by Valerie McGaha and Jacki Fitzpatrick

Employment, Academic and Extracurricular Contributors to College Aspirations

Abstract

Although there have been many studies on college entrance and aspirations, little attention has been paid to post-high school adults (who enter the workworld rather than college). It is possible that post-high school adults still have college aspirations, and it would be valuable to identify the factors that foster such aspirations. This study examined how employment (e.g., job satisfaction), applied academic (e.g., math and literacy skills), and extracurricular (e.g., sports, books, volunteerism) factors contributed to aspirations. The results indicated that all three types of factors affected aspirations in unique ways. The results are interpreted in the context of prior research and implications for college recruitment and outreach are offered.

Contributors to College Aspirations

College continues to play a vital role in the personal and professional development of young adults. College education is concentrated on the dual focus of a well-rounded education and offering courses that target specific community or individual needs (Mangan 2007). Some benefits of attending college are increased earning power (Light & Strayer 2004), professional growth, enhanced health, improved quality of life (Institute for Higher Education Policy 1998), and increased participation in community service (Marks & Jones 2004). Many individuals who are not currently attending college agree that postsecondary education is essential to improving their careers and seeking lucrative employment (Lindholm 2006).

Yet, not everyone has a direct (or perhaps equal) path to college entry (Patterson 2007). Despite the gains of attending college, many individuals may not seek postsecondary education directly from high school (e.g., Crume 2005). Rather, they might enter the work world to engage in full-time employment. While some of these individuals might have no interest in attending college, many employed individuals have college aspirations. When they attend college, they will join the growing population of nontraditional students. Similar to other types of nontraditional students (e.g., Jones & Gloeckner 2004), college admission officers would be more effective if they better understood these individuals' circumstances.

The purpose of this study was to examine the factors that affect college aspirations among employed individuals. More specifically, we addressed the following research question: To what extent do employment, applied academics and extracurricular activities contribute to college aspirations for employed young adults? By addressing this question, we can identify issues that might be relevant to recruitment and entry into the college system.

Educational Aspirations

Educational aspirations refer to the highest educational level individuals expect to achieve (Akande 1987). Thus, the higher the aspirations, the more advanced degrees individuals want to attain. Many students identify academic achievement as an important value (Robbins, Wallis & Dunston 2003). According to Dounay (2006), one in three individuals obtains a college degree. So, it is not unreasonable to propose that aspirations serve as a motivational factor in many students' educational success.

Past research on aspirations has typically focused on structural factors (e.g., social class, economics, school system resources). For example,

Ali and McWhirter (2006) reported that educational aspirations are positively associated with socioeconomic status (SES) and financial resources. In addition, students have increased aspirations when their parents are more educated and have higher SES (Bohon, Johnson, & Gorman 2006). In reference to school systems, Griffin, Allen, Kimura-Walsh and Yamamura (2007) found that high school students with higher aspirations are more likely to be involved in AP courses, have increased access to counselors, gain sufficient knowledge on college preparation or adjustment, and receive information from parents and peers regarding the college environment.

Similar to Patterson (2007), prior studies indicated that students with structural advantages have high aspirations. However, such studies might reveal little about students who don't have a desire or opportunity to enter college immediately after high school. Indeed, it is possible for aspirations to develop from a variety of venues or experiences after high school. For example, Crume (2005) argued that college aspirations might increase as young adults gain employment, learn a new skill or seek hobby-related interests. So, it is important to identify factors that might affect aspirations for post-high school employed adults.

Employment

Employment is a common endeavor for adults who don't attend college. Among high school graduates who were not enrolled in college in 2006, approximately 76 percent were employed (Bureau of Labor Statistics 2007). The number of weekly work hours increases as the likelihood of college attendance decreases (Ali & McWhirter 2006; Messersmith & Schulenberg 2008; Staff & Mortimer 2007).

