

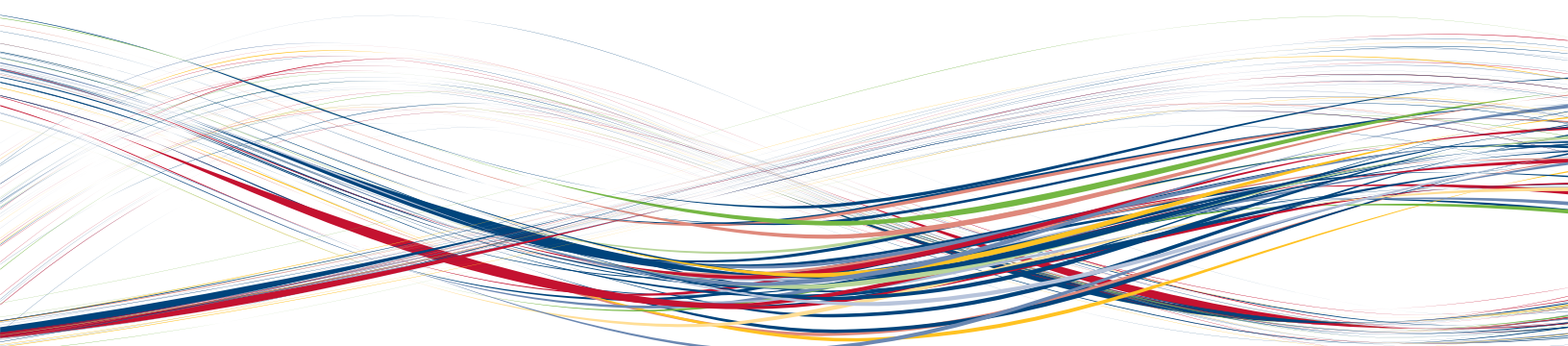
The Human Element

Mentoring in Youth Programs

A Research Study by the AIM Institute
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Executive Summary

For some time, staff at the AIM Institute have wanted to know how much one-on-one interpersonal coaching, or mentoring, contributes to student success in its federally funded “TRIO” school programs and the foundation-funded College Access Program. These programs are intended to help students succeed in school and go on to college; the students are economically disadvantaged, or come from families in which they would be the first college graduates, or both.

The Talent Search program serves a total of 900 students in several schools, while the College Bound Club and College Access Program serve 150. The format of Talent Search is a group-and-class setting and the format of College Bound and College Access emphasizes one-on-one tutoring and mentoring. Federal studies of mentoring in TRIO programs have concluded that it has only a small or moderate impact on student success, but AIM Institute staff thought it had a significant effect in the College Bound and College Access programs. However, the effect of mentoring had never been formally evaluated—that is the purpose of this study.

In December 2011 and January 2012, AIM Institute researchers conducted seven focus groups of student program participants and six group interviews with teachers who work part-time in the programs in one middle school and four high schools in the Council Bluffs-Omaha area. In addition, the study’s project lead conducted telephone interviews with school administrators, program staff, guidance counselors and a program graduate. Written questionnaires were collected from five program graduates.

The questions asked of study participants addressed the primary research question, “What are the effects of sustained interpersonal coaching in AIM’s school activities?” as well as four secondary research questions. The study’s findings can be summarized in two key areas.

Mentoring has important positive effects on student success in school.

Though study participants expressed a range of views, both program participants and staff believe that the mentoring relationship is very important to success in school. Program staff and teachers monitor grades, offer guidance and tutoring, and serve as liaison with classroom teachers on behalf of students. Mentoring appears to have important effects on students’ motivation to do well in school and on their grades. This effect is stronger in the College Bound and College Access programs because of the emphasis on the one-on-one connection, but it benefits students in Talent Search as well.

The on-site mentoring model is resource-intensive, but it is also effective in helping students prepare for college.

The Talent Search, College Bound, and College Access programs all help students understand the college experience, envision possible careers, and apply for scholarships and college admission. One-on-one mentoring plays a role in all the programs, but in College Bound and College Access it is especially powerful. Student appreciation for the support given them by mentors shows clearly in the studies’ findings. Though overall program effects cannot be attributed entirely to mentoring (and indeed a number of respondents thought that other program elements were of equal or greater importance), to quote language from the concluding section of this report, “Participants are not the same people at the end of their program experience they were at the beginning.”

Purpose of the Study

The AIM Institute’s research program addresses the “workforce pipeline,” with the goal of strengthening regional IT competitiveness by preparing young people for IT careers and supporting the careers of established IT professionals. The Institute has released research reports on women in IT leadership and youth perceptions of IT; this report examines the important issue of mentoring youth for the purpose of increasing college enrollment and completion.

AIM operates federally funded “TRIO” (Upward Bound and Talent Search) and foundation-funded (College Access Program, or CAP) programs focused on encouraging middle and high school students to succeed in secondary education and go on to college. (The term used to identify AIM’s Upward Bound program is “College Bound Club,” or CBC.) Talent Search serves middle and high school students and CBC and CAP serve high school students. In all three programs, students must be from lower-income families, or families in which they would be the first generation of college graduates, or both.

The College Access Program, funded by the Iowa West Foundation, is parallel in purpose and function to AIM’s College Bound Club. In both, the participants are students whose socio-economic and family backgrounds may be barriers to academic success. The federal website for the Upward Bound program describes its purpose and target population as follows:

Upward Bound provides fundamental support to participants in their preparation for college entrance. The program provides opportunities for participants to succeed in their precollege performance and ultimately in their higher education pursuits.

“... students must be from lower-income families, or families in which they would be the first generation of college graduates, or both.”

Upward Bound serves: high school students from low-income families; and high school students from families in which neither parent holds a bachelor’s degree. The goal of Upward Bound is to increase the rate at which participants complete secondary education and enroll in and graduate from institutions of postsecondary education. (U.S. Department of Education, <http://www2.ed.gov/programs/trioupbound/index.html>)

The Talent Search mission and target population are similar to those of the Upward Bound program:

The Talent Search program identifies and assists individuals from disadvantaged backgrounds who have the potential to succeed in higher education. The program provides academic, career, and financial counseling to its participants and encourages them to graduate from high school and continue on to and complete their postsecondary education. . . . The goal of Talent Search is to increase the number of youth from disadvantaged backgrounds who complete high school and enroll in and complete their postsecondary education. (U.S. Department of Education, <http://www2.ed.gov/programs/triotalent/index.html>)

The program can serve:

. . . students who are limited English proficient, students from groups that are traditionally underrepresented in postsecondary education, students with disabilities, students who are homeless children and youths, students who are in foster care or are aging out of the foster care system or other disconnected students. (U.S. Department of Education, <http://www2.ed.gov/programs/triotalent/index.html>)

The types of activities supported by Upward Bound are described by the U.S. Department of Education in this way:

Upward Bound projects provide academic instruction in mathematics, laboratory sciences, composition, literature, and foreign languages. Tutoring, counseling, mentoring, cultural enrichment, work-study programs, education or counseling services designed to improve the financial and economic literacy of students. (U.S. Department of Education, <http://www2.ed.gov/programs/trioupbound/index.html>)

And Talent Search activities are described as follows:

Projects provide tutorial services, career exploration, aptitude assessments, counseling, mentoring programs, workshops, information on postsecondary institutions; education or counseling services designed to improve the financial and economic literacy of students; guidance on and assistance in secondary school reentry, alternative education programs for secondary school dropouts, entry into general educational development programs or postsecondary education. (U.S. Department of Education, <http://www2.ed.gov/programs/triotalent/index.html>)

This study is about what AIM Institute staff have called “sustained interpersonal coaching,” that part of AIM’s school programs in which adults directly assist youth with academic and career development and preparation for college admission. Staff have observed over time that this “human element” in school programs appears to make a difference in the lives of participating students, but to date there has been no effort to assess the character or size of the difference.

AIM’s Upward Bound (CBC) and CAP programs include mentoring in several forms. On a monthly basis, students meet with program staff who work in local schools to

discuss and plan their education focus in high school (this program activity is called “Student-Teacher Education Plan,” or STEP). Weekly, they participate in a “Teacher-Mentor” meeting for purposes of academic assistance and problem intervention as needed. Four days each week, they take part in the “After-School Program” of tutoring and coaching related to life skills. In contrast to some other Upward Bound programs in which staff visit schools for scheduled program activities, AIM has program staff stationed in the schools with regular hours in addition to program activities.

