The Yale Child Study Center's Impact Analysis and Strategies Group conducted a three-year, independent evaluation of the Institute for Student Achievement (ISA), which is a multi-site, school-based intervention program for students placed at risk of failure. The evaluation design triangulated: (1) student outcomes; (2) the level and quality of the students' youth development; and (3) the quality of program implementation at the sites. The research included direct observations of academic enrichment and counseling sessions; retroactive analysis of achievement data; cohort analysis of the class of 2000; a student learning and youth development survey; a staff survey; and extensive interviews. The quality of implementation varied. The findings show that when implemented well, there is a significant positive ISA effect on student outcomes. (Contains 1 figure, 3 tables, and 15 references.) (Author/JDM)
The impact of a school-based academic and counseling intervention on the lifepaths of youth: An independent evaluation of the Institute for Student Achievement

Michael Ben-Avie, Ph.D. and Trudy Raschkind Steinfeld

Impact Analysis and Strategies Group

Yale Child Study Center


Seattle, April 13, 2001
Abstract
The Yale Child Study Center’s Impact Analysis and Strategies Group conducted a three-year, independent evaluation of the Institute for Student Achievement (ISA, a multi-site, school-based intervention program for students placed at risk of failure). The evaluation design triangulated (1) student outcomes, (2) the level and quality of the students’ youth development, and (3) the quality of program implementation at the sites. The research included direct observations of academic enrichment and counseling sessions; retroactive analysis of achievement data; cohort analysis of the class of 2000; a student learning and youth development survey; a staff survey; and extensive interviews. The quality of implementation varied. The findings show that, when implemented well, there is a significant positive “ISA effect” on student outcomes.

Introduction
Since the early years of this century, the relationship between youth development and student learning has been a topic of heated debate: Is youth development independent of learning? Is learning actually development? Are learning and development mutually dependent and interactive processes? Or does learning “awaken” development? (Vygotsky, 1978). The Institute for Student Achievement (ISA) operates on a simple but powerful principle: Focus on both student learning and youth development simultaneously.

Our Impact Analysis and Strategies Group at the Yale Child Study Center is currently in its third year of studying the impact of ISA’s school-based academic and counseling intervention on the lifepaths of youth. ISA provides school-based academic and counseling support services to 2,267 middle and high school students who have been identified as being at risk of not making a healthy transition to adulthood and/or being at risk of academic failure. ISA student groups are microcosms of the neighborhoods in which their schools are located. As such, they present a complex challenge to the adults who seek to assist them. Other intervention programs may learn from the challenges and triumphs of ISA in promoting the learning and development of the students.

Problem Analysis
The Institute for Student Achievement (ISA) was founded in 1990 by Gerard and Lilo Leeds, cofounders of CMP Media Inc. ISA is a not-for-profit public/private venture in Manhasset, Long Island. Its self-described mission is “to improve the quality of education for children and youth at risk so that they can succeed in our society.” Gerard Leeds has a persuasive argument to justify the expenditure necessary to attempt this: Provide integrated school-based academic and counseling support services to students identified as being at risk of dropping out of school, at a cost of $3,000 to $5,000 per student annually — approximately $20,000 for a 4-6-year program — and eventually “society gets its money back every two years for the working life of each person.” In his (1998) words, “When [ISA students] graduate from college, they’ll be making $30,000 to $40,000 a year. They’ll average paying $10,000 a year in taxes. When they graduate from college, in two years they’ll have paid society back in taxes” (p. 25). Furthermore, society
saves by “avoiding the future costs of unemployment, health and welfare support and the costs of the criminal justice system” (ibid.).

ISA is the organization charged with implementing COMET and STAR in schools. In April 2000, Dr. Gerry House was appointed President and CEO of ISA. ISA is codirected by Patrick G. Halpin and Lavinia T. Dickerson, who designed ISA’s COMET/STAR program. COMET (Children of Many Educational Talents) is designed to meet the academic and personal developmental needs of seventh and eighth grade students. STAR (Success Through Academic Readiness) is the continuation of the program in high school.

Support services are provided by a team generally consisting of a program director, academic coordinators, counselors, outreach coordinators, and a college and career coordinator (the number of staff and staff roles are determined by the age and number of students). ISA students participate to varying degrees in academic enrichment and counseling before, during, and after school. COMET/STAR has developed a well-formulated and sustained college and career planning curriculum, before- and after-school programs that are closely linked to daily classroom experiences, and an extended-year component that connects students to learning beyond the regular academic school year. The case conference process used by COMET/STAR is consistent with best practices in promoting youth development among children placed at risk.

ISA has traditionally been a forward-looking organization with strategic plans that emphasized expansion. During the 1990–1991 school year, ISA served 25 students. By 1994–1995, ISA served 240 students. During the 2000–2001 school year, ISA provided services to 2,267 students in the following school districts and areas:

- **Long Island, New York**
  - Roosevelt Union Free School District, Long Island
  - Hempstead Union Free School District, Long Island
  - Wyandanch Union Free School District, Long Island

- **New York City**
  - Community School District 13, Brooklyn
  - Metropolitan Corporate Academy High School
  - Park East High School

- **Westchester County**
  - City of Mount Vernon Public Schools, Westchester County

- **New York State Capitol Region**
  - Enlarged City of Troy Public Schools

In the last year, new sites were opened in
- Fairfax County, Virginia
- Dorchester, Massachusetts
- San Francisco
As part of its expansion drive, ISA is in the process of restructuring its organization to increase the internal capacity of its national office. Researching an organization that is in the process of reorganization and expansion is a complicated matter. Even though ISA is going through the turmoil of expanding while renewing its self-identify and mission, its leaders and staff members have cooperated in this independent evaluation and have embraced the challenge of the thorough self-examination that necessarily follows such an evaluation.