Such employees are more likely to lack basic academic skills, increasing the chances of maintaining transitional jobs, such as fast food preparation (e.g., Carnevale 2008). Researchers have also found that increased hours of employment for high school students contribute to decreased aspirations and lowered confidence (Ali & McWhirter 2006). Compared to males, fewer female post-high school students are likely to pursue employment. Rather, Cho (2007) reported that more females attend college to increase their marketable skills and opportunities in employment. (Bureau of Labor Statistics 2007)

Although employment may not be the recommended pathway to college entry, employment still offers benefits that can foster college success. For example, individuals who are employed are more likely to have advanced skills in responsibility, punctuality, interactive communication, patience, teamwork (Greifner 2006) and time management

(Staff & Mortimer 2007). Such skills would foster academic success when individuals enter college. In addition, work participation is associated with more academic motivation and college aspirations (Alfeld, Stone, Aragon, Hansen, Zirkle, Connors, Spindler, Romane, & Woo 2007). Thus, past research has been inconsistent, and it is not entirely clear whether employment helps or hinders aspirations.

Therefore, it might be worthwhile to examine specific aspects of employment. For example, it is possible that job training affects aspirations. As individuals receive more job training (which is a form of education – Heckman 1999), they might see the benefits of increased learning. Job training might also help young adults to see direct benefits of education that were not apparent to them in high school. In addition, individuals can gain dignity, meaning and security from training (Ayers, Miller-Dice & Carlone 2008), qualities which would serve them well in college. Thus, it is possible that job training fosters college aspirations.

A second employment factor is job satisfaction. It is possible that lower job satisfaction contributes to higher college aspirations. If individuals have low satisfaction, then they experience unpleasant work conditions (e.g., violated expectations, resentment, burnout) and might engage in lower-quality job performance (Turnley & Feldman 2000). Under such conditions, individuals might look for new opportunities beyond the specific employers, or beyond the workworld itself. As job satisfaction decreases, college could become an increasingly appealing option. In addition, individuals might see that college would give them the skills necessary for a different job (e.g., Carnavale 2008) that offers potentially more satisfaction.

Applied Academics – Math and Literacy Skills

Applied academics refer to the use of skills gained from education (Tapp 2004). Two types of applied academics are math and literacy skills (e.g., Burke 1990). Math and literacy skills are important factors in successful employment and college attendance. For example, adolescents who lack the ability to focus and read extensively may have difficulties in their transition to college (Rubin 2008). To date, there is an alarming need for K-12 educators to increase the proficiency of literacy, mathematics and technical skills (Dean & West 1999). Indeed, workforce development initiatives focus on the measurable skills for high school students to seek and maintain employment after graduation (e.g., Wagner, Wonacott & Jackson 2005).

There appear to be gender differences in skill retention. Females are more likely to retain academic skills longer than males, but females are less likely to find employment (Wagner, Spratt, Klein, & Essaki 1989). Thus, it is important to determine the conditions under which skills are learned and opportunities are available to skilled individuals. Employees who use math and literacy skills more frequently in

the workplace may have increased opportunities for advancement (Hutchinson, Anthony, Massaro, & Rogers 2007).

It is possible that math and literacy skills are positively associated with college aspirations. Similar to job training, skilled individuals might see the value of education in their career success. Thus, more education (e.g., college) might open pathways to accelerated success. This pathway process might be particularly appealing if universities focus on the math skills that individuals actually use in daily life (e.g., Burke 1990).

Extracurricular Activities

Extracurricular activities refer to the participation in school and neighborhood activities (Barnett 2007; Shannon 2006). Individuals who were involved in extracurricular activities during high school are more likely to have higher GPAs (Feldman & Matjasko 2007), improved test scores, postsecondary aspirations (Lipscomb 2007), and improved literacy scores (Shulruf, Tumen, & Tolley 2008). After high school, research has found that involvement in extracurricular activities remains valuable for young adults, as they develop interests and define adult identity (e.g., Dix 2008).