The Talent Search program operates in an Omaha middle and high school and in a middle and high school in Council Bluffs. It offers 10 after-school activities related to academic skills, planning careers, and preparing for college. In contrast with the College Bound program, which serves 25 in each of two high schools and 50 in another, and CAP, which serves 35 students in one high school and 40 in another, the Talent Search program serves a total of 900 students, 300 in each of two middle schools and 300 in a high school. CBC and CAP students often remain in the programs for several years, while Talent Search students often participate in several events over a period of time, but the program does not include the sustained mentoring relationship found in CBC and CAP.

The research design for this study of the human element in school programs involves focus groups of youth participants in AIM’s College Bound, College Access, and Talent Search programs and interviews with program staff, teachers, administrators, guidance counselors, and program graduates. Because CBC and CAP include more intensive interpersonal mentoring, they offer a contrast with Talent Search, providing additional perspective on the human element. The research question and secondary research questions are:



Research Question

What are the effects of sustained interpersonal coaching in AIM's school activities?

Secondary Research Questions

1. Does sustained interpersonal coaching have specific effects on student continuation in education?
2. Do the activities influence students' career interests, and if so, how does this occur and which careers are involved?
3. To what extent is program success due to content and to what extent is it due to mentoring engagement by staff?
4. Can key success factors be expressed in a model or models that could be applied in other places or in other activities?

Studies of Mentoring in Federal Programs

Though this is the first time the AIM Institute has examined the human element in its school programs, there is a substantial body of related research literature that helps to inform the current study and put its findings in context.

There is a common belief that mentoring is generally effective and valuable in youth development. The authors of a report on a national survey of mentors in 2005 wrote that,

Youth development experts now agree that mentoring is a critical element in any child's social, emotional, and cognitive development. It builds a sense of industry and competency, boosts academic performance and broadens horizons. Without doubt, young people who have the benefit of caring adult mentors navigate the path to adulthood more successfully. (Mentor, 2005, p. 1).

Narrative from the Oregon Mentors Program describes the advantages of mentoring at the secondary school level as follows:

Mentoring has been shown to improve school performance and reduce illicit drug use, underage drinking, and violence among young people. Experts say that the key reason mentoring works is that it enhances an adolescent's self-esteem and instills a sense of hope for the future. Research consistently shows that relationships with caring adults, in addition to one's parents, can help a young person grow up healthy. These relationships provide a stable context for youth to build an identity beyond their family situations. Successful mentoring requires a trusting, long-term relationship between mentor and mentee. (<http://oregonmentors.org/programs/detail/132/>)

Rhodes and DuBois (2008) wrote that "Mentoring is one of the most popular social interventions in American society, with an estimated three million youth in formal one-to-one relationships" (p. 254). They noted that studies have shown "significant associations between youth involvement in mentoring relationships and positive developmental outcomes" (p. 254). They also cautioned, however, that these demonstrated associations "are modest," and "depend on several intervening processes" (p. 254).

In a meta-analysis of 55 evaluations of the effects of mentoring programs on youth, DuBois, Holloway, Valentine, and Cooper (2002) found "only a modest or small benefit of program participation for the average youth" (p. 157). However, they also found enhancement of beneficial effects in the presence of programmatic "best practices," such as "ongoing training for mentors, structured activities for mentors and youth... expectations for frequency of contact," and so on (p. 187). A number of studies have focused on specific aspects of the mentoring relationship, finding that, among other effects, mentoring can: enhance attachment to parents, friendship with adults, and disclosure to adults (Thomson & Zand, 2010); produce "significant improvements in overall academic performance and prosocial behavior and marginally significant improvements in classroom effort and self-perceptions of academic abilities" (Schwartz, Rhodes, & Chan, 2011, p. 458); and prove important for "the psychological health" of youth "during this period of tremendous growth and change" (Spencer, 2006, p. 313).

The picture that emerges from this research literature is one of often modest effects in a complex setting with a variety of intervening factors, such as frequency and length of contact, programmatic practices, the age of mentors, and so on. The programmatic context of

research studies varies; Big Brothers Big Sisters has been a frequent site for research, as have other programs.

Evaluations of three U.S. Department of Education programs are especially applicable to the current study of the human element in AIM Institute programs. One is the “Student Mentoring Program” authorized by the No Child Left Behind Act of 2002. This program “addresses the lack of supportive adults at critical junctures in the lives of students at risk by providing funds to schools and to community-and-faith-based organizations to create school-based mentoring programs targeting children in grades 4-8” (U.S. Department of Education, 2009a, p. xiv).

The program pairs volunteers, who may be high school or college students as well as adults, with mentees during the school year, generally for one hour per week. The evaluation report notes that earlier research has found that school-based mentoring may not be as effective as community-based mentoring, in part because mentoring relationships are interrupted by the schedule of the school year, and in part because volunteers who are students do not form longer-term relationships with mentees (U.S. Department of Education, 2009a, pp. xiii-xiv).

The evaluation studied 32 programs nationwide with 2573 participants, focusing on 17 specific impacts over three “domains”: academic achievement and engagement; interpersonal relationships and personal responsibility; and high-risk or delinquent behavior. The study found that “The Student Mentoring Program did not lead to statistically significant impacts on students in any of the three outcome domains” (U.S. Department of Education, 2009a, p. xx). There were some significant “subgroup effects,” such as improved academic outcomes for girls, negative effects on the “self-reported pro-social behavior” of boys, and a decrease in truancy for younger students (p. xxii). In addition, there were impacts at the site level,

both positive and negative. Two notable negative impacts were: “The frequency of mentor/supervisor meetings was negatively associated with site-level impacts,” and “The proportion of mentors aged 22 or younger was negatively associated with site-level impacts on math grades” (p. xxiii).

“Evaluations of three U.S. Department of Education programs are especially applicable to the current study of the human element in AIM Institute programs.”

The second applicable evaluation comes from Talent Search. In 2006, the U.S. Department of Education published an evaluation of the Talent Search programs in Florida, Indiana, and Texas. The data came from 60% of all Talent Search programs operating in the three states in 1995-1996, involving 6186 Talent Search participants. In addition, 54,529 students who were not in Talent Search programs

were used for purposes of comparison. The evaluators found significant programmatic effects in these three key areas:

Financial Aid Applications

Talent Search participants were more likely than nonparticipants from similar backgrounds to be first-time applicants for financial aid in the 1999–2000 school year. The difference in financial aid application for Talent Search participants and nonparticipants was 17, 14, and 28 percentage points, respectively, for Florida, Indiana, and Texas (Figure 1). The difference was smallest in Indiana, where we had the strongest measures of educational aspirations. Even in Indiana, however, the gap represents application levels for financial aid that are one-third higher for Talent Search participants. (U.S. Department of Education, 2006, p. xvii)

Postsecondary Enrollment

Talent Search participants were more likely than nonparticipants to enroll in a public college or university in their state by the 1999–2000 school year. Initial enrollment in a postsecondary institution was higher by 14, 6, and 18 percentage points, respectively, for Florida, Indiana, and Texas. (p. xviii)

Enrollment in Two- Versus Four-Year Institutions

Talent Search participants were more likely to enroll in two-year and four-year institutions and the gains were larger and more statistically robust for two-year enrollment (Figure 3). Enrollment by type of institution (two- or four-year) was linked to the type of institution hosting the Talent Search project. In general, projects increased two- or four-year enrollment, but not both. Talent Search projects may have increased enrollment by exposure to their type of institution, or to their specific institution. (p. xviii)

In summary, the evaluators wrote that:

The findings we present in this report suggest that assisting low-income students who have college aspirations to overcome information barriers—an important objective of the Talent Search program—may be effective in helping these students achieve their aspirations. Practical information—direct guidance on how to complete applications for financial aid and admission to college and what a college campus looks and feels like—may have been one of the key services that Talent Search projects delivered. (U.S. Department of Education, 2006, p. xxi)

The third program evaluation highlighted here is from Upward Bound. Though Upward Bound provides mentoring in schools, it is quite different from the Student Mentoring Program. Instead of youth in grades 4-8, it serves students in high school, services are provided by paid staff instead of volunteers, and the frequency of sessions with youth is greater. Beginning in 1991 and with a final report in 2009, the U.S. Department of Education commissioned a longitudinal evaluation of Upward Bound conducted by Mathematica Policy Research, Inc. (MPR). This complex study involved the use of control groups, surveys, reports from project staff, collection of data from transcripts and records of participation and financial aid, and so on. The research questions addressed in the final

report of the study (U.S. Department of Education, 2009, p. xv) were:

- What effect does Upward Bound have on the likelihood of attending a postsecondary institution and on the highest level of postsecondary attendance?
- What is the effect of Upward Bound on the likelihood of attending a relatively selective four-year college or university?
- What is the effect of Upward Bound on the likelihood of receiving financial aid in college?
- What is the effect of Upward Bound on the likelihood of earning a postsecondary degree, certificate, or license?
- For which groups of eligible applicants are the effects of Upward Bound greatest?
- What is the effect of Upward Bound participation length and completion on postsecondary outcomes?