If There Were an “ISA Effect,” How Would We Know It?

We do not expect to see a long-term “ISA effect” in the here and now. The whole premise of ISA is that it is possible to change the trajectory of a young child’s life so that child who was, perhaps, prison-bound or destined for unemployment will become a contributing member of society. Thus, to really know whether ISA was effective would require checking in with the students 30 years later, evaluating the degree of their success in life, and seeing whether they attribute that success at least in part to their participation in COMET/STAR.

Despite this, the program can be evaluated now on two overarching issues. First, to find out whether ISA meeting its own criteria for success, one can examine whether the outcomes that the adults desire for the students are being made more likely by the adults’ daily efforts. We can, for example, ask if the adults are promoting the day-to-day behaviors that amount to academic perseverance and its close cousin: an orientation toward the distant future. Second, to find out whether ISA’s efforts are likely to make a difference in the students’ present and future lives, one can compare ISA’s efforts with those we already know are most likely to make a difference. For example, the work of Dr. James P. Comer and the School Development Program has shown the importance of relationships between and among teachers and students, and the importance these relationships have for later life success. In assessing the effectiveness of ISA, we therefore can ask students if they have high levels of engagement with adults.

Evaluation Design

In order to discover if there has been an ISA effect, we used a triangulated approach that provided a measure of cross-validation of the findings:

1. To determine the extent to which positive trends may be discerned with regard to student outcomes, we conducted a retroactive analysis on the achievement data of the first four ISA cohorts (167 students) and a cohort analysis of the ISA Class of 2000 from four schools (presented in this paper).

2. To determine the level and quality of the students’ youth development, we administered the Youth Development and Student Learning Inventory (YDSL) (1998, 1999) to 173 ISA students from Roosevelt Union Free School District, Long Island; Wyandanch Union Free School District, Long Island; Enlarged City of Troy Public Schools, New York State Capitol Region; and City of Mount Vernon Public Schools, Westchester County. The responses of the ISA students were compared to responses of 698 non-ISA students at a comparison school.
3. To determine the quality of program implementation at the sites, we (1) conducted 70
direct observations of regularly scheduled ISA academic enrichment and counseling
class periods and (2) administered our Staff Feedback Form to 73 ISA school-based
staff members.

Our direct observations of COMET/STAR enrichment and counseling sessions
and analysis of the assessments of the COMET/STAR faculty regarding their
effectiveness helped us to interpret the students’ responses to the YDSL.

We also conducted interviews with ISA staff members at all levels and with
students throughout the 3 years of the study.

**Data Collection Instruments**

**The Youth Development and Student Learning Inventory (YDSL)**

The *Youth Development and Student Learning Inventory (YDSL)* (Ben-Avie and
Haynes, 1998, 1999), a survey for high school students, is an outgrowth of 10 years of
research at the Yale Child Study Center on the relationship between youth development
and student learning. YDSL is a 112-item scale with a 5-point Likert response format that
measures 4 dimensions of student learning and 4 dimensions of youth development. The
student learning dimensions are academic perseverance, excellence in language, problem
solving in math and science, and future academic orientation. The youth development
dimensions are engagement with adults, peer bonding, coping, and professional conduct.

The internal consistency reliability for the YDSL was found to be in the robust
high range (.91). The internal consistency reliability for the student learning dimension
was found to be in the robust high range (.91) and the internal consistency reliability for
the youth development dimension was found to be in the high range (.89). The
relationship between the student learning dimension and the youth development
dimension was observed to be strong (r = .764, p. < .001).

**Staff Feedback Form**

The *Staff Feedback Form* (Ben-Avie and Steinfeld, 2001) is a 97-item scale with
a 5-point Likert response format that measures the respondents’ assessment of their
career, mood in relation to work, work-related experiences of being critiqued and
observed, ability to maintain appropriate boundaries between job and personal life,
experience as a mentee and a mentor, personal efficacy, ability to manage anger and
anxiety, experience with working on a team, and assessment of the workplace from a
professional perspective. The internal consistency reliability for the SFF was found to be
in the high range (.86).

**ISA Observation Log**

The *ISA Observation Log* (Ben-Avie, 1998, 1999) was constructed to document
the nature and quality of program implementation through direct observations of ISA
academic enrichment and counseling sessions. Sections include positive learning
environment, quality of teaching, academic enrichment, and student engagement.
Impact Analysis

Figure 1 shows the model of effects that we developed in order to see whether an ISA effect may be discerned. The COMET/STAR team engages in activities that include (1) providing students with academic and counseling support services, (2) reaching out to parents, and (3) maintaining a positive relationship with the host school. Students who actively participate in COMET/STAR demonstrate an increase in academic performance, positive behaviors, and self-concept. Increases in academic performance, positive behaviors, and self-concept are intervening variables and not outcomes, according to the model. As intervening variables, they influence whether or not the students achieve desirable immediate and long-term outcomes. For example, graduating from high school is an outcome that ISA considers desirable; students’ academic performance influences whether or not they will graduate.

If ISA students receive at least a therapeutic level of treatment, then certain outcomes are expected to occur in the here-and-now. Among these immediate outcomes, students (1) remain in school and complete middle and high school on time; (2) develop competency in higher-order reasoning, thinking, communication, and comprehension skills, with an emphasis on reading, writing, math, and science; (3) develop a greater sense of self and independence in learning; (4) develop a positive attitude towards school, peers, family, and community; and (5) understand how the present course of study affects future career options. These immediate outcomes are expected to lead to the following long-term (“life-span”) outcomes: Students graduate from high school and either enter postsecondary education in good academic standing or initiate a meaningful career path.