Post-high school extracurriculars can be beneficial, as individuals develop enhanced skills that would promote college success. For example, they can develop increased emotional regulation, teamwork, social skills, and interpersonal involvement (e.g., Hansen & Larson 2007). Extracurricular involvement might be particularly valuable for students from underrepresented groups. Minority students who take leading positions in extracurricular activities are more likely to succeed in college (Bridgeman & Wendler 2004). If extracurriculars are a venue for students to build confidence, skills and interests, then it might actually promote their college aspirations. This premise is consistent with Crume's (2005) argument that young adults can be better prepared for college if they pursue other activities after high school. If extracurricular activities help students during this interim period (after high school, before college), then they might have a more positive view of their college preparedness and increased aspirations.

The Current Study

In sum, prior studies have focused on a variety of factors that affect college aspirations. Much of the prior literature focuses on the immediate transition directly from high school to college (e.g., Mattson 2007). Such studies have made substantial contributions to the college admission literature. However, these studies might not be reflective of students who might take a more indirect path (e.g., go to work after high school and consider college at a later date). The purpose of this study was to address this gap in the literature. More specifically, this study focused on the relationship among applied academics, extracurriculars, employment and aspirations for post-high school individuals.

Given the limited prior research on this topic, there was not a sufficient foundation to generate specific hypotheses. So, this study addressed the following research question: To what extent do employment, applied academics and extracurricular activities contribute to college aspirations for employed young adults?

Method

Sample and Procedure

This study was a secondary data analysis. Data used in this study came from the National Educational Longitudinal Study (NELS) fourth follow-up wave conducted by the National Center of Educational Statistics (NCES). The first wave of NELS was conducted in 1988. Data were collected from 24,599 eighth-grade participants. The participants had an opportunity to complete a follow-up survey every few years. The fourth follow-up wave was conducted in 2000. In this wave, the respondents completed a questionnaire that assessed educational, vocational and personal involvement beyond high school.

For the current study, a subsample was selected (See Table 1). The subsample was limited to respondents who were currently employed and not in college. This generated a group of 9,139 respondents (4,767 males, 4,372 females). Seventy-six percent were non-Hispanic White, 10 percent were African-American, five percent were Asian, two percent were Native American/Alaskan Native, one percent were Native Hawaiian/Pacific Islander, and seven percent identified their racial or ethnic identity as "other". Fifty-four percent were single,

39 percent were married, one percent were separated, five percent were divorced, and one percent were in "marriage-like" relationships.

Measures

College Aspirations

To assess college aspirations, a one-item measure was utilized. More specifically, respondents identified their highest educational aspirations by age 30. The aspirations represented the most advanced degree that they hoped to attain. Respondents selected only one of ten options (e.g., 1="GED", 2="high school", 3="vocational", 4="less than two years college", 5="bachelor", 6="finish BA", 7="post-bach", 8="masters", 9="Ph.D.", 10="MD, LLD, JD, DDS, or equivalent"). Thus, a higher score represented higher college aspirations.

Employment - Job Training Impact

To measure job training impact, a five-item scale was generated from single-item questions. The five questions focused on benefits gained from job training (e.g., better job, higher salary, more responsibility, promotion opportunity, better job performance). For each item, the respondents indicated the degree to which the job training had a positive impact (e.g., "Would you say that the job-related training that you have received in the last 12 months has resulted in more opportunities for promotion?"). The items were summed to create a single summary score for each respondent. The summed items were internally consistent (r=.95). Across respondents, higher scores represented a stronger positive impact.

Employment - Job Satisfaction

A similar procedure was used to assess job satisfaction. More specifically, eight job items (pay, fringe benefits, work importance, promotion opportunity, use of past training, job security, further training, overall satisfaction) were summed to create a single satisfaction score. Respondents rated each item on a two-point scale (e.g., "How satisfied are you with the work importance of your job?" - 0="dissatisfied", 1="satisfied"). The Cronbach's alpha for the scale was .78. Higher scores represented more job satisfaction.

Applied Academics – Math and Literacy Skills

In the initial survey, three survey items were utilized to measure respondents' use of math skills in employment settings. Similarly, three items were used to assess literacy skill use. For the current study, we initially summed the items to create a math scale and a literacy scale. However, the scales did not have high reliability values (r=.70 and .66, respectively). So, each survey item was treated as a separate variable.

