-school planning because they do not view their current academic situations as relevant to their future career prospects or as conduits for attaining their career aspirations (Blustein, Phillips, Jobin-Davis, Finkelberg, & Roarke, 1997; Ogbu, 1989; Worthington & Juntunen, 1997). Several scholars suggest that a possible solution for remedying this lack of perceived relevance is by increasing student participation in school and community activities (Fredricks, Blumenfield, & Paris, 2004; Guthrie & Wigfield, 2000; Newmann, 1981).

Previous studies on youth development have found a positive relationship between leadership development and participation in school and community organizations (Holland & Andre, 1987; Mckinley, Birkenholz, & Stewart, 1993; Wingenbach & Kahler, 1997). Increased opportunities to participate in enriching activities allow students the chance to gain a sense of ownership, make connections between academic content and real-life application, and reduce high levels of student boredom and disaffection (National Research Council, 1988). Furthermore, students who have been engaged in interactive instruction with hands-on experiences are more apt to apply school learning to workplace responsibilities and tasks (Crain et al., 1999; Moore, 1999; Ryken, 2006; Stern, Raby, & Dayton, 1992).

When examining the effects of student involvement in organizations and activities, McKinley et al. (1993) found a significantly positive relationship between four factors—interpersonal relations, administration, self management, and communications—and

participation in athletics, social organizations, career-oriented clubs, church groups, and agricultural organizations for students enrolled in a postsecondary agriculture program. Other investigators found that participation in career and technical education organizations such as FFA and Future Business Leaders of America increased students' leadership ability in communications, decision making, getting along with others, self management, understanding of self, and working with groups (Wingenbach & Kahler, 1997).

Although the benefits of leadership development for youth have been identified in the existing literature, only a limited number of studies have been undertaken in this line of research. van Linden and Fertman (1998) called for more attention to "understanding and appreciating the complexity of youth leadership" (p. 8). In their book, *Youth Leadership: A Guide to Understanding Leadership Development in Adolescents*, they asserted that the knowledge gained from studying youth leadership development was a prerequisite for supporting and challenging youth to be the best leaders they could be. Although the extent to which the effect of creating leadership development experiences differs by individual characteristics such as socio-economic status, race/ethnicity, personality types, and educational experiences (Rudd, Hoover, & Yermal, 1998; Snow & Yallow, 1982), several premises are integral to leadership development for youth. They include the need for autonomy, self-discovery/self-definition, a measured learning process, and experiences that are innovative and explorative (Ricketts & Rudd, 2002; Taylor, Gilligan, & Sullivan, 1995; van Linden & Fertman). Supporting these commonalities, Des Marais Yang, and Farzenhkia (2000) identified four essential elements that are necessary for fostering positive youth leadership development: (1) youth/adult partnerships; (2) granting young people decision making power and responsibility for consequences; (3) a broad context for learning and service; and (4) recognition of young people's experience, knowledge, and skills.

van Linden and Fertman (1998) stated, "Leaders are people who think for themselves, communicate their thoughts and feelings, and help others understand and act on their own beliefs" (p. 17). They provided a conceptual framework to assess, monitor, and evaluate the leadership development of adolescents when they proposed three distinct stages of youth leadership development: awareness, interaction, and mastery. Expanding on van Linden and Ferman's theory on youth leadership development, Ricketts and Rudd (2002) developed a comprehensive model for creating youth leadership education curriculum that linked the three stages to processes of comprehension, analysis, application, synthesis, and evaluation (Conner & Strobel, 2007).

Influenced by the research of Fertman and Chub (1993), Fertman and Long (1990), and Long, Wald, and Graff (1996), the three stages are described as processes of how students learn about leadership; they can be used to develop leadership interventions and to build on the experience and perceptions of students to enhance cognition and behavior in leadership development (Ricketts & Rudd, 2002). Awareness describes the initial stage when leadership is not a part of the student's life. The focus in this stage is to familiarize students with leadership concepts and skills, and assist them in understanding how leadership fits into their lives. After students become aware of leadership, they can progress into the second stage, interaction. Interaction describes the desire to explore how leadership skills affect various outcomes within their lives. Students who think about leadership and have committed to exploring the effects of leadership will progress into the final stage, integration. Students in this final stage of leadership development focus on improving their leadership skills and abilities through practice of leadership development activities and concepts. As such, this model offers a conceptualization of how youth leadership in career and technical education can be fostered in both formal and nonformal educational settings (Ricketts & Rudd).