As might be expected, there were many methodological issues in a study of this size and duration that affect the clarity and certainty of results. Nevertheless, the main findings of the report are clearly stated (U.S. Department of Education, 2009, pp. xv-xvii) and worth summarizing here:

- **Upward Bound had no detectable effect on the rate of overall postsecondary enrollment or the type or selectivity of postsecondary institution attended for the average eligible applicant.**
- **Upward Bound had no detectable effect on the likelihood of applying for financial aid, or, the likelihood of receiving a Pell Grant.**
- **Upward Bound increased the likelihood of earning a postsecondary certificate or license from a vocational school. It had no detectable effect on the likelihood of earning a bachelor's degree or the likelihood of earning an associate degree.**
- **Upward Bound increased postsecondary enrollment or completion rates for some subgroups of students.** For example, in the subgroup of students with lower educational expectations at

baseline—that is, the students who did not expect to complete a bachelor’s degree—Upward Bound increased the rate of postsecondary enrollment and the likelihood of receiving a degree, license, or certificate by 6 and 12 percentage points, respectively, raising the overall postsecondary completion rate to about the level observed for students with higher expectations.

- **Longer participation in Upward Bound was associated with higher rates of postsecondary enrollment and completion.** An additional year of Upward Bound participation was associated with a 9 percentage point increase in the rate of enrollment at four-year institutions and a 5 percentage point increase in the likelihood of receiving a bachelor’s degree. Completing the Upward Bound program was associated with increases of 27 and 21 percentage points, respectively. These findings are based on nonexperimental methods, and the validity of causal inferences based on these estimates depends on the validity of strong assumptions.

Compared to other youth mentoring programs, Upward Bound is intensive in relation to frequency of contact, and it is focused on specific outcomes of academic success in high school and college. Overall program impacts are relatively modest

when measured over a long period of time on a national level. However, Upward Bound has shown significant impacts on postsecondary enrollment and the likelihood of receiving a degree for students who did not expect to complete a bachelor’s degree. In addition, longer participation is associated with greater success.

It is in this context that the current study seeks to identify the effects of mentoring by adult staff, as perceived

by Upward Bound and CAP program participants and program staff. The research design used here does not directly address some of the questions asked in the research reviewed above, but instead concentrates on an aspect of AIM’s intensive approach to Upward Bound that staff believe to be especially effective. The Talent Search program is used for comparison, since it also addresses postsecondary enrollment but does not include intensive mentoring.

There are techniques available for assessing the quality of mentoring relationships. They measure factors such as closeness, relational/experiential compatibility, and the mentor’s approach (Nakkula & Harris, 2005). The current study seeks to determine perceptions of program impact, but at some point it might be worthwhile to examine the quality of the connection between program staff and participants. For the present, we assume that AIM’s in-school staff are knowledgeable and diligent and that the quality of mentoring being delivered is high, with staff often assessing their work and making adjustments to maximize the quality and effectiveness of time spent with students.

“Overall program impacts are relatively modest when measured over a long period of time on a national level. However, Upward Bound has shown significant impacts on postsecondary enrollment and the likelihood of receiving a degree for students who did not expect to complete a bachelor’s degree.”

As discussed above, there are research studies that evaluate the effects of programs that include mentoring, but more needs to be done to understand how the quality and quantity of professional

mentoring in school programs affects outcomes such as grades, career choices, and college attendance. Hirsch and Wong (2005, p. 374) suggest that future research should use multiple methodologies, examine effects across environmental settings, and explore “the impact of program/organizational characteristics on mentoring in after-school settings. . . .” This study of AIM Institute programs addresses a portion of the issue of effects of mentoring on youth outcomes by documenting



how participants and program staff perceive the value of mentoring; it remains for later studies to explicitly connect the characteristics of mentoring to measurable outcomes. The information gathered from the current study could be especially useful in modifying programs or shaping new program initiatives.

Methodology

Two techniques were used to gather data for this study in December 2011 and January 2012. The first consisted of seven focus groups of student participants in the Talent Search, College Bound Club, and College Access Program, conducted in one middle school and four high schools in the Omaha and Council Bluffs urban areas. Students in the middle school are participants in the Talent Search program, as are students in one of the high school programs.

This high school is the only one that has all three programs: Talent Search, College Bound Club, and College Access Program. Three focus groups were conducted there, one for each program. Focus groups in the other three high schools included either CBC or CAP participants. In one additional middle school, interviews were conducted with Talent Search staff, teachers, and administrators, but no focus group was conducted because of difficulties in making arrangements.

In keeping with the AIM Institute Institutional Review Board approval of the study design for protection of human subjects, student volunteers were invited to participate in the focus groups by people other than field staff in a given school. No names were recorded or used in the process. Audio recordings were made of the group sessions so that transcripts could be prepared for accuracy in reporting. They were later erased and the transcripts contained no form of identification of participants. The findings of this report are presented in aggregate form so that individuals and schools are not identifiable.

The second technique consisted of interviews with teachers and teacher-mentors (people who work after

school hours, conducting activities in Talent Search and as mentors in the College Bound and College Access programs), AIM Institute site coordinators (the people who deliver programs in the schools), school administrators, guidance counselors, and program graduates (students who had been in one of the programs recently). All interviews other than the group interviews with teachers were conducted by telephone.

“Two techniques were used to gather data for this study in December 2011 and January 2012. The first consisted of seven focus groups of student participants in the Talent Search, College Bound Club, and College Access Program, conducted in one middle school and four high schools in the Omaha and Council Bluffs urban areas.”

Six interviews with teachers were conducted on-site in group form (in essence, a mini-focus group), with three or four participants (one group had six). Two of the groups included middle school teachers working in the Talent Search Program. Teacher-mentors in the other four groups work in high schools, in

the College Bound and College Access programs. There were guidance counselors in some of the teacher-mentor interview groups. One guidance counselor was interviewed individually who works in a middle school with Talent Search, and one counselor was interviewed individually from a high school with CBC.

Seven AIM staff members were interviewed who serve as program coordinators in the schools. Three administrators in two middle schools with Talent Search programs were interviewed; these were a Dean and an Assistant Principal in one school and an Assistant Principal in the other. Two Assistant Principals were interviewed from high schools with College Bound and College Access programs, and one principal was interviewed from a high school that has Talent Search, College Bound, and College Access programs.

A set of common questions were asked of all study respondents. They were structured to answer the research questions shown above and to address issues noted in the review of research literature on mentoring.

Unlike other study respondents, students in the focus groups were not asked whether mentoring or program activities were more important to their success (people in the programs now would not necessarily be able to judge that balance and it might be inappropriate to prompt them to think about the distinction). Also, they were not asked how the programs might be improved (they were, however, asked whether staff could do more in particular areas).

Two study questions were asked only in the focus groups. The first of these, Question #2 for the groups, explores the effects of the programs on students by asking: "Are there ways these activities have been helpful to you? If so, how?" The second question, #6 for the groups, addresses mentoring relationships with staff. It asks: "Please tell me about your interactions with the staff who support these activities, the site coordinators and after-school teachers. Have these interactions affected your outlook on things like your motivation at school, dealing with challenges, or how you feel about yourself?"

There were a total of 54 participants in the focus groups. Of these, 17 were male and 37 were female. 42 were Caucasian, 6 were African-American, 4 were Hispanic, and 2 were categorized as "other."

The study design included telephone interviews with graduates from the Talent Search, College Bound, and College Access programs. This proved to be logistically difficult, with the result that one telephone interview was completed with a College Bound graduate now in college and five written interview forms were completed by College Bound graduates, also in college. All report that they are succeeding in college and all give considerable credit to the College Bound program for their success.



Findings

Discussion of the study’s findings is organized around the questions asked. For each question, the narrative describes themes found in the responses from current program participants, graduates, staff, teacher-mentors, counselors, and administrators. In the following section of the report, conclusions are drawn about the findings and their potential implications for program design and student success.

Question: Why do students participate in the Talent Search and Upward Bound (CBC and CAP) programs; what motivates them to do so?