Three dimensions of math skills were assessed: (a) read/fill out bills; (b) measure/estimate size; and (c) calculate specification (e.g., Sample Item - "How often in a typical week do you read/fill out bills?"). Participants responded to each question on a three-point Likert scale (0="never," 2="a lot"). Thus, higher scores indicated more frequent use of applied math skills at work.

Similarly, three dimensions of literacy skills were assessed: (a) reading letters, memos and reports; (b) reading manuals; and (c) writing letters (e.g., Sample Item - "How often in a typical week do you read letters, memos or reports?"). The respondents indicated on a three-point Likert scale (0="never," 2="a lot") how frequently they utilized each skill. Higher scores represented more frequent literacy skill use.

Extracurricular Activities

Extracurricular activities can be quite diverse. As it is not known which specific extracurriculars affect college aspirations, several different activities were utilized in the current study. Similar to math and literacy skills, each of 13 activities was treated as a separate variable. The extracurricular activities assessed in this study were: (a) read papers/magazines; (b) read books; (c) use computer at home; (d) use internet for information; (e) watch TV news; (f) engage in physical fitness; (g) go to public library; (h) attend plays/concerts; (i) engage in organized religion; (j) participate in sports; (k) volunteer at youth center; and (l) participate in political campaign (e.g., Sample Item - "How many days in a typical week do you participate in physical fitness activities?"). Respondents indicated their level of involvement an eight-point Likert-scale (0="never," 7="seven days a week"). Higher scores represented more frequent engagement in each extracurricular activity.

Results

To address the research question, a regression analysis was performed. The regression analysis was appropriate because it allowed us to examine simultaneously the contribution of each type of variable (employment, applied academics, extracurriculars) to college aspirations. Given that prior research revealed gender differences in college aspirations or attendance, we entered gender as a control variable. In addition, we entered prior undergraduate activities as a control variable. ["Prior undergraduate activities" means that respondents entered college at one point, but did not complete a degree and are not in college now.]

Collectively, all of the factors accounted for 16 percent of the variation in educational aspirations. [In Table 2, the asterisks indicate which factors most strongly affected aspirations.] Higher college aspirations were associated with (a) prior undergraduate activities, (b) more job training impact, (c) less job satisfaction, (d) less measurement/estimation math skills used at work, and (e) engaging more frequently in four extracurricular activities [reading books, engaging in physical fitness, going to the library, volunteering at a youth center]. More detailed information about the data analysis or results is available from the authors upon request.

Discussion

Mattson (2007) argued that college administrators need to increase their understanding of the pre-college factors that might be relevant to college admission and success. The current study was consistent with Mattson's argument, in that it examined how three types of post-high school factors (employment, applied academics and extracurriculars) affected college aspirations. The findings indicated that all three types of factors were relevant. These results are consistent with Kelsay's (2007) argument that young adults choose to attend college based on several factors, rather than a single factor. Thus, studies that examine multiple variables might elucidate post-high school adults' intentions to attend college.

In reference to employment factors, job satisfaction was negatively associated with educational aspirations. Individuals who are less satisfied in their employment are more likely to aspire towards postsecondary education. It is possible that young adults had unrealistic thoughts and expectations about the work world (Sampson, Peterson, Lenz, Reardon, & Saunders 1998), which could have adversely affected job satisfaction. As individuals become dissatisfied, they can become more creative (Zhou & George 2001) and consider other options (such as attending college). Thus, lower job satisfaction might have motivational benefits. In addition, young adults might see a potential glass-ceiling effect (Cotter, Hermsen, Ovadia, & Vanneman 2001). Despite their low satisfaction with the current job, they might see that moving to a higher-level position is potentially more satisfying.

However, a higher position might require a college degree. Thus, college might be seen as a tool on a career ladder that might overcome their current job dissatisfaction. Similarly, job training impact was associated with higher aspirations. As previously noted, training might help individuals experience personal and professional benefits of education (Ayers, Miller-Dice & Carlone 2008). In this way, job training might be a gateway to pursuing a college degree.