By using the three stages of the youth leadership development model proposed by Ricketts and Rudd (2002) as its conceptual framework, this study assesses the

leadership awareness, interaction, and integration of urban agriculture students in a comprehensive agriculture program. More specifically, the study explores the extent to which urban agriculture students are aware of the importance of leadership in their lives, what opportunities they currently participate in to develop leadership skills, and what factors are desired in quality leadership development experiences. Because we only looked at students' perceptions and preferences of leadership development and not evaluating leadership education curriculum, the levels of cognition from the taxonomy of educational objectives were not used to analyze our findings.

Purpose and Objectives

A previous national study of secondary agriculture students provided a general overview of the students' perceptions of and preferences for leadership development; its sample was comprised of students enrolled in more traditional agriculture programs in rural and small school settings (Ulmer, Anderson, Torres, & Ulmer, 2006). However, the existing literature fails to address the perceptions and preferences of students in urban agricultural programs. Thus, the purpose of this study was to examine the perceptions of and preferences for leadership development by this nontraditional population. Specific objectives of the study were to: (1) identify selected demographic characteristics (gender, year in school, and involvement in school and community activities) of the urban agriculture students, (2) describe students' attitudes toward the importance of leadership in various areas of their lives, (3) identify current opportunities to learn and practice leadership skills as perceived by students, and (4) identify students' preferences for quality leadership development activities.

Procedure

The population of this descriptive study consisted of students enrolled in the Chicago High School for Agricultural Sciences (CHSAS). Because of resource constraints, only one program was sampled. However, since CHSAS has been named a model of innovation program by the National FFA Organization, it has been used as a template for developing comprehensive urban programs throughout the country. Factors used to select this program were that students enrolled were randomly selected from thousands of applicants to attend the school, students took agriculture classes all four years, courses were available in the five state-approved career pathways; and the FFA and Supervised Agricultural Experiences (SAE) were an integral part of the program and were required of all students.

Four agriculture instructors were selected to administer the questionnaire based on the number of students they would typically see the day the survey was administered. Each instructor was given 75 questionnaires to distribute to three intact classes. The questionnaire was an adapted version of the National FFA Leadership Continuum Assessment Student Questionnaire (NFLCASQ; Ulmer et al., 2006). For the study, participants were told that the definition of leadership was *the ability to motivate self and others to achieve worthwhile goals*.

The instrument contained 72 items divided into six main sections. The first five sections used a 5-point scale (1 = low, 2 = slightly low, 3 = moderate, 4 = slightly high, and 5 = high) to rate students' perceptions and preferences. The first section included six summated items to determine students' attitudes toward leadership development in specified areas of their lives. The second and third sections asked participants to rate current opportunities to learn and practice leadership skills; however, an additional choice of *not applicable* was added in order not to distort the responses of those participants who genuinely felt a question had no applicability to them. The fourth section asked students' preferences in location where leadership training should occur. The fifth section asked students to rate the importance of specific factors when developing a quality leadership training experience. The final section consisted of 10 demographic questions.

Face validity for this adapted version was established by a four-person panel consisting of three researchers and one expert in instrumentation. Content validity and reliability were established by using a panel of experts and test-retest. The Cronbach's alpha reliability coefficient on Q1 – Q6 summated scale was 0.87. Twenty-five questions scored 94% or better, 22 questions scored 88%, and 9 questions scored 81% agreement on the test/retest. Descriptive statistics were performed by using SPSS to analyze the categorical data. When reporting frequencies and percentages in the findings, the term high includes the top ratings of slightly high and high. Similarly, the term low includes the bottom two ratings of slightly low and low. Furthermore, when reporting perceptions for opportunities to learn and practice leadership skills, the *n* value represents the number of respondents who indicated the activity was applicable.