For Talent Search staff, teachers, and counselors, students come to their programs because it’s something to do instead of going home, there is excitement in new and different activities, and their friends are there. Some students have no one to go home to at that hour, since their parents are working, and some are attracted to the programs because they don’t fit into traditional types of activities, such as athletics or a math or chess club.

College Bound Club and College Access Program staff, teacher-mentors, and counselors have a somewhat different perspective. For them, students come to the programs because they want to go to college; students need to learn about the process of applying for scholarships and college admission, they want to improve their high school grades and, in general, they are focused on the future. They want to be successful and they know about careers they aspire to, but the road to achieving their goals is fuzzy. CBC/CAP helps them with college and career choices and finding the resources to go to college.

“Many participants come from families in which college is not part of the environment, so parents often don’t know how to help.”

Many participants come from families in which college is not part of the environment, so parents often don’t know how to help. A participant in a teacher-mentor interview session noted that some parents are resistant to their children going to college, but it is expected in their school that students will go to college. Some other parents express appreciation for the program, saying that without it, they would not know how to help and their child would not go to college.

Staff think that CBC/CAP provides a place that feels safe, commonality with other students, and connections with adults who care about them. They have College Prep sessions four days per week for an hour each and Saturday sessions 4-5 times per year (on topics such as leadership development); study time with teacher-mentors is often spent on improving grades in subjects such as English and math. Some students would be successful anyway, but the programs help them improve. They create relationships with staff and teacher-mentors, they see their peers as examples, and they spread information about the programs to students who are not participants.

The perspectives of Talent Search and CBC/CAP administrators largely paralleled those of staff, teachers, and counselors. Talent Search administrators said that students come to the programs because of activities such as “Science Rocks,” to get help with homework, for snacks, and for a sense of community, being with friends, and someone to depend on. CBC/CAP administrators said that students want to succeed, know they need help, and may not have much family support for their goals. The programs give them a comfortable, safe place with a small-group atmosphere and access to adults they trust to discuss problems and get academic help.

Middle school students in Talent Search focus groups said that the program activities given them something to do after school; one said that robotics sounded like fun. At the high school level, students said they can learn more, get to know other people, have new experiences, work with teachers, and learn about college first hand.

In the CBC/CAP focus groups, students said they were motivated to participate because the program is helpful, they enjoy the activities, it's fresh and fun, and they get to know people. Students are appreciative of the one-on-one assistance they receive from program teachers with all course subjects. Help with scholarships and choosing a college is central to the program experience for these students. One said, "They really help a lot with your future, going to college. We learn about how to get organized." Students noted the college visit experience, saying that it helps them decide where they want to go and they get useful information. Students also mentioned the value of the workshop that prepares them for the college-admissions ACT exam; it gives them helpful statistics and practice on test-taking strategies. The program is also helpful in setting career goals.

Graduates from one of the CBC schools noted several reasons for joining the CBC program. One said that as a first-generation college student, the program helped learn more about the college process. Another wrote that "it was something interesting." Another reason given was that "it gave me a chance to get to know people," and "to meet new friends." In preparation for the future, one wrote that it "helps me get well rounded and it looks good on my resume," "I wanted to go on to college to better myself for the future," and, "to be best prepared for college." There was also a family related reason: "to also be an example for my younger sister." One student said she "was introduced to the program by a student who was currently in the program. I attended as a visitor for a little while before I was accepted."

Question: How do respondents assess the impact of AIM's programs on the school experiences of participating students? Do they think participation affects students' grades, school attendance, and/or interactions with other students?

Some teachers in Talent Search are not aware of any specific evidence on improvement in student grades as a result of program participation, while others think that grades improve because of the extra time students have to study. One staff person has compared grades at the beginning, middle, and end of the year, finding that improvement seems to run in cycles; sometimes there is improvement and sometimes not, without apparent cause.

"Students are appreciative of the one-on-one assistance they receive from program teachers with all course subjects. Help with scholarships and choosing a college is central to the program experience for these students."

In CBC/CAP, staff and teacher-mentors emphasize working intensively with students, checking often on their grades and helping them improve. They will coordinate with guidance counselors and classroom teachers and overall this team is "vigilant" about student grades.

As an example, a staff person may discuss a student's grades with her or him, identify missing assignments in a particular class, and guide the student toward completing them. At the more reserved or skeptical end of a continuum assessing program effect on student grades, a staff member said it is uncertain how much improvement is due to program participation, but it seems to make a difference, through accountability and intervention. At the stronger end of this continuum, staff and teachers think there is a definite positive effect on grades. Parents say there has been improvement, students have pride in what they do and want to impress each other and staff/teachers, and being with other kids with positive goals has a reinforcing effect. One staff person said that CBC directly impacts grades and we expect students to improve, since it's the only way to get to college.

Grade improvement isn't all about monitoring and accountability. According to teacher-mentors, many CBC/CAP students are on the honor roll, and teacher-mentors give kids positive reinforcement by commending them for their progress. School administrators largely agree with staff and teachers about grades. Some note that they have not seen hard evidence of grade improvement and others assume that broader experiences and one-on-one attention are probably helpful.

A Talent Search high school focus group participant said that being in the National Honor Society helps keep her grades up. There was a range of responses in CBC/CAP focus groups about effects on grades. One student said it had no effect and "I pretty much maintain the same grades." Another said it helps to meet with a teacher-mentor to keep grades up, but they are good anyway. Other students said their grades have gone up, grades go down if they don't attend, it has helped them with harder classes, and grades have gone up with homework assistance. Students appreciate both the help with homework and the quiet space to get their work done. One CBC program graduate thought the program affected grades only sometimes, but the rest said that it made a difference; for example, "Yes, a huge difference!" and, "it made a quiet and helpful environment to receive help on my homework." A CAP focus group participant said,

It's really helped me. . . I always knew it was important for good grades but I never really saw the point, but when I joined CAP they pointed out why the grades were important and what colleges really do look at in terms of your grades. Before it just seemed trivial and it wasn't a big deal for me.

A CBC focus group participant echoed that thought:

Like last year, I didn't really have the best grades and this year I came back and I started going to all the college prep hours and it boosts my grades big time. I see all my grades at straight A's and if I didn't have this, I wouldn't be at this point.

Attendance is good in the study schools, overall, and it is not an important issue for respondents. Some adult respondents say that participating in any after-school activities (not only those associated with Talent Search or Upward Bound) motivates students to come to school, while others have not seen evidence one way or the other. For focus group participants and graduates, effects on attendance were mixed, with most saying there was little or no effect. Among those who thought there was an effect, students in one group said that on the days they don't feel like coming to school, they come anyway because they don't want to miss CBC. Opinions in other groups ranged from no effect to "I always attended school, but it gave me an incentive to make sure I regularly attended school," and, "Yes, because when I was in CBC it helped me get help with classes I struggled with."

The question about program effects on students' social interactions drew strong responses. There was general agreement across staff, teachers, and administrators that Talent Search and CBC/CAP provide a sense of belonging and opportunities for friendship that help students become more involved, more verbal, and more confident, resulting in much improved social skills. It is especially valuable for "nerdy" students and those who don't participate in other school activities. An example was given of a student who belonged to CBC and no other school groups in his freshman year, but because of the confidence gained in CBC he participated in several school clubs in his sophomore year. A CAP focus group member said, "I've gotten to know older kids in this program and I think that helps my social skills a lot because it gives me confidence." A Talent Search staff person said this social effect is the biggest benefit of the program.

Talent Search focus group participants in middle school said the program helps them meet new friends and high school students said it helped them socialize. A CBC or CAP focus group participant said the program allows you interact with kids you wouldn't normally talk to, finding out that others have the same problems with school work. CBC/CAP students said they are "forced" to meet



new people, for example in Saturday sessions and when teachers keep changing the groups and tables (one student said with a smile that this is the teachers' favorite thing to do). Several students said they were shy at first and now they are more social; the clubs help them practice with new situations and conversations and it's a life skill they need. Students recognize the value of interacting with a diverse group of people including those in different grades. One graduate experienced little effect on interactions with other students because "I also did other activities besides CBC which helped me meet other people," but other graduates said "It made me interact with my peers and make new friends," and "It affected me in a positive way. I learned to open up to new people." A CBC focus group participant said of the effects of social interaction in the program:

It's nice to know there are other people like you, we're all in this club because we all want to go to college and this whole organization is just to help us get there, otherwise it might be harder for us. Knowing there are other people in the same situation that want to do this and have the same qualities that I do, it's just cool.

Question: Have respondents seen evidence that participating in these activities makes a difference in the college plans and career plans of participants?