Defying Negative Predictions: The Students

According to ISA’s theory, students who actively participate in COMET/STAR’s support services tend to develop a strong connection to the educational process. ISA calls this effort and its outcomes “increasing the students’ resilience,” that is, their determination to overcome occasional setbacks and stay in school. This increases the likelihood that they will complete high school and continue on to postsecondary education, thus increasing their options in later life. And helping high school students to complete formal education is an urgent need. On February 28, 2001, The New York Times published data in an article on high school dropout rates. It read, “the percentage of [New York City] students who graduated in four years was down to 49.7% for the class of 2000 from 50.1 for the class of 1999” (Hartocollis, p. B6). ISA targets those students who have been identified as most likely to drop out of school. In effect, ISA’s mission is to help students defy the negative predictions about their future.

According to the model, students placed at risk of dropping out are referred to ISA by the appropriate grade level counselors in June and February, and the school’s counselor informs the parents. Who is most at risk of dropping out? A report submitted in 1997 by the State University of New York and the New York State Department of Education, A Report to the Governor and the Legislature on the Educational Status of the State’s Schools, cites 4 risk categories: (1) background factors, (2) student performance and ability measures, (3) student behaviors and choices, and (4) school factors (p. 153).
“Background factors” refers to nontraditional family structure and low socioeconomic status. “School performance and ability measures” refers to poor grades and low scores on standardized tests. “Student behaviors and choices” refers to patterns of behavioral problems in school, teenage marriage and pregnancy, and arrests. “School factors” refers to such school characteristics as enrollment, programs, teacher-pupil ratio, percent of ethnic minority enrollment, competency testing, and teacher turnover rate. Consistent with these criteria, ISA’s eligibility codes include the following: Academic performance, attendance, behavior, family/peers, negative family change, abuse/neglect, homelessness, substance abuse, limited English proficiency, pregnancy/parenting, negative peer pressure.

1999–2000 Profile

During the 1999–2000 school year, the school attendance rate for COMET was 93% and the attendance rate for STAR was 94%. Seventy-nine percent of COMET students achieved a passing GPA in all 4 core subject subjects combined, as did 71% of STAR students (Boykin and Sukhu, 2000).

Table 1 shows the promotion/retention rates at Roosevelt COMET/STAR, the first ISA site, which appear to be typical of ISA. To appreciate the ISA difference, it helps to widen the frame for a moment and discuss the state of Roosevelt school district. On March 21, 2001, The New York Times reported that the New York State Board of Regents recommended a state takeover of Roosevelt school district, calling it “the only viable option for raising student achievement and restoring financial stability in the chronically failing system” (p. B1). Up until now, the state has refrained from completely taking over a school district. However, the state may do so in the case of Roosevelt because the district has failed twice to develop a “convincing” improvement plan (p. B2).

Table 1. Promotion/Retention Status Report for Roosevelt COMET/STAR (1999–2000)

<table>
<thead>
<tr>
<th>Grade Level 1999–2000</th>
<th>Total students enrolled</th>
<th>Number promoted in June 2000</th>
<th>Number in school July–August 2000</th>
<th>Number retained in June 2000</th>
<th>Total promoted for school year 1999–2000 (computed after the summer of 2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>30</td>
<td>25</td>
<td>5</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>8</td>
<td>38</td>
<td>22</td>
<td>16</td>
<td>0</td>
<td>38</td>
</tr>
<tr>
<td>9</td>
<td>36</td>
<td>31</td>
<td>5</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>10</td>
<td>34</td>
<td>23</td>
<td>9</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>11</td>
<td>40</td>
<td>30</td>
<td>10</td>
<td>5</td>
<td>35</td>
</tr>
<tr>
<td>12</td>
<td>38</td>
<td>34</td>
<td>4</td>
<td>3</td>
<td>35 graduates**</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>216</strong></td>
<td><strong>165</strong></td>
<td><strong>49</strong></td>
<td><strong>13</strong></td>
<td><strong>203</strong></td>
</tr>
</tbody>
</table>

* 2 students did not attend summer school.
** 2 out of 3 seniors are scheduled in school as fifth-year students; they did not graduate in four years and are returning for another year of high school.
Table 2 shows a cohort analysis for ISA’s Class of 2000. Once again, it is critical to understand ISA’s graduation rate against the backdrop of the dropout rate in similar schools. According to a recent *The New York Times* article, “most — 67% — of the dropouts in the class of 2000 never advanced beyond 9th or 10th grade, even though most stayed in school for four years” (Hartocollis, March 22, 2001).

### Table 2. Cohort Analysis of the STAR Class of 2000 in Four High Schools \((N = 111)\)

<table>
<thead>
<tr>
<th>Site</th>
<th>Mean overall GPA when they were Sophomores 1997–1998</th>
<th>Mean overall GPA when they were Juniors 1998–1999</th>
<th>Mean overall GPA when they were Seniors 1999–2000</th>
<th>Number of graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hempstead</td>
<td>67</td>
<td>66</td>
<td>68</td>
<td>27 (87%)</td>
</tr>
<tr>
<td>Roosevelt</td>
<td>72</td>
<td>73</td>
<td>77</td>
<td>35 (92%)</td>
</tr>
<tr>
<td>Wyandanch</td>
<td>76</td>
<td>75</td>
<td>77</td>
<td>23 (96%)</td>
</tr>
<tr>
<td>Troy</td>
<td>72</td>
<td>74</td>
<td>76</td>
<td>18 (100%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>103 (93%)</td>
</tr>
</tbody>
</table>

Source of data: *Table 13 and Table 14* (Boykin and Sukhu, 2000)

** Only those sites which had at least 3 data points for the Class of 2000 appear in this table.

The grade-point averages (GPAs) of the Class of 2000 are similar to those of the first 4 ISA cohorts (167 students), which we analyzed to discern whether the positive changes that were observed among the first cohorts of ISA may be attributed to chance or to the effects of ISA. During the freshman year of the ISA cohorts that were analyzed, the mean GPA of the students was 75.14. (The range was from 56 to 94, and the standard deviation was 7.49). After three years of high school, the mean GPA of the ISA students was 78.14. (The range was from 53 to 94, and the standard deviation was 8.01). A slight decrease in mean GPA was observed during the students’ senior year. Given the ISA students’ GPAs in their freshman year and the reason why the students were referred to COMET/STAR, one might have expected the students to have dropped out of high school or experienced school failure. The data analysis suggested an ISA effect because the students’ mean GPA over time could not have been predicted using either chance or comparison to national, matched groups (Ben-Avie et al., 2000).