In reference to applied academics, one math skill (measure/estimate items) was associated with lower college aspirations. One explanation is that math competence might show individuals that they don't need advanced degrees to succeed at work. Alternatively, more math work might have a dampening effect. Although measurement is an extremely important work task, it is possible that some individuals experience measurement tedium over time. If young adults find the math work tedious, then they might become less motivated. Indeed, tasks that don't stimulate individual's interest may result in boredom and lack of performance (Dyer-Smith & Wesson 1997). Boredom or malaise might generalize to other areas in their lives, including educational aspirations.

In contrast to math skills, none of the literacy skill factors were uniquely related to aspirations. It is possible that the specific literacy skills seem irrelevant to a college education. Thus, there might be other literacy factors that were not assessed in the current study which have more predictive value (e.g., reading comprehension). This argument is consistent with studies that have reported that individuals can increase writing proficiency (Spycher 2007), and enhanced literacy skills are associated with increased aspirations (Feiler & Logan 2007).

In reference to extracurricular activities, four variables (reading books, going to the public library, engaging in physical fitness, volunteering at a youth center) were associated with higher aspirations. It seems logical that individuals who read and go to libraries have stronger aspirations. If they use books or libraries as a source of intellectual stimulation, then college might be very appealing to them. Indeed, they might already be engaging in self-education (e.g., Schunk & Zimmerman 1994). It is less obvious why physical fitness is related to aspirations. It is possible that exercise reflects part of a larger self-improvement effort. If this is true, then fitness and education could go hand-in-hand. In addition, extracurricular involvement may offer an outlet for individuals who are faced with multiple stressors. As they learn to manage stress, they might be more prepared to face bigger challenges (e.g., pursuing a college degree).

The volunteer work might reflect positive qualities that can enhance educational motivation. That is, young adults might have a desire to help others, and see that an advanced degree would increase their opportunities to improve social conditions. Thus, just as admission

officers can have an ethic of help that enhances their ability to serve students (Patterson 2007), young adults can have an ethic of help that enhances their aspirations. This argument supports Lipscomb's (2007) findings that individuals' involvement in activities was positively related to improved test scores and postsecondary aspirations. The extracurriculars also fit Dix's (2008) argument that young adults can use diverse avenues and activities to find their authentic selves.

Implications for Practice

According to Kelsay (2007), universities have to be proactive in reaching potential students and providing the information that they want or need. As the student body becomes more diverse and individuals take multiple pathways to college, admission officers are challenged to create systems that balance students' needs with institutional needs (Wang & Pilarzyk 2007). It is understandable that officers might not have known where to contact adults about their college interests after they left high school. However, the results of this study might offer some clues.

First, the results revealed that employed young adults indeed have educational aspirations. It does not appear that the employment track has ended their college dreams. Indeed, some work conditions even enhance their aspirations. Thus, it might be worthwhile for recruiters to collaborate with local employers to share information about educational options. In addition, colleges and employers might cooperate on some issues (e.g., course schedules) for individuals who want to remain employed while attending college. Similar to other policy issues (e.g., Jones & Gloeckner 2004), admission offices might want to evaluate their policies on college credit for work experience.

Second, extracurricular activities contribute to aspirations as well. Although, it might be common to dismiss extracurricular activities as purely recreational, it appears that such activities might have more value than presumed. Thus, recruiters might also want to consider recreational settings (e.g., gyms, fitness Web sites) as potential venues to advertise what colleges have to offer. Similarly, community centers might be particularly valuable sites as young adult volunteers might already have some qualities (e.g., motivation, communication, team skills) that would serve them well in college. Similar to work credit, admission officers might evaluate policies on course credit for volunteer work. This might be particularly appealing to young adults who have made an extensive investment (e.g., time, effort, training) in their communities.

Third, it might be worthwhile to explore the relationship between applied academics and aspirations more closely. Consistent with Burke (1990), it is possible that individuals might actually be more interested in studying math if colleges focus on math skills that are used on a daily basis. Middleton and Midgley (2002) reported individuals

seek education to improve and develop their skills. So, if college officers can demonstrate how advanced education will help adults develop relevant skills, then it might be possible to build aspirations.