Findings

Demographic Characteristics

The sample of 284 students represents approximately 48% of the student population in the school. Respondents were 56% female with 26% freshmen, 23% sophomores, 28% juniors, and 23% seniors. Sixty-three percent of the students reported being of African-American decent, 22% Caucasian, 10% Hispanic, and 5% other, respectively. When asked about involvement in school, 22% reported no involvement, whereas 29% reported being involved in one, 31% in two, and 18% in three or more organizations. When asked about out-of-school involvement, 47% reported no community involvement, whereas 25% reported involvement in one, 16% in two, and 12% in three or more community organizations. In terms of official leadership positions, 28% reported holding a current office in some organization.

Although every student was a member of the FFA, an integral part of the urban agriculture program, only 87% of the students reported that they were FFA members. In addition, 75% of the respondents reported having a SAE. It must be noted that the school requires all incoming freshmen to attend a summer orientation program, take an introductory leadership course to learn more about the leadership opportunities available through FFA membership, and spend one summer working on a SAE. In reference to the amount of participation in chapter FFA activities, 20% indicated no participation, 60% indicated participation in less than half the activities, and 20% in half or more of the activities.

Attitudes Toward Leadership

Table 1 summarizes the respondents' perceived level of importance. When examining attitudes about the importance of leadership in their lives, respondents rated leadership with slightly high importance ($M = 4.07$, $SD = 0.69$). Looking at the six specified areas where students may commonly use leadership skills, approximately 89% of the respondents indicated that leadership had high importance in their future career. Approximately three-quarters of the respondents rated leadership in organizations and in school as the next two most important areas. Although leadership was rated as important in all six specified areas, community received the lowest ratings with 17% ($n = 49$) of the respondents.

Table 1
Level of Importance of Leadership Skills in Selected Areas by Percentage (n = 284)

Area	Low Importance	Slightly Low Importance	Moderate Importance	Slightly High Importance	High Importance
Community	5.3	12.0	28.0	28.6	26.1
Family	1.1	4.9	25.0	28.2	40.8
Friends	3.2	8.1	24.6	33.5	30.6
Future Career	0.4	1.4	8.8	26.9	62.5
Organizations	1.8	1.8	20.1	30.7	45.6
School	0.7	2.5	21.8	34.9	40.1
Total Importance	0.4	0.4	17.1	50.8	31.3

Opportunities to Learn and Practice Leadership Skills

When asked about their opportunity to learn leadership skills in selected youth activities, sports received the highest ratings. Of the 254 respondents who reported sports as being applicable, 80% of them rated it as a high opportunity to learn leadership skills, followed by activities at work (*n* = 239), which was rated by 71% of the respondents as high. The top four choices were completed with the *FFA* (*n* = 238) and church (*n* = 273), both being rated by 66% of the respondents as a high opportunity to learn leadership skills (Table 2). It should be noted that a second tier of opportunities emerged as well; ag classes, with parents, with siblings, with peers, and student council were all rated high by approximately 60% of the students.

When examining the students' opportunity to practice leadership skills, ratings for the top activities were similar to those of opportunities to learn leadership skills (Table 3). Sports (*n* = 248) was rated as the highest opportunity with 76%, followed by at work (*n* = 234) with 66% of the respondents indicating high ratings. The FFA (*n* = 236) was rated the third highest,

with 63% of the respondents rating it as high. Interestingly, several other activities rated within two percentage points of the FFA. They were church (*n* = 225) and with siblings (*n* = 254) with 62%, and with guardians and peers with 61% of the respondents selecting high ratings. With both opportunities to learn and practice leadership skills, student council, band, and scouts were the activities rated the lowest (Tables 2 and 3).

Leadership Training Preferences and Factors in the Quality of Leadership Experiences

The strongest preference for where leadership training should occur was in ag classes with 64% of the respondents rating it as high (Table 4). Somewhat lower, officer meetings were rated second highest with 54% of the respondents indicating a high preference. A majority of the respondents indicated that chapter meetings, international experience, and national workshops were also highly preferred places where leadership training should occur. None of the locations received an overwhelming response for not preferred.