**Can We Attribute the Students’ School Success to an ISA effect?**

A cohort of students who had been identified as likely or most likely to drop out of school did not do so. How are we to know whether we may attribute this to an ISA effect? The evidence has to be persuasive, taken as a complex, interrelating whole. For example, adolescents tend to engage in magical thinking — “Somehow, the project is going to get done: Somehow, the college application is going to get completed and sent in the mail.” If we see an organization that claims that it is fostering academic perseverance...
but we observe this kind of magical thinking throughout its student body, then we would
not accept its claims. Our first step, then, is to take a look at the nature and quality of the
students’ learning and development, as measured in interviews with students and with
staff members; by direct observation of academic, counseling, and college and career
planning meetings; and by administering our own *Youth Development and Student
Learning Inventory*.

**Analysis of Responses to the Youth Development
and Student Learning Inventory (YDSL)**

We designed our research instruments to capture students’ intensity of agreement with
statements that point to (1) future orientation, (2) academic perseverance, (3) coping, (4)
engagement with adults, and (5) affiliation with a well-supervised youth group, all of
which have been demonstrated to promote and/or reflect student learning and youth
development (see Comer, Ben-Avie et al., 1999). The relationship among these variables
is complex and interdependent. Knowing what we know about student learning and youth
development, if we did not see evidence of these variables, we would reject the idea of an
ISA effect. It would be too implausible that ISA could overcome the students’ prior risk
factors without program elements that promote high levels of these variables. Therefore,
these are the variables that we use in the present paper to determine whether we may
attribute to an ISA effect the students’ defiance of negative predictions that have been
made about them.

There are complex links between and among all five of the variables we have
chosen to evaluate. Consider *Future Orientation* and *Academic Perseverance*: People
learn from many sources what to expect of themselves in the here and now and in the
future. By the 7th grade, students placed at risk of failure typically demonstrate that their
orientation toward the future (*Future Orientation*) already diverges from the orientation
of their more-likely-to-be-successful age-mates. It is marked by magical thinking
(“Somehow, the project will get done in time”), by hoping for an external intermediary
(“I’ll win the Lottery”), and/or by the expectation that the future will remain largely the
same as the present (“I’ll always live in a dangerous neighborhood”; “I wouldn’t know
how to behave in such a fancy office”). All these beliefs can support habits antithetical to
academic excellence. In order for students to change, and in order for the adults who
guide them to help them change, the students and adults must have and demonstrate
thoughts, feelings, and behaviors that support a positive attitude about the long-distant
future and about themselves as successful learners and contributing members of society.

During the 1999–2000 school year, we administered the *YDSL* to 173 ISA
students from Roosevelt Union Free School District, Long Island; Wyandanch Union
Free School District, Long Island; Enlarged City of Troy Public Schools, New York State
Capitol Region; and City of Mount Vernon Public Schools, Westchester County.

**Selected Findings from the YDSL**

ISA’s academic, counseling, and college and career components are designed to
encourage the development of internal motivation and personal accountability for school
success. We analyzed ISA students’ responses to the *YDSL* to see whether a subgroup
could be discerned based on those who indicated “luck” in response to the following
item: “Most of the time, when I do well in school the major reason for my success is (1)
luck (2) being prepared (3) ability.” Fifty percent responded “ability,” 36% “being prepared,” and 14% “luck.” (It is interesting to note that the lower-performing ISA students tended to attribute their success in school to luck. Twenty-five percent of the ISA respondents indicated that most of the students in their grade have GPAs that are “lower” than theirs, 53.8% responded “about the same,” and 21.3% responded “higher.” Those ISA students who indicated that most the students in their grade have GPAs that are higher than theirs tended to indicate “luck” as the major reason for their success in school, significantly differing from those who responded that most other students’ GPAs were “about the same as mine” (p. = .02) and those who responded that most other students’ GPAs were “lower than mine” (p. = .004).\(^{11}\)

ISA’s academic, counseling, and college and career components are designed to encourage students to thinking responsibly and creatively about their future. Eighty-three percent of the ISA students who responded to the YDSL strongly agreed or agreed that they often think about what they are going to do after high school graduation. Seventy-eight percent strongly agreed or agreed that they tend to set goals for their future. Seventy-nine percent strongly agreed or agreed that they could imagine themselves in college or an institution of higher education. By way of contrast, the variable that had the lowest mean score among the non-ISA students at a comparison school was Future Orientation. This variable measures the students’ tendency to devote attention to the future, set goals beyond the immediate time frame, and engage in behaviors designed to reach future goals.