At the middle school level in Talent Search, college and careers are some years away. As one teacher put it, these students don't think much beyond where they are. Some students think they know where they're going with college and some others think they don't need college, since they plan to be athletes, dancers, bartenders, or something else that does not involve higher education. Staff use a program exercise to show students what it

costs to live and to compare these costs to salaries for particular jobs. For example, a student who wants to work in health care and to live in a certain way (in relation to car, house, and daily expenditures) discovers that it cannot be done on the salary of a Certified Nursing Assistant, which requires brief training post-high school. Instead, the student's preferred lifestyle fits the salary of a Registered Nurse with a college degree. This is eye-opening for students, since they are often unaware of the economic realities of jobs.

"...college visits help students understand career options. A Talent Search staff person said that the campus visits promote an 'awakening and awareness of the possibility.'"

All Talent Search club activities in one school include an element of career discussion, and college visits help students understand career options. A Talent Search staff person said that the campus visits promote an "awakening and awareness of the possibility" and a Talent Search administrator said that the program gives kids hope, a path toward college. An example is the trip that female program participants make to Iowa State University to explore careers in math, science, and engineering. Most of the girls are not aware they can do these things and they return with lots of questions—without trips like these, students lack an adequate understanding of their career options. This exposure is important, because the students' parents have not had experience with college and cannot offer much help in thinking about the possibilities. Though in one school 80% of these students qualify for free/reduced lunch and might not ordinarily be expected to go to college, a staff person said that 90% of program participants do so.

The overwhelming response of CBC/CAP school administrators, teacher-mentors, counselors, and program staff to this question can be summarized as "absolutely!" An administrator said that students learn that something they thought was unattainable is accessible. Staff site coordinators and teacher-mentors fill a role that parents unfamiliar with college cannot, allowing students to think

beyond their parents' career choices. According to a staff person, campus visits, college fairs, and invited speakers are very helpful and summer academies have the most impact of the college-related activities. In a group teacher-mentor session, one person said that during campus visits, students meet people like themselves who are successful.

A teacher-mentor said that it helps to talk one-on-one, since students often don't listen well in groups. Another said that the teacher-mentor's role is to focus on what a student needs to achieve a goal, not to change what the student wants to do. Another said that without CBC, many of these kids would not be in college, and staff have graduates come back to tell them how much campus visits and summer academy mattered to them.

A Talent Search focus group member said the program helps in finding out what colleges want and it helps to know you need to study more. Others noted that college visits help prepare them for what is expected. A CBC focus group participant said it makes an impression when CBC alumni return to talk to them about their journey and to provide helpful hints on how to prepare for college. Several CBC/CAP students said that exposure to a wide variety of colleges and career choices has been extremely helpful in planning for the future. They have discovered colleges and careers they could not have imagined before and have received assistance with the ACT, scholarships, and financial planning. Tools such as internships and job shadowing have been useful in envisioning career choices. One student said that an assessment showed her she was smarter than she had thought, so she has chosen to go into physical therapy as a career. Another changed career plans, switching from being a chef to considering the medical field.

All the CBC graduates thought the program had significantly helped them plan what to do about college and careers and one said it was the determining factor in going to college. The questionnaire for graduates also asked whether they are in college at present. The graduate

interviewed by telephone said she is now a junior in college, majoring in business and human resources management. The written responses from graduates are reproduced below:

- "Yes; it made me decide what I want to do; my major is sociology."
- "Yes, it helped me realize that other places besides Nebraska have college, like Northwest Missouri State University. My major is merchandising in furnishing, apparel, and textiles."
- "Yes, because it helped me see if the health care field is for me because most of my activity is health related. I am in college now and I'm majoring in nursing."
- "Yes, I wouldn't have gone to college. I go to UNL in grazing and livestock systems."
- "Yes it did, this program helped me to find what college was good for me, and helped me to easily transition from high school to college and what to expect. I am in college now, my major is in the health field to be a radiologist."

Question: How much do respondents think mentoring by program staff has helped students think about college and careers?

By design, Talent Search is a group, rather than one-on-one program; as a staff person put it, "we reach the masses." Even so, an administrator noted that kids talk to the teachers, a teacher said that students get to know them and will ask questions, and another teacher said the program gives students "another adult to trust." The latter teacher said it takes a while to build one-on-one rapport, but it "makes a world of difference," giving students someone to talk with directly about what will be best for them. The program setting can encourage students to interact differently than they do in the classroom; a staff person said that teachers may report that a particular student is disrespectful or doesn't participate, but the student does not behave that way in the Talent Search program.

Overall, staff, teachers, and administrators think that students relate to staff and teachers as individuals and that it helps their college and career plans and success. A staff person receives letters of thanks from graduates for helping them get to college and also receives calls from parents saying how the program gave their child a place to fit.

In CBC/CAP, an administrator assessed the contribution of mentoring by saying that it makes a big difference and another said that it is very powerful to have daily access to staff and teacher-mentors. A teacher-mentor described the effect as “huge”; one staff person said that “mentoring is the crucial piece” and another said it is “the biggest advantage of our program.” Teacher-mentors said that students come to them because they are the student’s mentor. The connection can be even stronger when students are also in a teacher-mentor’s regular classroom. Though students may recognize the teacher-mentor’s role begrudgingly, they realize the encouragement is “cool” and it puts them ahead of other students.

A primary feature of mentoring discussed by staff and teacher-mentors is the opportunity for students to ask questions. Staff and teacher-mentors can share personal experiences, help with choosing a college, assist students in defining their goals, advise them about grades, help with the ACT and financial aid and, in general, give students the feeling they have an advocate who cares about them. A teacher-mentor said that students wouldn’t think about college and careers in the same way without one-on-one attention.

Talent Search middle school focus group participants thought being in a club motivated them in relation to school and staff have helped them think about careers. Participants in high school have learned that scholarship opportunities are not out of reach and they are now able to show their families what they can accomplish.

College visits and other research have helped in focusing on a particular career. One student was considering engineering but is now more interested in medicine, another was thinking about music but now wants to teach sign language, and another thought about fashion design but now wants to be a teacher.

Participants in the CBC/CAP focus groups said that everybody has been helpful, staff, teacher-mentors, and others. In one focus group, referring to the site coordinator, a male student said “she really cares about us.” Staff have assisted students in deciding things such as what area of engineering to go into and which colleges would be best for particular majors, and by bringing in speakers on specific careers and making career assessments available.

Asked what more could be done, students said they would like to know more about colleges outside the region, they would like more financial aid information, it would be good to have more mentors in particular subject areas, some students would like more surveys or assessments on career preferences and how certain skills go with particular careers, more speakers like the AIM Institute

“...one staff person said that ‘mentoring is the crucial piece’ and another said it is ‘the biggest advantage of our program.’”

staff person who visited recently would be good, and several expressed a desire for a greater variety of substantive offerings. They think there is an over-emphasis on information technology, since most jobs require basic IT skills and the students have been raised with and are adept at technology. They would like more offerings (academies) in areas such as science, archaeology, history, cooking, forensics, philosophy, and Shakespeare (this was said

with a side comment that program staff need not worry that students wouldn’t like more obscure subjects).

The theme of helpful staff was echoed in comments from CBC graduates. One said that staff and teacher-mentors were always there for any questions, saying, “how else can I help you?” To this student, that alone makes a huge

impact, because you're not afraid to ask questions. She said the program was "magnificent," and she still goes back to talk to students. In written comments, one graduate said that the program "helped out so much," another wrote that staff "helped support me a lot and really think about what I want to do in college and in life; and another wrote that "it helped me prepare better because they have been through it themselves; they gave me great pointers on what to do." In addition, a student wrote that "it gave me a chance to ask questions on a more personal level." Another student wrote that staff and teacher-mentors "pushed me to my fullest potential." A CBC focus group member said, "I like being able to have one-on-one with the teachers. Even if they aren't your teacher. . .they're willing to help you."

Question: To what extent do respondents think program successes are due to the types of activities students are involved in, and to what extent are they due to mentoring? What weight would they give to each?

It might be expected that in Talent Search program activities would be perceived as more important than one-on-one relationships, but most respondents did not think so. An administrator said that activities and mentoring have the same weight and mentoring gives students someone to trust and depend on. Another said that it's both, and we must begin with a relationship. One teacher said that "If it wasn't for the contact, they [students] wouldn't care about substance" and another said that mentoring might be more important than activities, because students can get content elsewhere. Staff responses were also strong in favor of mentoring. One person said that interpersonal interaction is more important than activities; another said that a high percentage is mentoring and it is a powerful connection. On the other hand, one teacher said of participation in his club on gaming and videos that one-quarter of the students are there because they like him and the rest are there because of their love of video.