Table 2
Opportunity to Learn Leadership Skills during Youth Activities by Percentage

Activity	*n*	Low	Slightly Low	Moderate	Slightly High	High
Ag Classes	276	4.7	7.6	23.2	29.3	35.1
Band/Chorus	199	15.1	19.6	29.1	21.1	15.1
Boy/Girl Scouts	133	17.3	12.0	18.0	27.8	24.8
Church	227	6.6	9.7	16.8	28.3	38.1
Community Activities	209	6.7	13.9	31.1	28.7	19.6
Core Classes	268	6.7	13.1	25.0	23.9	31.3
Other School Orgs.	201	3.0	13.9	28.9	32.8	21.4
FFA	238	8.0	8.8	16.8	21.4	45.0
Literature/Books	257	7.8	12.8	34.6	23.7	21.0
Sports	254	3.9	3.9	11.8	31.1	49.2
Student Council	189	9.0	9.5	20.6	31.2	29.6
With Parent/Guardian	273	4.0	5.9	26.0	27.5	36.6
With Peers	272	5.1	7.0	27.6	32.7	27.6
With Siblings	257	6.6	8.2	23.0	28.0	34.2
Work	239	5.4	5.9	17.2	32.2	39.3
Workshops/Conferences	210	6.2	11.9	26.7	27.1	28.1

Table 3
Opportunity to Practice Leadership Skills during Youth Activities by Percentage

Activity	*n*	Low	Slightly Low	Moderate	Slightly High	High
Ag Classes	272	6.3	11.4	22.8	22.8	36.8
Band/Chorus	182	17.0	15.4	29.1	23.6	14.8
Boy/Girl Scouts	127	17.3	15.0	18.9	20.5	28.3
Church	225	6.6	8.0	23.0	25.7	36.7
Community Activities	231	6.1	12.6	32.9	23.4	25.1
Core Classes	242	9.1	15.3	28.9	25.6	21.1
Other School Orgs.	196	6.6	12.2	30.1	27.0	24.0
FFA	236	8.1	9.7	19.1	21.2	41.9
Literature/Books	249	8.0	19.3	28.5	22.1	22.1
Sports	248	3.2	5.6	15.3	29.0	46.8
Student Council	184	10.9	13.0	21.7	28.8	25.5
With Parent/Guardian	266	6.0	9.4	23.7	26.7	34.2
With Peers	268	4.9	9.7	24.3	28.0	33.2
With Siblings	254	7.9	8.3	22.0	27.6	34.3
Work	234	7.3	7.3	19.2	26.5	39.7
Workshops/Conferences	201	6.7	5.7	17.3	20.1	21.2

Table 4
Level of Preference for Leadership Training Locations by Percentage (n = 284)

Location	Low Preference	Slightly Low Preference	Moderate Preference	Slightly High Preference	High Preference
Ag Classes	11.2	7.6	17.3	28.8	35.3
Chapter Meetings	19.8	10.1	18.7	21.6	29.9
District Workshop	19.5	11.2	28.5	22.4	18.4
International Experience	17.5	8.7	23.3	22.9	27.6
National Workshop	18.5	9.5	21.1	25.5	25.5
Officer Meetings	19.5	9.7	17.0	25.3	28.5
Regional Workshop	22.3	10.1	21.6	20.1	25.9
Section Workshop	19.6	12.7	23.3	24.7	19.6
Statewide Workshop	20.5	10.1	22.7	21.9	24.8

Three factors were rated high by approximately three-quarters of the respondents for quality leadership training experience: interactive, organized, and fun. In addition, approximately 70% of the respondents indicated that a quality leadership experience should include real-world application and group work. Conversely, the respondents indicated that national officers, state officers, lectures, and prizes were of low importance to the quality of a leadership training experience relative to other response categories (Table 5).

Table 5
Factors in Developing Quality Leadership Training Experiences by Percentage (n = 284)

Factor	Low Importance	Slightly Low Importance	Moderate Importance	Slightly High Importance	High Importance
Content	3.7	8.9	24.4	34.4	28.5
Fun	3.3	2.9	19.4	31.5	42.9
Group Work	3.7	4.4	21.6	34.4	35.9
Independent Work	4.8	9.2	19.9	32.8	33.2
Interactive	2.6	2.2	17.0	34.1	44.1
Lectures	11.7	17.6	34.1	21.6	15.0
Location	6.3	11.9	30.7	28.9	22.2
National Officer	17.6	14.7	24.3	19.5	23.9
Organized	3.7	7.0	14.8	32.6	41.9
Prizes	9.5	15.0	25.3	27.1	23.1
Real-world Application	5.9	6.6	16.8	32.6	38.1
Specific Topic	7.0	8.8	26.5	30.5	27.2
State Officer	17.6	11.4	25.7	21.0	24.3
Well-known Presenter	7.0	7.7	23.4	28.6	33.3
Take-home Materials	11.4	10.6	27.5	24.2	26.4