The responses of ISA students to the items that tap into future orientation are all the more remarkable when it is remembered that the inclusion criteria for participation in ISA programs stress “most likely to drop out.” Strathman, Boninger, Gleicher, and Baker (1994) note the positive correlation found between future orientation and socioeconomic status. Students who experience pressing immediate events (e.g., poverty and violence) tend not to take action to shape future outcomes. The relationship between potential future outcomes and present behavior for students is captured in the following passage by Lens and Moreas (1994):

> People with a long future time perspective . . . will experience less immediate satisfaction and more delayed satisfaction due to goal attainment (e.g., to become a nurse in two years vs. a medical doctor in seven years). However, the self-imposed delayed gratification that is inherent in long-term goal-setting cannot be reached by waiting. One usually has to perform a longer or shorter series of instrumental actions in order to achieve one’s goals. (p. 27)

For high school students, the “instrumental actions” are the daily activities of learning that are measured by our Academic Perseverance variable of the YDSL.

ISA’s academic, counseling, and college and career components are designed to support students in their daily activities of learning, the “instrumental actions” mentioned above. These are measured by the Academic Perseverance variable of the YDSL. Academic Perseverance refers to motivation, persistence, and strategic behaviors that increase the likelihood of academic success, regardless of occasional obstacles. A significant difference was observed between the students’ score on Academic
**Perseverance** between Site A, which had a mean of 3.2, and the students' score on the same variable at Site B, which had a mean of 3.5 ($p = .046$). The students' overall GPA echoed this difference. Site A's 9th grade students had an overall GPA of 70, in comparison with Site B's 9th grade students, who had an overall GPA of 75. Similarly, Site A's 10th grade students had an overall GPA of 69, in contrast to Site B's 73.

A comparison of ISA and non-ISA students' responses to items in the **Academic Perseverance** variable is revealing.

- While only 39% of non-ISA students strongly agreed or agreed to the following item, 55% of ISA students did so: "I double-check my answers before I hand in an assignment."
- While 66% of ISA students strongly agreed or agreed to the following item, 59% of non-ISA students did so: "I think through new ideas I learn in class until I understand them."
- While 41% of non-ISA students strongly agreed or agreed to the following item, 34% of ISA students did so: "I make less of an effort in a class where I do not like the teacher."

ISA counselors intervene, and they teach the students to intervene and sustain interventions for themselves. On the YDSL, **Coping** (which we defined as the ability to quickly recover one’s healthiest self during and after challenging social situations) was found to be the most important predictor of **Academic Perseverance** (see Table 3). The next two most important predictors of **Academic Perseverance** were found to be **Problem Solving in Math and Science** and **Engagement with Adults**. **Problem Solving in Math and Science** is the careful analysis of a problem and the formation of steps toward solving it. **Engagement with Adults** is the tendency to trust adults and to develop supportive relationships with them.

### Table 3. **Coping** was the most important predictor of **Academic Perseverance**

<table>
<thead>
<tr>
<th>Variable</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Beta</th>
<th>Significance of T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coping</td>
<td>.569</td>
<td>.324</td>
<td>.318</td>
<td>.569</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Math/Science</td>
<td>.674</td>
<td>.454</td>
<td>.444</td>
<td>.389</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Adults</td>
<td>.693</td>
<td>.481</td>
<td>.466</td>
<td>.190</td>
<td>.02</td>
</tr>
</tbody>
</table>

That **Coping** was observed to be the most important predictor of **Academic Perseverance** is intriguing because ISA directly addresses the students' coping skills through its counseling component. Individual, group, and crisis counseling aims to promote students' personal development, especially coping skills. ISA counselors intervene. A comparison of ISA and non-ISA students' responses to items in the **Coping** variable is interesting:

- While 46% of ISA students strongly agreed or agreed to the following item, 35% of non-ISA students did so: "If I think that a classroom rule is unfair, I am able to respectfully get a teacher to consider changing it."
While 62% of ISA students strongly agreed or agreed to the following item, 51% of non-ISA students did so: "Many times, when two of my friends have argued, they have asked for my help in settling the argument."

While 47% of ISA students strongly disagreed or disagreed with the following item, 38% of non-ISA students did so: "When there is a conflict between two adults in my family, I am unable to do my schoolwork."

COMET/STAR provides students with a sense of belonging. The students feel part of a group that has strong adult guidance. A comparison of ISA and non-ISA students’ responses to items in the Adult Engagement variable is interesting:

- While 61% of ISA students strongly agreed or agreed with the following item, 39% of non-ISA students did so: "When I am having some type of crisis during the school day, an adult is there for me."
- While 67% of ISA students strongly agreed or agreed with the following statement, 42% of non-ISA students did so: "When I am making a decision about my future, I get advice from an adult at school."

**Who Are the Adults? The ISA Team**

To determine whether an effect on student learning may be attributed to ISA, an analysis of the nature and quality of the intervention is essential. This analysis begins with a description of the adults charged with implementing the intervention. The topic is imperative because "Troubled students lack easy access to adults and psychologists." This is the title of a recent *USA Today* article written by Kevin Dwyer (1999), then president-elect of the National Association for School Psychologists. He wrote "Teens told me there is no longer an adult at home or in the school to talk to, and that ‘It’s getting worse’ " (p. 15a). ISA students were asked to indicate on the YDSL whether an adult is home when they arrive from school. Those students who indicated "never" or "rarely" had significantly lower scores on Engagement with Adults (the variable which measures students’ tendency to trust adults and to develop supportive relationships with them) than those students who indicated "always" or "sometimes" (3.2 vs. 3.6, p = .03). Given that there are students who are not engaged with adults, it is all the more important to see who are the adults that ISA brings into the lives of the students.

**Selected Findings of the Staff Survey**

**Experience in education.** Out of 92 ISA school-based staff members, 73 completed and returned our Staff Feedback Form (SFF) during January 2001. The respondents tended to be experienced educators. Sixty percent of respondents reported that they had worked in education for 5 or more years, and less than 10% reported that they were new to education. Forty-four percent reported that they had worked in their current specialty for 5 years or longer, and only 17% reported that they were new to their specialty area.