Results among administrators, teacher-mentors, and staff in CBC/CAP also favored mentoring. An administrator said they are equally important and hard to separate but two others thought mentoring more important. One said that, especially for kids in poverty, conversation is the "power piece." Opinions of teacher-mentors and staff ranged from equally important to favoring mentoring. One conflicting view, expressed by a staff person, was that more benefit comes from activities and that "mentoring is the icing on the cake."

Conflicting views were offered about the age of students who particularly benefit from mentoring. A teacher-mentor thought that mentoring is more important for freshmen, but a staff person thought younger students are drawn by the activities and getting to know other kids, while mentoring is more important to juniors and seniors who are thinking about college and careers. One staff person focused on differences in student needs, saying that some are self-motivated without much staff involvement, while others need mentoring to experience program benefits.

An example of the value of mentoring was given by a teacher-mentor, who said that students mostly know what they want and just need some help. The example was about a freshman skipping a class for several days straight. The student's teacher-mentor talked with a counselor and a teacher to resolve the problem. According to the teacher-mentor, the mentoring relationship was "huge" in resolving the problem. This was an important intervention that might not have taken place without the program's emphasis on mentoring.

One program graduate thought the most important thing was the plans they made for college and some other graduates had mixed assessments. Three emphasized mentoring; as an example, "It's great having mentoring; we would set goals, inventory scholarships, study the ACT; having them there for us, especially in senior year, with deadlines."

Question: Aside from program staff and teacher-mentors, who are the people in students' lives, the "influencers," who help them think about college plans and career choices? (Such as counselors, family members, friends, and so on.)

In part because Talent Search is conducted in group format, staff, teachers, and administrators don't hear much from students about who in their lives helps them think about college and careers. One of the two administrators said that often a staff person or coach at school can help, and another said that "we're what they have to see the future." A teacher said that the biggest influence is people at school and noted that at school. Another said that at school, going on to college is expected, so of course students will go and they can plan for it.

In CBC/CAP, an administrator said that the biggest influence is one another; the students are in it together and they are a tight-knit group throughout the day, not just during program sessions. Teacher-mentors and counselors mentioned siblings, parents, an aunt or uncle, teachers and coaches, and other kids in the program as influencers. One said that if siblings are in the program together, the effect is huge. Other points made were that students in the program discuss it with others, drawing them in, and that program staff are especially important. Staff noted that the influence exerted by parents varies. A parent might want their child to be a physician, but the child wants to be a nurse or a physician's assistant. Other parents might want a student to go to a particular school because of cost or because it is close to home. Sometimes, parents will ask staff what they can do to support a child's career choice.

Talent Search focus group members in middle school mentioned parents as influencers, along with a grandmother and an older sister. One student's mother wants her to go to college so she doesn't end up like her, working at Walmart. A high school student mentioned a school counselor as influential. Some CBC/CAP students

in focus groups said that friends influence them, though in one group students laughed at this, saying that friends who aren't in CBC are clueless and unhelpful. Focus group participants listed a full range of influencers; for some, parents are especially important, and grandparents and siblings were mentioned as well. Program staff and teachers were mentioned several times, and it is clear that other students in CBC/CAP are very important; one student said that friends in CBC have life plans and it helps him focus on his own goals.

Among CBC graduates, one noted the role of counselors, though it isn't as comfortable because of the number of students they serve. Others named staff and mentors, friends who were doing similar things, teachers who showed them interesting things about a particular career, and family such as a brother, and a mother who "really helped me. She is my main support system."

Question: If anything, what would respondents change in the school programs that might make them even more effective?

Respondents had quite a few suggestions for program improvements. Some of them are listed below, first for Talent Search and then for CBC/CAP.

Talent Search

- An administrator said they don't know how much money is in the program grant and they are not part of the decision-making process about resources. It would help the principal to know more about funding.
- A teacher would appreciate an AIM product that shows several websites illustrating college and career choices for students.
- More resources for trips was mentioned by teachers.
- A teacher thought there is too much focus on technology, math, and science and would prefer a more global, comprehensive approach that shows the connections between hard sciences and creative areas such as art, music, and writing. This concern was echoed by a staff person who said that in focusing on



technology some kids have left the program. Things may be more rigorous now, but there were negative effects on activities that help kids grow.

- A teacher said that last year, clubs met twice each week but this year they meet once each week for six weeks; this isn't enough time to approach topics such as programming.
- A teacher said it would be good to have two people supervising some clubs; the gaming and robotics club had 40 students the first day. The desire for additional help was echoed in a staff interview; the staff person said that two teachers per evening plus a paraprofessional is not enough.
- A teacher thought it would be good to have more exposure to real work settings in the community. Students develop unreal expectations from television and elsewhere about the rich and glamorous lives of businesspeople—they need a dose of realism to offset misconceptions about the world of work.

CBC/CAP

- An administrator said that it would be good to have more kids involved, a teacher-mentor said it would be good to have more mentors, and another said more contact time in the school would be helpful; an administrator said the number of mentors available should be the last thing cut.
- An administrator said they are in a wonderful situation with two full-time people on site, one for each program; a teacher-mentor said they have the resources they need access to, and a staff person said most things they do are about time, not money.
- An administrator said he doesn't know exactly how resources are used in the program. Another said one thing to work on is the relationship between the program and school administrators; we could be more strategic and systematic about communication, for example updates on program progress every couple of weeks.
- A teacher-mentor said it would be good to promote the program more; they aren't given much information generally.

- A teacher-mentor said it would be nice to have a special room for mentoring, so all mentors are available in a specific place at a specific time.
- A staff person suggested focusing more on the time after students are accepted into college—go back to the campus to be sure it's where they want to spend the next four years.
- A staff person thought it would be good to, each summer, add one or two careers in more depth, expanding the range of careers covered. Another would like to have college visits increase; a few more college visits would be worthwhile (but, they take kids out of school).
- A staff person said that more small-group time would be good. Take maybe 10 students on a field trip, for example to an architectural firm—companies don't necessarily want to host a large group. One of the limitations is the cost of transportation, since vans aren't available and busses are expensive. Another staff person thought it would be good to offer a few more Saturday events; they are good because you can spend 3-5 hours at a time, unlike during the school week.
- A staff person said it is important for AIM to allow staff to spend 90 percent of their time on the kids rather than doing corporate things. We need to respect the time in the building and more time away makes us less effective. This person does not want to spend a long time downtown and the travel time is significant.
- A teacher-mentor said that staff are very good at monitoring students and they have been tweaking the process for improvement. A teacher-mentor said: "We're doing good for kids. I got into teaching to help people and that's what we're doing."

Graduates all thought it was a great program. One suggested developing "new and exciting programs," but others said "I love it!" and "I enjoyed the program exactly how it was."



Question: Are there things respondents would like to share that were not covered during the interview/group session?

Again, items are listed, first for Talent Search and then for CBC/CAP.

Talent Search

- One administrator said that it is a fantastic program, another called it terrific, and another said it is a wonderful opportunity for the students. Both emphasized the excellent job done by staff, who are positive and energetic.
- Teachers and counselors said the program is a wonderful opportunity for the students. Staff find resources to fund activities and save the teachers time.
- Teachers at one school said the kids look forward to the activities and it would be sad to see the program go. It is important to offer things like this to kids who don't see themselves having much of a future; we need to "let them dream a little." We give them exposure to more than one way to reach their goals; they need to know that success won't happen overnight or be given to them, but it can be done.
- A staff person said we can see the benefits of small groups like those in Upward Bound, but we serve the masses; the program is inclusive and kids can be part of something; we love the program.
- A staff person said, I hope we don't get more restrictive (referring to the focus on technology); the absence of other activities would be difficult.

"An administrator said that from his experience, the program provides something that nothing else in the building can."

CBC/CAP

- An administrator said that from his experience, the program provides something that nothing else in the building can. You can't quantify how important it is to kid's success; compare their success, their lack of struggle keeping up in college, with other kids—there

is less of a shock in the transition to college, given the lack of a model of success these students have.