Conclusions, Implications, and Recommendations

The first research objective was to describe the selected characteristics of the sample, which had approximately equal number in each grade level. However, in terms of gender, there were a greater percentage of female respondents (56%), which is 18% higher than the National FFA Organization (2008) reports for female membership. The predominant race/ethnicity was African-American (67%), which again was not representative of FFA membership (4% in 2007) (National FFA Organization, 2008). Because the sample was purposive and demographic characteristics could not establish generalizability, the conclusions drawn from the study are limited to this and similar programs. Despite such limitations, this study helps to establish the groundwork for a line of inquiry into the perceptions and preferences of this unique and understudied urban agriculture student population.

With regard to the student participation, the average respondent was more active in

school than in the community. Alarmingly, almost one-half of the respondents reported not being active in any community activity. This finding raises the question as to how these students will learn and practice civic engagement. More specifically, how will these students, as they make the transition to young adulthood, be able to identify and address issues of public concern if they do not learn the importance of voluntarism, organizational involvement, and civic responsibility now? Another notable finding is the inconsistency between the 87% of students who reported FFA membership and the program requirement of 100% membership. This finding demonstrates the limitations of self-reporting, but can likely be attributed to the students' perception that program participation is synonymous with FFA membership.

Although there was a discrepancy between the reported and actual FFA membership, the bell curve-shaped participation in chapter activities and number of reported SAE demonstrates the influence the organization has on this program. However, the question remains, would this influence be observed in other urban programs? Therefore, it is suggested that further research focus on the perceptions of students and/or teachers toward SAE and the FFA in urban programs nationally.

Research objective two sought to describe students' attitudes toward the importance of leadership. The majority of students reported leadership as important in their lives. Based on the definition of leadership given to the students, the respondents indicated that it is important for them to motivate themselves and others to achieve worthwhile goals. This finding implies that the students in fact have leadership awareness and have progressed to leadership interaction. In addition, more than three-quarters of the students perceived leadership to be of high importance in their future careers, in school, and in organizations. The results of the study indicate that the respondents understand the importance of leadership in their everyday life, but place more importance on the areas in which they receive the most leadership education.

This is evident through the findings of research objective three, current opportunities to learn and practice leadership skills. Of the 16 items identified as opportunities to learn leadership skills, sports, work, FFA, and church were rated the highest opportunities. However, when asked to identify opportunities to practice leadership skills, there was a slight drop in the frequency of high ratings for all items. As a result, church dropped out of the top tier of choices for practicing leadership, leaving sports, work, and the FFA as the top opportunities. The consistency of the top three rated choices for learning and practicing and for importance suggests that students tend to perceive leadership skills as more important in the areas that are most prominent in their life.

Furthermore, although a majority of the students reported all six areas as important, friends, family, and community received the highest numbers in the low importance categories. In a report by the Committee on Agricultural Education in Secondary Schools, titled *"Understanding Agriculture: New Directions for Education,"* it was recommended that building new links with underrepresented groups of students through community leaders, churches, and local organizations is crucial to advancing agricultural education and preparing urban agriculture students to be future leaders (NRC, 1988). Students are learning and practicing leadership skills in a variety of places, yet the findings indicate that students may not be fully aware of the importance of their unique experiences in their overall leadership development. Also, the decline in ratings from the opportunities to learn category to the opportunities to practice category may imply that too much emphasis is being placed on awareness and not enough on interaction and integration.

Therefore, it is critical that their instructors provide a clear message on how the skills learned in school are applicable to situations outside of school, and vice versa. Encouraging students to make these connections will increase academic and civic engagement and the integration of new skills into every area of their life, including with friends, family, and in their communities by acknowledging and

incorporating the lessons learned from participation in extra-curricular activities into the curriculum. Hence, it is recommended that leadership curriculum for secondary students continue to be (re)designed utilizing Ricketts' and Rudd's (2002) comprehensive model for creating leadership education curriculum. This curriculum should utilize content and experiential learning to emphasize the acquisition of leadership skills at all levels of cognition. In addition, more research should be conducted to evaluate the effectiveness of this curriculum on cognition.