**Future orientation.** Most respondents’ self-reports showed them to be good models of positive future orientation. Seventy percent of respondents reported that they agreed or strongly agreed that “this job is part of a career path that I have planned.”
experience of achieving a planned future — and the personal teaching stories this achievement generates — are essential for adults who are striving to model for their students a future orientation that includes success and satisfaction in the workplace.

**Effects of the job.** Most respondents reported that they found the work stimulating and were enthusiastic about students, colleagues, and parents. Respondents reported positive effects of their work. A large majority agreed or strongly agreed with the statements, “My job stimulates my creativity” (82%), “My job stimulates my energy” (76%), and “I feel good about myself because of the way I do my job” (almost 87%). However, for almost half of the staff members, work took a toll. There was an almost even split in response to the statement “My job is physically draining,” with 44% agreeing or strongly agreeing and 47% disagreeing or strongly disagreeing. And there was a similar split in response to the statement “My job is emotionally draining,” with 50% agreeing or strongly agreeing and 44% disagreeing or strongly disagreeing.

**Strategies.** Two thirds of respondents agreed or strongly agreed with the statement “I have a tried-and-true strategy to alter my private thoughts and/or feelings so that I actually perform better at work,” and one fifth were not sure. Those respondents who disagreed or strongly disagreed with the statement, “I have a tried-and-true strategy to alter my private thoughts and/or feelings so that I actually perform better at work” also tended: to report that their job was not part of a planned career path ($r = .408, p = .001$), to report that their job did not stimulate their creativity ($r = .384, p = .001$), to report that their job did not stimulate their energy ($r = .329, p = .005$), to disagree with the statement, “I feel good about myself because of the way I do my job” ($r = .406, p = .001$), to report that they did not welcome supervisors’ observations ($r = .255, p = .03$), and to report that they did not know how to help students create effective strategies ($r = .287, p = .015$).

**Personal boundaries.** Many ISA staff members’ responses indicated that they felt emotionally safe and were willing to risk being observed and corrected, even by the people who evaluated their job performance. Those who agreed or strongly agreed with the statement “I welcome being observed by my supervisors” (76%) also tended to: welcome being critiqued by supervisors ($r = .914, p = .001$), feel comfortable being observed by peers at work ($r = .524, p = .001$), and feel emotionally safe during staff meetings ($r = .409, p = .001$).

**Relationships.** Many ISA staff members’ responses indicated that there is a need to improve relationships between colleagues and to make sure that every staff member has access to a mentor he or she finds to be helpful. Respondents who disagreed or strongly disagreed with the statement “I am comfortable when I critique my peers at work” (18%) also tended to disagree or strongly disagree that there was at least one person available who could guide them through a problem about a colleague ($r = .302, p = .01$).

**New ideas.** Many ISA staff members’ responses indicated that there is a need to refresh their optimism and creativity. Those who agreed that they had run out of ideas on how to deal with a colleague on site also tended to agree that they: had run out of ideas on how to deal with a parent ($r = .303, p = .01$), thought that there is a student whom nobody could deal with ($r = .356, p = .002$), felt that there is a staff member or administrator who makes them anxious ($r = .355, p = .002$), felt that change will not be
forthcoming from administrators on important issues ($r = -0.292, p = .01$), and felt that change will not be forthcoming from administrators on minor issues ($r = -0.333, p = .005$).

**Expectations.** Many staff members' responses indicated that it is likely that negative shifts in their mood are related to their low expectations and, therefore, the way they implement the program. Respondents who reported that there was at least one staff member or administrator who makes them angry or irritable (46%) tended to: agree or strongly agree that they need to learn how to stimulate their creativity when they run out of ideas on how to deal with people ($r = 0.299, p = .013$), agree or strongly agree that at times they feel that it is simply impossible to fulfill the mission ($r = 0.409, p = .001$), disagree or strongly disagree that their team does good work together ($r = -0.306, p = .011$), and disagree or strongly disagree that their team is making a real difference ($r = -0.433, p = .001$).

**Adult in the workplace.** Situated in whatever locations the schools are able to fit them, COMET/STAR programs vary in amount and flexibility of space, privacy, and separation from the often-disrupting influences of non-ISA students. Large groups of respondents reported that they had an acceptable place in which to teach (25%), an adequate space in which to work with students (46%), adequate secure space for their professional supplies (40%), and adequate private space (51%). Given these responses, staff members' enthusiasm for working with the students (see above) is all the more impressive.

Communications within sites and from the national office to the sites were seen by a significant minority to be in need of improvement. There was disagreement or strongly disagreement with the statement, “Whenever my supervisor sends around a message to staff members, I receive it when I should in order to act on it in time” (27%); the statement, “I have easy access to all the documents that I need to do my job well” (26%); the statement, “My supervisor has adequately communicated to me the performance standards for my job” (17%); and the statement, “The training I have received adequately addressed the key duties and tasks of my job” (33%).

These results show that programs that grow organically, no matter how well-conceived and well-implemented at the outset, need institutionalization. ISA staff members treasure the freedom they have to be creative in the classroom. However, they keenly feel the need for bureaucracy. They desire academic freedom, but on the other hand they want the structure: the job policies, the manual, the job hierarchies, the pay structure. They want the rules and regulations. To use Margaret Martinez's (1999) four-part description of learning orientations, they are transforming learners as teachers and performing, conforming, or resistant learners as adults in the workplace. Transforming learners “seldom solely rely on deadlines, structured environments, normative performance standards, expected social or instructional compliance, extrinsic rewards, or others for learning efficacy or self-motivation.” In contrast to transforming learners, “performing learners are short-term, detail, task-oriented learners” and conforming learners “learn best in well-structured, directive environments using step-by-step procedures.”