- A teacher-mentor said it's a good program, good for teachers and the community; mentors get to connect with other teachers, serving as a bridge between the students and teachers. Another asked, "Without this program, what would happen?" We've spent four years working with this kid; without that, where would they be?
- A teacher-mentor said that if not for our staff person, many students wouldn't have applied for scholarships. Another said that students don't realize how few spaces there are in the program and how lucky they are.
- A teacher-mentor said that "CBC is the ideal classroom." Another said you don't always get the personal connection in class; in CBC, we can talk about bullying, etc. It's a tight-knit place and we help with the tough stuff.
 - A staff person noted that they have connections with the school itself in the building; they get to know counselors and administrators, finding options that could be overlooked if one didn't know the kids and have access to the resources.
- A program graduate would like to see expansion to more students, with more publicity about the program.
- CBC/CAP focus group participants echoed some of the themes that appear above in other question areas. Notably, one student said, "CBC is amazing" and another said it has "helped so much." Suggestions for improvement included more college visits and career fairs, as well as expanding the schedule for program activities so that students who have sports or who can't come to Breakfast Club have other opportunities.
- A program graduate wrote: "I loved being in CBC. If I wasn't in it I probably wouldn't be in college." Another wrote: "I was glad I joined CBC. It has helped me get the scholarships I want and the college I want."



And another wrote: "This program was a blessing to me. It taught me so much and being first generation with nobody in my family to talk to about my fears of college, so it was great to be able to be in a group of students who have the same fears and challenges ahead."

Unique focus group Question #2: Are there ways the program activities have been helpful to participants?

In the Talent Search middle school group, students noted the value of activities on topics such as cameras and video, robotics, digital media, careers, and "Dinner and a Book." In the high school group, students said activities have helped with choosing a career and college and all agreed that college visits helped to see what college life is like and what to expect. One student said she had been helped with social skills such as giving a good first impression. Helpful program aspects mentioned in CBC and CAP groups are displayed below in categories.

Scholarships and financial assistance. Students complete a written summary of their volunteer experiences; this is useful material for scholarships essays they are required to write. Students appreciate the information and assistance they receive on scholarships and financial assistance.

Homework and grades. The program provides a quiet place to do homework and students can ask for help from teacher-mentors. The mentors keep students "on track" with their homework. A student said that staff and mentors have helped keep grades up.

College and career choices. A student said that staff and mentors help look at different career choices, helping you decide what you want. Another student noted attendance at the National Student Leadership Conference, which was a "big eye-opener"; they stayed at a college campus and met people. A number of students emphasized the impact of exposure to information about college options.

Activities and skills. Several activities and skills were mentioned, such as orienteering, "Strike Zone," and team building. Students said these interactive situations help them with interpersonal relationships. One said CAP helps with talking to people and being more comfortable with peers. The student is shy and the program helps students come out of their shell, decreasing fear of new encounters.

Unique focus group Question #6. Have interactions with program staff and teacher-mentors affected participant outlook on things like motivation at school, dealing with challenges, or how they feel about themselves?

In Talent Search, students said that staff were nice and helped with things like computers, and one student said a mentor helped in achieving her goals. Students in CBC/CAP had much to say about staff and teacher-mentors and they were very appreciative of the role staff and teacher-mentors play in their school day. This feedback included comments such as:

Interactions

- We get a different perspective outside of the teachers' classes that they take during the day.
- I talk to my mentor about more than academics.
- I get a lot of good advice.
- They are very resourceful to help with many subjects.
- They explain academic material in a way that is clear.
- They are pretty helpful; Mr. _____ is an example—if you're going to mess around he gets on you, but he listens 1-on-1, he helps, he cares, it's just tough love.
- I like that they are available most of the time even when they are teaching, especially since they are our teachers.
- We can always find them after school and during school.
- It helps to have an adult that is a friendly figure.
- One staff member helped me by showing me stuff about what her husband does in the medical field

(what I am interested in) and where he went to school. That helped me. It was nice to see someone I kind of know.

Motivation

- The staff person motivates me to work hard, which I do. I also apply for scholarships because of her. We even study together, using flash cards and stuff. She helps me with my grades.
- Yeah, the staff helped me get more prepared for college, so they are helpful.
- Our mentors and teachers like Ms. _____ know us, have time and care.
- Ms. _____ is amazing! She'll help you with anything. She checks up on me all the time. She really knows me. She asks about grades and tests and stuff. She is really easy to talk to.
- They raise the bar for us; they expect us to do well, and get on us if we don't.
- They are friendly and approachable and I can't do that with other teachers (many in the group agreed with this).
- Site coordinators are positive and encouraging.
- It gives me more confidence, they all boost you up and keep positive thoughts.

Ideas for program improvement

- A student wishes that CAP and CBC were together more and not separated.
- A student said that more site coordinators are needed so more kids can get what we have; another suggested adding more site coordinators so there would be one for each grade.
- A student said the teacher-mentors push us and keep us on track—we wish all teachers would push kids more and keep them on track (raise the bar), like what we get in the TRIO program.

Conclusions

The purpose of the Human Element study is to examine “the important issue of mentoring youth for the purpose of increasing college enrollment and completion.” There are any number of issues connected with the Talent Search and Upward Bound programs that could be studied, but the focus here is mentoring. Unlike some of the federally sponsored evaluations described above, this study did not use numerical measures of financial aid applications, postsecondary enrollment, or other variables across large numbers of participants to characterize the value of particular program elements. Instead, we solicited perceptions, ideas, and evaluations of program success from people who are directly involved in several schools in the Council Bluffs-Omaha metropolitan area. This research design limits what can be said about measurable program impacts, but it offers rich description of what program participants and the people responsible for working with them think about program elements and outcomes.

To address the overall research question, “What are the effects of sustained interpersonal coaching in AIM’s school activities?,” four secondary research questions served as the conceptual framework in developing the study methodology. These conclusions are organized around the four questions.

“Does sustained interpersonal coaching have specific effects on student continuation in education?”

The AIM Institute Talent Search and Upward Bound programs serve students whose support systems for learning about careers and college can be weak. Many program participants are economically disadvantaged and their parents have not had the college experience. Some parents see little value in college and others want their children to stay close to home, limiting the students’ options. Parents who encourage their children to go to college may not have the knowledge needed to help their children prepare for the experience. This situation offers

fertile ground for interpersonal coaching, mentoring, to affect students’ attitudes toward succeeding in school and going on to college.

Talent Search and CBC/CAP are very different in design. Mentoring is a relatively small part of Talent Search, it is a large part of CBC/CAP, and this difference shows clearly in the findings. Having access to a trusted adult should they have problems or questions is important to Talent Search participants, but the primary focus of the program is the activities oriented toward particular topics (such as science or computer video programs) and group-oriented discussion of careers and college. Having a staff person on-site that students know appears to contribute to program success, but mentoring in itself is not a primary feature of the program.

This study’s principal investigator had little exposure to the programs in advance other than information gained from conducting the review of research literature summarized above and hearing about them from AIM Institute administrative staff. Given that exposure, the principal investigator assumed in advance that mentoring would be more important in the AIM programs than it was found to be in the Federal evaluation studies, but that this difference in importance would be moderate in size. However, the study findings show a range of perceptions of importance, from mentoring as a useful addition to program activities to mentoring as the most effective program tool for encouraging students to succeed in school, choose careers beyond what they would have thought possible without the programs, and go on to be successful college students.

It is clear from the focus group results and interviews/questionnaires from program graduates that participants regard their relationships with staff and teacher-mentors as life-changing and central to their success. On a one-to-one basis, these adults help them think through career

options, encourage them to keep their grades up, make linkages with classroom teachers, counselors, and others when they need it, choose and apply to colleges, and solve problems that are bothering them. Participants are not the same people at the end of their program experience they were at the beginning.

As a generalization, participants in this study think interpersonal coaching is a powerful tool for expanding student knowledge of careers and college, maintaining and improving their performance in school, and giving students the tools to get into and succeed in college. This contradicts findings of the Federal evaluations, especially those of Upward Bound. This could be because very different research methodologies were used, it could be because of differences between the student populations involved in the Federal studies and this study, it could be because of structural differences between the AIM Institute's programs and most others that use the same funding source, or it could be the result of some combination of these factors.

“Do the activities influence students’ career interests, and if so, how does this occur and which careers are involved?”

Some students in the study reported that they had learned about options within a field of interest (for example, health care) they had not known about before. Others learned about careers they had never considered, for example the student who had wanted to be a chef and was thinking about the medical field. Discussions, assessments, and other activities can be important in shaping participant's ideas about careers and college. College visits are mentioned by students, staff, and teachers as a powerful way to interest students in fields of study and practice they might not have thought available to them. The example of girls visiting Iowa State University to learn

about careers in math, science, and engineering and returning full of questions and a new understanding of their career options is illustrative.

Staff do not see their role as pushing students to abandon their current interests in favor of others, but program activities and interpersonal interaction can have significant effects on student perceptions of career options. This means that decisions made by staff about which careers and colleges are highlighted for students can be especially influential and important.