Conclusion

According to Buster-Williams (2007), moving students through the college admission process to active college engagement is a complex process. Just as the process is complex for other nontraditional students (e.g., Jones & Gloeckner 2004), it could be challenging for young adults who do not enter college directly after high school. However, the current study revealed that such adults can still have college aspirations, and that multiple factors (employment, applied academics, extracurriculars) affect these aspirations. Thus, there might be several different pathways to college for these young adults. Individuals who are not enrolled in college now may feel more empowered by work or extracurricular conditions to enter in the future. Thus, admission officers might benefit by being more mindful of the post-high school conditions that could facilitate college entrance of the current generation.

Table 1: Demographic Characteristics of the Sample

	Frequency	Percent
Gender		
Male	4767	52
Female	4372	47
Ethnicity		
Non-Hispanic White	6941	76
African American	881	10
Native American/Alaskan Native	159	2
Asian	440	5
Native Hawaiian/Pacific Islander	116	1
Other	602	7
Marital Status		
Single (Never Married)	4935	54
Married	3569	39
Divorced	429	5
Separated	122	1
Widowed	3	0
Marriage-like relationship	81	1

Table 2: Beta Values for Regression of Educational Aspirations on Control, Employment, Applied Academic and Extracurricular Variables

Variables	Betas (ß)
Control	
Gender (male/female)	.01
Prior undergraduate activities	.25***
Employment	
Job training impact	.08***
Job satisfaction	-.06***
Applied Academics (Math)	
Read/fill out bills	-.02
Measure/estimate item size	-.04***
Calculate specifications	-.01
Applied Academics (Literacy)	
Read letters, memos, reports	.04
Read manuals	.03
Write letters	.02
Extracurricular Activities	
Read papers/magazines	.01
Read books	.07***
Use computer at home	.02
Use internet for information	.03
Watch TV news	.00
Engage in physical fitness	.04***
Go to public library	.08***
Attend plays, concerts	.01
Engage in organized religion	-.01
Participate in sports	.03
Volunteer at youth center	.06***
Participate in political campaign	.02

*p < .05 ***p < .001

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REFERENCES

Akande, B. 1987. Rural-urban comparison of female educational aspirations in south-western Nigeria. *Comparative Education* 23: 75-83.

Alfeld, C., Stone, J., Aragon, S., Hansen, D., Zirkle, C., Connors, J., Spindler, M., Romane, R., & Woo, H. 2007. *Looking inside the black box: The value added by career and technical student organizations to students' high school experience.* Minneapolis, MN: National Research Center for Career and Technical Education. (ERIC Document Reproduction Service No. ED497343).

Ali, S. R., & McWhirter, E. H. 2006. Rural Appalachian youth's vocational/educational postsecondary aspirations: Applying social cognitive career theory. *Journal of Career Development* 33: 87-111.

Ayers, D., Miller-Dyce, C., and Carlone, D. 2008. Security, dignity, caring relationships and meaningful work. *Community College Review* 35: 257-276.

Barnett, L. 2007. "Winners" and "losers": The effects of being allowed or denied entry intocompetitive extracurricular activities. *Journal of Leisure Research* 39: 316-341.

Bohon, S. A., Johnson, M. K., & Gorman, B. K. 2006. College aspirations and expectations among Latino adolescents in the United States. *Social Problems* 53: 207-225.

Bridgeman, B., & Wendler, C. 2004. *Characteristics of minority students who excel on the SAT and in the classroom. Policy information report.* Princeton, NJ: Educational Testing Service. (ERIC Document Reproduction Service No. ED485191).

Bureau of Labor Statistics. (2007, April 26). *College enrollment and work activity of 2006 high school graduates.* (Bureau of Labor Statistics News, No. USDL 07-0604). Washington, DC: Bureau of Labor Statistics. (ERIC Document Reproduction Service No. ED498826).

Burke, P. 1990. Math that adults need. *Journal of College Admission* 128: 18-20.

Buster-Williams, K. (2007). An admission metaphor: Who moved my cheese? *Journal of College Admission* 197: 4-5.

Carnevale, A. P. (2008). College for all? *Change: The Magazine of Higher Learning* 40: 22-31.