This desire for clear standards is at its root a desire for security and for fairness. ISA's experience shows us that the nuts and bolts of faithful program implementation and job performance expectations must be continually updated and re-described at routine intervals. All too often, in our focus on the children we neglect these frontline workers.
Yet the most successful programs will benefit the adults in the same ways that they benefit the students: through clear standards and measurable performance outcomes. The school-based staff members need a highly efficient organization surrounding and embracing them. There also needs to be a renewal process that keeps the positive energy flowing.

What the Adults Do: The Academic, Counseling, and College and Career Support Services

To document what, specifically, ISA staff members do, we conducted 70 observations of COMET and STAR regularly "scheduled periods" (academic enrichment and group counseling) during the 1999–2000 school year. Observations were conducted at:

- Roosevelt Union Free School District, Long Island
- Hempstead Union Free School District, Long Island
- Wyandanch Union Free School District, Long Island
- Community School District Thirteen, Brooklyn
- City of Mount Vernon Public Schools, Westchester County

Selected Observations

Implementation and GPA. We found, for example, that the ISA site that had the lowest implementation rating, as measured by our ISA Observation Log, also had the lowest overall GPA (68) of all the sites that year.

Our observations and students' perceptions. In addition, we noted a close correspondence between our direct observations and students' perceptions, as measured by the YDSL. For example, 64% of the students disagreed that when working on a team, they often jump in and start speaking before another team member has finished speaking. In our direct observations, we noted that in 63% of the sessions this was indeed the case. Also, 70% of the students agreed that they ask questions of their teachers in ways that are likely to give them the answers that they need. In our direct observations, we noted that in 74% of the sessions this was indeed the case.

Tutoring and enrichment. During the 1998–1999 school year, 33% of the ISA sessions passed over the threshold from "tutorial" to "enrichment" (tutoring means reinforcing the curriculum and enrichment means adding something extra to the curriculum). During the 1999–2000 school year, our team categorized 54% of the sessions as "enrichment."

Quality of teaching. In terms of quality of teaching, we observed that the ISA staff members communicated the Class Learning Objective to the students at the beginning of the period (85.5% of the sessions), had a clear lesson introduction (86.9%), gave the students time to think through a question (88.2%), gave clear directions (91.2%), checked for understanding along the way (89.7%), revised instruction on the basis of student comments, questions, and performance (95.8%), provided the students with a conceptual framework when presenting a great deal of facts (80.9%), continued the lesson until the end of the period (86%), and matched the teaching styles and methods with the learning situation of the students (84.3%).
Positive learning environment. ISA staff members promoted a positive learning environment by creating rapport among the whole group (75.4% of the sessions), communicating expectations for achievement (85.5%), ensuring positive interpersonal relations and mutual respect (62.9%), and developing an atmosphere that fosters self-discipline (63.7%). We also observed that in 91% of the sessions, the students felt comfortable letting their staff know when they did not understand. In 73.9% of the sessions, the students asked questions of their staff in an appropriate manner, and in 63.3% of the sessions, the students waited their turn during in-class discussions. In general, teamwork was promoted among the students (63.3%). However, during 20 of the 70 observed ISA sessions, there was an instance of teasing. We also charted the number of sessions in which there were inappropriate student behaviors (a category that includes teasing) that were not addressed by the staff members, and the number of inappropriate behaviors per session. In roughly one third of the 70 observed sessions, multiple instances of inappropriate behavior were not addressed by staff members.

Engagement. Students tended to be engaged during their regularly scheduled COMET/STAR period. In 73.5% of the sessions, all the students arrived prepared for class. Moreover, the students stayed focused on the lesson until the end of the period (70.6%) and the students paid attention when the staff member was speaking (75.4%). However, in only 44.7% of the observed ISA sessions did the students keep track of what they needed to do, and in only 45.7% of the observed ISA sessions did all the students remain engaged.

Staff commitment. We observed the “STAR Patrol” in action. STAR Patrol is one student’s description of the Hempstead STAR staff’s tenacity in making sure that the students fulfill their responsibilities. Staff members support program goals most effectively by making sure that the students actually attend class and after-school programs for which they are scheduled and by following up with the family when students cut class, are absent from school, do not complete homework, or have other difficulties.

Youth group. We observed that COMET/STAR functions for the students as a youth group or alternative peer group. Some notable features of youth groups include a staff that knows each student well and a sense of belonging to a group. This becomes especially clear when we observe that ISA students tend to eat lunch together in the cafeteria and walk down the halls together (Ben-Avie, et al., 2000). “Knowing students well” means that the staff members make the effort to know about the students’ out-of-school lives. One especially effective way in which COMET/STAR engenders this youth group function is through day trips and overnight trips. These trips contribute to the students’ enrichment as much as (if not more than) the regularly scheduled COMET/STAR periods. As we noted, “ISA’s answer to the question of how to help students placed at risk to successfully complete formal education is theoretically sound: Promote students’ participation and belonging in a youth group that has clearly defined expectations of behavior while providing them with the tools to achieve academically” (Ben-Avie, et al., 1999, p. 42).

Team support for future goals. We observed that during their junior and senior years of high school, ISA students participate in a well-formulated college and career preparation curriculum. This curriculum includes weekly meetings designed to raise the educational aspirations of the students, internships, SAT workshops, college tours, self-
appraisal sessions, and a guided process of applying to college or initiating a meaningful career path. To increase the probability that those students who were identified as likely to drop out of school during their first or second year of high school succeed in reaching the college and career component, ISA provides intensive team support. It appears that the underlying reason for an effect of the ISA College and Career component is that this component stretches the students’ future orientation.

Can We, Then, Attribute the Findings to an ISA Effect?