In terms of research objective four, leadership activities desired by urban agriculture students, the location that received the highest preference for leadership training was agriculture classes. Although students gave agriculture classes marginal ratings as a current opportunity to learn and practice leadership skills, this location may be an area students would like to see further utilized for training. In addition, chapter and officer meetings were among the top preferences for leadership training locations. Interestingly, the three items in this section most directly associated with their school, namely ag classes, chapter, and officer meetings, also rated high as preferences for location. However, it must be noted that sports and core classes, items that were listed in the sections for learning and practicing leadership skills, were not included as items in this section. These two items, also directly associated with their school, may have been preferred locations as well. Therefore, future assessments should include sports and core classes in order to determine if the high rating is exclusive to agricultural and FFA related locations.

Finally, the five items (i.e., interactive, organized, fun, real-world application, and group work) rated by the students as the most important factors to the quality of a leadership training experience support previous research on indicators of effective practices for teaching agriculture (Cruickshank, 1990). In particular, Newcomb, MaCracken, Warmbrod, and Whittington (2004) addressed three principles related to the these factors

identified in the present study: (1) subject matter must possess meaning, organization, and structure (organization); (2) students must be motivated to learn by taking into account their interests, desires, needs, and aspirations (fun & real-world application); and (3) students should "inquire into" versus being "instructed in" the subject matter (interactive).

A key goal of career and technical education is to align students' educational and career ambitions (Ryken, 2006). Through experiential learning, agriculture students have the opportunity to build academic, personal, and social competencies (Grubb, Badway, Bell, & Kraskouskas, 1996; Hamilton & Hamilton, 1997; Schneider & Stevenson, 1999). However, to fully benefit from these experiences, students need to be engaged in every aspect of the learning process. To be productive, developing leadership skills is equally as important as acquiring content knowledge. As the face of agricultural education transforms, it is critical that we modify the way youth are prepared to become productive citizens. If the U.S. is to continue to maintain and improve its position in the global market, today's youth, who are tomorrow's workforce, must participate in activities that promote the development of civic investment and workplace competencies by becoming involved with their school and community. They must also be introduced to experiences that are innovative and perceived as relevant to their career aspirations. The experiences provided for them today must allow them to explore their interests, discover their authentic selves, develop autonomy, and increase their decision-making power in a steadily advancing and nonthreatening environment.

References

Blustein, D. L., Phillips, S. D., Jobin-Davis, K., Finkelberg, S. L., & Roarke, A. E. (1997). A theory-building investigation of the school-to-work transition. *The Counseling Psychologist, 25,* 364-402.

Conner, J. O., & Strobel, K. (2007). Leadership development: An examination of individual and programmatic growth.

Journal of Adolescent Research, 22(3), 275-297.

Crain, R. L., Allen, A., Thaler, R., Sullivan, D., Zellman, G. L., Warren Little, J., et al. (1999). *The effects of academic career magnet education high schools and their graduates* (MDS-779). Berkeley, CA: National Center for Research in Education.

Cruickshank, D. R. (1990). *Research that informs teachers and teacher educators.* Bloomington, IN: PHI DELTA KAPPA.

Des Marais, J., Yang, T., & Farzanehkia, F. (2000). Service-learning leadership development for youths. *Phi Delta Kappan, 81*(9), 678-680.

Fertman, C. I., & Chubb, N. H. (1993). The effects of a psychoeducational program on adolescents' activity involvement, self-esteem, and locus of control. *Adolescence, 27*(107), 517-526.

Fertman, C. I., & Long, J. A. (1990). All students are leaders. *School Counselor, 37*(5), 391-396.

Finn, J., & Rock, D. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology, 82,* 221-234.

Fredricks, J. A., Blumenfield, P. B., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59-109.

Grubb, W. N., Badway, N., Bell, D., & Kraskouskas, E. (1996). *Community college innovations in workforce preparation.* Berkley: National Center for Research in Vocational Education, University of California.

Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M. Kamil & P. Mosenthal (Eds.), *Handbook of reading research* (Vol. 3, pp. 403-422). Mahwah, NJ: Lawrence Erlbaum.

Hamilton, M. A., & Hamilton, S. F. (1997). When is working a learning experience? *Phi Delta Kappan, 78*(9), 682-689.

Holland, A., & Andre, T. (1987). Participation in extracurricular activities in secondary school: What is known, what needs to be known? *Review of Educational Research, 57*(4), 437-466.

Long, J. A., Wald, H. P., & Graf, O. (1996). Student leadership. *Keystone Leader, 29*(1), 21-24.

McKinley, B. G., Birkenholz, R. J., & Stewart, B. R. (1993). Characteristics and experiences related to the leadership skills of agriculture students in college. *Journal of Agricultural Education, 34*(3), 76-83.

Modell, J., & Elder, G. H. (2002). Children develop in history: So what's new? In W. Hartup & R. Weinberg (Eds.), *Minnesota Symposia on Child Psychology: Vol. 32. Child psychology in retrospect and prospect: In celebration of the 75th anniversary of the Institute of Child Development* (pp. 173-205). Mahwah, NJ: Lawrence Erlbaum.

Moore, D. T. (1999). Toward a theory of work-based learning. *IEEE Brief, 23.* New York: Institute on Education and the Economy.

National FFA Organization. (2008). *About FFA: FFA & agriculture statistics.* Retrieved February 18, 2008, from http://www.ffa.org/index.cfm?method=c_about.stats

National Research Council. (1988). *Understanding agriculture: New directions for education.* Washington, DC: National Academy Press.

Newcomb, L. H., McCracken, J. D., Warmbrod, R., & Whittington, S. (2004). *Methods of teaching agriculture* (3rd ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Newmann, F. (1981). Reducing student alienation in high schools: Implications of theory. *Harvard Educational Review*, *51*, 546-564.

Ogbu, J. U. (1989). Cultural boundaries and minority youth orientation toward work preparation. In D. Stern & D. Eichorn (Eds.), *Adolescence and work: Influences of social structure, labor markets, and culture* (pp. 101-140). Mahwah, NJ: Erlbaum.

Ricketts, J. C., & Rudd, R. D. (2002). A comprehensive leadership education model to train, teach, and develop leadership in youth. *Journal of Career and Technical Education, 19*(1), 7-17.

Rudd, R. D., Baker, M. T., Hoover, T. S., & Yermal, C. (1998). Learning styles of selected Florida agricultural youth leaders. *Proceedings of the 48th Annual Southern Agricultural Education Research Meeting* (pp. 93-105). Little Rock, AK.

Ryken, A. E. (2006). "Goin' somewhere": How career technical education programs support and constrain urban youths' career decision-making. *Career and Technical Education Research*, *31*(1), 49-71.

Schneider, B., & Stevenson, D. (1999). *The ambitious generation: America's teenagers motivated but directionless.* New Haven, CT: Yale University Press.

Snow, R. E., & Yallow, E. (1982). Education and intelligence. In R. J. Sternbert (Ed.), *Handbook of Human Intelligence* (pp.

493-586). London: Cambridge University Press.

Stern, D., Raby, M., & Dayton, C. (1992). *Career academics: Partnerships for reconstructing American high schools*. San Francisco: Jossey-Bass.

Taylor, J. M., Gilligan, C., & Sullivan, A. M. (1995). *Between voice and silence*. Cambridge, MA: Harvard University Press.

Ulmer, J. D., Anderson, J. A., II, Torres, R. M., & Ulmer, A. M. (2006). *National youth leadership assessment of agriculture students.* Presented at the AAAE North Central Agricultural Education Research Conference, Ames, IA.

van Linden, J. A., & Fertman, C. I. (1998). *Youth leadership: A guide to understanding leadership development in adolescents.* San Francisco: Jossey-Bass.

Wingenbach, G. J., & Kahler, A. A. (1997). Self-perceived youth leadership and life skills of Iowa FFA members. *Journal of Agricultural Education*, *38*(3), 18-27.

Worthington, R. L., & Juntunen, C. L. (1997). The vocational development of non-college bound youth: Counseling psychology and the school-to-work transition movement. *The Counseling Psychologist, 25,* 323-363.

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