Cho, D. (2007). The role of high school performance in explaining women's rising college enrollment. *Economics of Educational Review* 26: 450-462.

Cotter, D., Hermsen, J., Ovadia, S., & Vanneman, R. 2001. The glass ceiling effect. *Social Forces* 80: 655-682.

Crume, R. (2005). Is that child really ready for college? *Journal of College Admission* 188: 31-32.

Dean, B., & West, R. (1999, November). *Characteristics of viable and sustainable workers for the Year 2015.* Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Point Clear, AL. (ERIC Document Reproduction Service No. ED435838).

Dix, W. M. (2008). Footsteps in the hall: The college admission process as existential crisis. *Journal of College Admission* 198: 2-3.

Dounay, J. (2006, August 1). *Involving families in high school and college expectations.* Denver, CO: Education Commission of the States. (ERIC Document Reproduction Service No. ED493715).

Dyer-Smith, M., & Wesson, D. 1997. Resource allocation efficiency as an indicator of boredom, work performance and absence. *Ergonomics* 40: 515-521.

Feiler, A., & Logan, E. 2007. The literacy early action project (LEAP): Exploring factors underpinning progress with literacy for a child in his first year of school. *British Journal of Special Education* 34: 162-169.

Feldman, A. F., & Matjasko, J. L. (2007). Profiles and portfolios of adolescent school-based extracurricular activities participation. *Journal of Adolescence* 30: 313-332.

Greifner, L. (2006). College-admissions experts differ on value of summer employment. *Education Week* 25(44): 31.

Griffin, K. A., Allen, W. R., Kimura-Walsh, E., & Yamamura, E. K. 2007. Those who left, those who stayed: Exploring the educational opportunities of high-achieving Black and Latina/o students at magnet and nonmagnet Los Angeles high schools (2001-2002). *Journal of the American Educational Studies Association* 42: 229-247.

Haas, T. 1992. *What can I become: Educational aspirations of students in rural America,* ERIC Digest. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED345931).

Hamilton, G. (2002, July). *Moving people from welfare to work: Lessons from the National Evaluation of Welfare-to-Work Strategies.* Washington, DC: Department of Health and Human Services. (ERIC Document Reproduction Service No. ED469794).

Hansen, D. M., & Larson, R. W. 2007. Amplifiers of developmental and negative experiences in organized activities: Dosage, motivation, lead roles, and adult-youth ratios. *Journal of Applied Developmental Psychology* 28: 360-374.

Hauser-Cram, P., Durand, T. M., & Warfield, M. E. (2007). Early feelings about school and later academic outcomes of children with special needs living in poverty. *Early Childhood Research Quarterly* 22: 161-172.

Heckman, J. (1999). Doing it right: Job training and education. *Public Interest*, 135, 86-107.

Hoover, E. (2007). How applying to college shapes students: Study finds "formative experience," frustration for brightest applicants. *Chronicle of Higher Education*, 54(5), A1.

Hui, A., & Lau, S. (2006). Drama education: A touch of the creative mind and communicative-expressive ability of elementary school children in Hong Kong. *Thinking Skills and Creativity*, 1, 34-40.

Hutchinson, D., Anthony, W., Massaro, J., & Rogers, E. S. 2007. Evaluation of a combined supported computer education and employment training program for persons with psychiatric disabilities. *Psychiatric Rehabilitative Journal* 30: 189-197.

Institute for Higher Education Policy. 1998. *Reaping the benefits: Defining the public and private value of going to college.* Washington, DC: Author.

Jimerson, L. (2007, March). Slow motion: Traveling by school bus in consolidated districts in West Virginia. Arlington, VA: Rural School and Community Trust. (ERIC Document Reproduction Service No. ED499440).

Jones, P., & Gloeckner, G. 2004. A study of admissions officers' perceptions of and attitudes toward homeschool students. *Journal of College Admission* 183: 12-21.

Kelsay, L. S. 2007. Aftermath of a crisis: How colleges respond to prospective students. *Journal of College Admission* 197: 6-13.