“To what extent is program success due to content and to what extent is it due to mentoring engagement by staff?”

This question is largely answered in the discussion of the effects of interpersonal coaching, above. In the Talent Search program, success in helping students succeed in school and go on to college is due mostly to program content, but interpersonal interaction is important as well. The majority of opinion among study participants familiar with CBC/CAP ranged from mentoring and program activities as equally important to mentoring as the more important of the two. The study findings show that when intensive mentoring is a central element of program design, it can have a major impact on participants. The effectiveness of mentoring as an intensive program element seems evident in a comment made by a Talent Search focus group participant who had also been in CBC. She said,

I don't want to sound rude but I think I've been more informed through College Bound compared to Talent Search, the things I've done on this I've learned through College Bound but then I realize Talent Search is doing it. I feel College Bound is more informative and they're more. . .what's the

word. . .they communicate more I guess rather than Talent Search. I feel like College Bound has helped me.

This student knew that Talent Search covers much the same material as College Bound Club, but CBC had been more helpful for her. The phrase she used is that “they communicate more”; it is likely she is referring to the one-on-one format of CBC.

“Can key success factors be expressed in a model or models that could be applied in other places or in other activities?”

Talent Search and Upward Bound (TRIO) programs around the country offer tutoring, workshops, summer academies, and other program activities that help students succeed in school and raise their expectations about careers and college. There are two program elements that emerge from this study as both especially important and somewhat different from similar programs elsewhere. One of these is a sustained staff presence in the schools and the other is the intensive mentoring offered in the CBC and CAP programs.

It is common in TRIO programs for program staff to be housed in colleges, universities, or other institutions that have secured Federal grants. They visit program schools routinely to offer program services. AIM Institute program staff have offices in the schools and are called “site coordinators”; they become part of the school, working cooperatively on a daily basis with teachers, counselors, and administrators. The school staff know them and students can come talk with them when they want to.

As an outsider visiting the schools, the principal investigator observed these relationships in action—students work with staff several times each week in a common meeting area, students are in and out of staff and teacher-mentor offices and classrooms, and in general there is a feeling of community in evidence. When student and program graduate study respondents described the impacts of their interpersonal mentoring relationships with staff and

teacher-mentors, there was a clear connection between those outcomes and the observed school settings. Maintaining on-site staff is resource-intensive, but it also appears to be a powerful tool in shaping program outcomes, indeed in making a lasting impression on the lives of program participants.

The intensive mentoring offered in the CBC and CAP programs is related to the on-site staff presence. Rather than waiting for scheduled visiting times to talk with a mentor, students in these programs have frequent access during the school week. Again, this is a resource-intensive program element, but to the extent we can rely upon the perceptions of the people involved in these programs, it appears to be an effective way to guide and inspire students to succeed in their current schoolwork and to go on to college and careers they could not otherwise have imagined.

The caveat “to the extent we can rely upon the perceptions of the people involved in these programs. . .” is necessary given the nature of the study. It should be emphasized, though, that the study included people in a variety of roles who observe program outcomes from quite different perspectives: classroom teachers, school administrators, program staff, guidance counselors, and current and former students. When study findings present relatively consistent results across these varied perspectives, it is reasonable to give them considerable weight.

Comments by some respondents, including most of the members of one high school focus group as well as some teachers and staff, suggest moderation in focusing AIM’s programs on information technology. A focus on technology can be valuable in today’s job market; the challenge is to balance it with other things students are interested in that may benefit their college experience and career success. Many students are already well versed in technology and some of them would like to be exposed to a variety of subjects with which they are not as familiar.

Summary

In closing, this study of mentoring in the AIM Institute's TRIO programs has found the technique to be effective in helping students succeed in their schoolwork, go on to college, and choose careers they would not otherwise have considered. (Indeed, some graduates said they would not have gone to college if they had not participated in the programs. Given the study findings, it is likely a significant portion of this success is attributable to mentoring.) This summary finding runs counter to some studies of mentoring in Federally funded school programs; the difference may be the result of factors such as study methodologies and the design of the AIM Institute's programs.

People involved in the programs suggested a number of improvements they thought would be worthwhile. They ranged from suggestions that would require additional resources to relatively simple things, such as improved coordination with school administrators to adding a few more careers to those discussed in summer

activities. Adding resources may not be possible, but the suggestions showed that respondents would like to make the programs available to more people and/or make them even more effective.

“... This study of mentoring in the AIM Institute's TRIO programs finds it to be a small-scale but powerful way to create positive change in young people's lives and the future of the region.”

In broad societal perspective, these programs were intended by the U.S. Congress to improve the life chances of underprivileged children. This fits well with the AIM Institute's goal of strengthening regional competitiveness, since a competent workforce is a valuable economic asset. The issue of improving the life chances of people who might not be expected to succeed is especially relevant today,

in an economy that is producing increasing income inequality (Congressional Budget Office, 2011) and decreasing socio-economic mobility (DeParle, 2012). This study of mentoring in the AIM Institute's TRIO programs finds it to be a small-scale but powerful way to create positive change in young people's lives and the future of the region.

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Appendices

Appendix A Questions for Students

Here is a handout with a list of activities we sponsor, and I'll read them to you. When I've done that, please tell me which of the activities you have participated in.

[Hand out and read the Talent Search or High School list appropriate for the group; try to record a sense of how many people have participated in each activity.]

1. Why do you come to activities like these?
2. Are there ways these activities have been helpful to you? If so, how?
[Try to record which activities have been helpful and in what ways.]
3. I'd like to know whether being involved in activities like these makes a difference in your school experience.
[Ask each of these one at a time and record responses.]
 - Do you think it affects your grades?
 - Does it make a difference in your school attendance?
 - How about your interactions with other students—do these activities affect that?
4. Do you think participating in these activities makes a difference in your college plans? If so, what has changed in your thinking about college since you have been participating?
5. Has taking part changed your thinking about career choices? If so, in what ways?
6. Please tell me about your interactions with the staff who support these activities, the site coordinators and after-school teachers. Have these interactions affected your outlook on things like your motivation at school,

dealing with challenges, or how you feel about yourself?
[Prompt if they haven't discussed this and they seem open to talking:]

- Is there more that staff might do in these areas?
7. Have the staff helped you think about college? In what ways?
[Prompt if they haven't discussed this and they seem open to talking:]
 - Is there more that staff might do to help your thinking about college?
 8. Have the staff helped you think about careers? In what ways?
[Prompt if they haven't discussed this and they seem open to talking:]
 - Is there more that staff might do to help your thinking about careers?
 9. Outside of these school-related activities, are there other people who help you with the things we've been talking about? Maybe counselors, teachers, family members, friends?
 10. Do you have any last thoughts for me about the things we've discussed, maybe something we missed?

Appendix B

Questions for Staff and Administrators

1. Could you tell me what you think motivates students to participate in these school program activities?
2. How would you assess the impact of AIM's programs on the school experiences of participating students? Do you think they affect students' grades or school attendance? Do they change student interactions with other students?
3. Have you seen evidence that participating in these activities makes a difference in the college plans and career plans of participants?
4. We want to assess the contribution of direct one-on-one mentoring to program outcomes. How much do you think mentoring by program staff has helped students think about college and careers?
5. Overall, to what extent do you think program successes are due to the types of activities students are involved in, and to what extent are they due to mentoring? What weight would you give each?
6. Have students talked with you about other people in their lives, influencers, who help them think about college plans and career choices? (Counselors, family members, friends, etc.)
7. Given the need to do the most with limited resources, are there things you would change in the school programs that might make them even more effective?
8. Is there anything else you might share with me before we close, something we've missed?

Appendix C

Questions for graduates

Tell us a little about yourself. What school were you in and which activities did you participate in? When was this?

1. What motivated you to participate in these activities?
2. Do you think participation made a difference in your school experiences?
 - Did it affect your grades?
 - Did it make a difference in your school attendance?
 - How about your interactions with other students—did these activities affect that?
3. Do you think participating in these activities made a difference in your college or career plans? In what way? Are you in college now—what is your major?
4. We want to assess the contribution of direct one-on-one mentoring to program outcomes. How much do you think mentoring by program staff helped you think about college and careers?
5. Do you think mentoring, or program activities like reviewing plans for college, were more important to you?
6. Outside of these school-related activities, were there other people who helped you think about careers and college? Maybe counselors, teachers, family members, friends?
7. Are there things you would change in the program you were in to make it even better?
8. Do you have any last thoughts for me about the things we've discussed, maybe about the overall value to you of these school activities, or something we missed?



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