Light, A., & Strayer, W. 2004. Who receives the college wage premium? Assessing the labormarket return to degrees and college transfer patterns. *Journal of Human Resources* 39:746-773.

Lindholm, J. 2006. Deciding to forgo college: Non-college attendees' reflections on family, school and self. *Teachers College Record* 108: 577-603.

Lipscomb, S. 2007. Secondary school extracurricular involvement and academic achievement: A fixed effects approach. *Economics of Education Review* 26: 463-472.

Madhere, S. 1999. Convergence and divergence in the process of academic development for black, white, and Hispanic high school students. *Journal of Education for Students Placed at Risk* 2: 137-160.

Mangan, K. 2007. Look who's minding the store. *Chronicle of Higher Education* 53(35): 19.

Marks, H. & Jones, S. 2004. Community service in the transition: Shifts and continuities in participation from high school to college. *Journal of Higher Education* 75: 307-339.

Mattson, C. E. (2007). Beyond admission: Understanding pre-college variables and the success of at-risk students. *Journal of College Admission* 196: 8-13.

Messersmith, E. E., & Schulenberg, J. E. 2008. When can we expect the unexpected? Predicting educational attainment when it differs from previous expectations. *Journal of Social Issues* 64: 195-211.

Middleton, M. J., & Midgley, C. 2002. Beyond motivation: Middle school students' perceptions of press for understanding in math. *Contemporary Educational Psychology* 27: 373-391.

Moreno, P. 2008. Incarcerated youths get a second chance with CTE. *Techniques Connecting Education and Career* 83: 18-21.

Patterson, S. 2007. Philosophically informed: Exploring the ethic of help. *Journal of College Admission* 196: 5-7.

Robbins, S. B., Wallis, A. B., & Dunston, K. T. 2003. Exploring the academic achievement and career aspirations of college-bound and postsecondary Zulu students. *The Counseling Psychologist* 31: 593-618.

Rubin, J. (2008). Judging our students – keeping it just: The theorem of intellectual measure. *Journal of College Admission* 199: 4-11.

Sampson, J., Peterson, G., Lenz, J., Reardon, R., & Saunders, D. 1998. The design and use of a measure of dysfunctional career thoughts among adults, college students and high school students: The Career Thoughts Inventory. *Journal of Career Assessment* 6: 115-134. Schunk, D., & Zimmerman, B. 1994. *Self-regulation of learning and performance: Issues and educational applications.* Boston: Lawrence Erlbaum.

Shannon, C. 2006. Parents' messages about the role of extracurricular and unstructured leisure activities: Adolescents' perceptions. *Journal of Leisure Research* 38: 398-420.

Shulruf, B., Tumen, S., & Tolley, H. 2008. Extracurricular activities in school: Do they matter? *Children and Youth Services Review* 30: 418-426.

Spycher, P. 2007. Academic writing of adolescent English learners: Learning to use "although." *Journal of Second Language Writing* 16: 238-254.

Staff, J., & Mortimer, J. T. 2007. Educational and work strategies to early adulthood: Consequences for educational attainment. Social Forces 85: 1169-1194.

Tapp, A. (2004). A call to arms for applied marketing academics. *Marketing Intelligence and Planning* 22: 579-590.

Turnley, W., & Feldman, D. 2000. Re-examining the effects of psychological contract violations: Unmet expectations and job dissatisfaction as mediators. *Journal of Organizational Behavior* 21: 25-42.

Wagner, D. A., Spratt, J. E., Klein, G. D., & Essaki, A. 1989. The myth of literacy relapse: Literacy retention among Moroccan primary school leavers. *International Journal of Educational Development* 9: 307-315.

Wagner, J., Wonacott, M., & Jackson, D. 2005. *Alternative education.* (YouthWork Information Brief No. 6). Columbus, OH: Center on Education and Training for Employment. (ERIC Document Reproduction Service No. ED490022).

Wang, Y., & Pilarzyk, T. 2007. Mapping the enrollment process: Implications of setting deadlines for student success and college management. *Journal of College Admission* 197: 24-33.

Zhou, J., & George, J. 2001. When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal* 44: 682-696.