We set out to determine whether ISA programs work, and, if so, why do they work. Our answer is as follows: When there is an affiliation with a well-conceived and well-led group, adults and students will continue, up to a point, to come back to a very difficult situation with the expectation of success. The ISA effect is clearly observable on a variety of different scales. Even with its enthusiastic, unplanned growth, ISA is a model for certain program elements without which students at risk cannot be expected to succeed in school and, therefore, in their later lives. At its best, when implemented most faithfully, ISA has fulfilled its mission.

Implications

It is clear from our observations that students who have been identified as being “at risk of not making healthy transitions” do not stop being “at risk” simply because they participate in an intervention. At what point do “at-risk” kids stop being at risk? Is it after the student transitions to a more stable environment? Is it after the student has become “other” than what he or she was before (e.g., more self-motivated, more connected to school)? Or, is it when the student transitions to adulthood? We asked James P. Comer, M.D., founder of the Yale School Development Program, to respond to this question of at-riskness. He told us that children transition to a state of no longer being at risk when they are able to manage the average expected environment. All of us live in a world that presents a series of challenges. Most of us are prepared to handle these challenges. A child who is not prepared to handle challenges is at risk. Therefore, a twofold intervention is needed that simultaneously prepares children and reduces risks inherent in the environment (e.g., reduces violence in the school). Our evaluation of the Institute for Student Achievement’s programs in junior and senior high schools has yielded these insights:

A disruptive school environment will undermine any intervention program, no matter how well-conceived and well-implemented. While ISA students routinely describe the COMET/STAR room in their school as an “oasis,” it is impossible (and, perhaps, not desirable) for ISA to try and close itself off from the rest of the school. What we observe in ISA is that, at all levels, the efforts of people implementing the program are so frequently impeded by interruptions, violence, illness — the daily life of adults and students in low-performing schools — that they are often amazed when their students are able to succeed. Thus, the response has to be twofold: (1) The team has to include a sufficient number of persons (in ISA’s case, social workers and other similarly trained
professionals) who understand child and youth development so that barriers to academic success can be removed; and (2) there needs to be a parallel track for the school (e.g., staff training in teaching methods and youth development; access to support groups).

There is a threshold beyond which unplanned growth undermines program implementation. The Institute for Student Achievement began as a drop-out prevention program at one high school. During the first decade of its growth, ISA expanded from New York to sites in California, Virginia, and Massachusetts. ISA has completed its pilot, early replication, and initial expansion stages, and is now poised to emerge as a national presence — or to collapse under its own weight. What ISA brings to the table is (1) the group’s experience and expertise in working with the “hardest to reach” students and (2) its experience in acting as a broker between corporate American and public education. ISA needs to document its experience and effectiveness in these arenas as much as it documents success on the individual student level.

Meaningful educational change results in potentially life-long change in the individual student. Academic goal-setting is linked to locus of control — and locus of control is linked to future orientation. “Individuals who engage in self-regulated academic goal-setting are more likely to judge that their outcomes are caused by their own efforts (internal attributions) or factors outside of their agency (external attributions),” write Terell P. Lasane and James M. Jones (1999). Citing previous research, Lasane and Jones add that “future time oriented students were more likely to make internal attributions for success (effort and ability) than external attributions (luck, task characteristics)” (p. 33). ISA has shown that high school students who have been identified as “most likely to drop out” can transform themselves “so that they can succeed in our society” (to quote ISA’s mission) when they develop in the here-and-now high levels of future orientation, coping with appropriate tasks, and academic perseverance, as well as skills for coping with failure and disappointment without giving up — that students can learn how to see beyond the next step, and to discover what steps they need to take in the present in order to accomplish their most-desired future. In other words, when implemented at its best, ISA has demonstrated that students who previously were either hopeless or unaware of what to hope for can move into their futures with optimism, options, and skills.

Sustained commitment. The major policy implication of ISA is clear: Programs must sustain their commitment to children and youth over many years. At a time in which our educational system is fragmented, ISA walks with the students from middle school through high school graduation. ISA teaches us that if you want to make a difference in the lives of children, you can’t jump in and out of their lives. You also can’t expect major changes in the trajectories of children’s lives after only a year or so of intervention. Meaningful change — true change — takes well-implemented commitment over time.
Partnerships

School-based integrated academic and counseling support services

Components:
- Academic enrichment
- Counseling and personal development
- College and career
- Community service
- Monthly incentive
- Summer program
- Parent involvement
- Student and graduate involvement activities

Academic performance
Behavior
Self-Concept

Students...
1. remain in school and complete middle and high school on time;
2. develop competency in higher-order reasoning, thinking, communication and comprehension skills, with an emphasis on reading, writing, math and science;
3. develop a greater sense of self and independence in learning;
4. develop a positive attitude towards school, peers, family, and community; and
5. understand how the present course of study affects future career options.

Students graduate from high school and either enter post-secondary education in good academic standing or initiate a meaningful career path.

Site Director
Academic Coordinators
Counselors
Parent Outreach Coordinator
College/Career Coordinator

Parent outreach

Figure 1: ISA Model of Effects
References


Dwyer, K. (Wednesday, June 30, 1999). Troubled students lack easy access to adults and psychologists. *USA Today*, p. 15a.


According to Achievement in America 1999, data provided to us by The Education Trust in Washington, D.C.: Of every 100 White Kindergartners: 93 graduate from high school, 62 complete at least some college, and 29 obtain at least a bachelor’s degree. Of every 100 African-American kindergartners: 86 graduate from high school, 48 complete at least some college, and 15 obtain at least a bachelor’s degree. Of every 100 Latino kindergartners: 61 graduate from high school, 31 complete at least some college, and 10 obtain at least a bachelor’s degree. (These figures are based on current 24 year olds). Of those students in the lowest test quartile, only 27% enter 2-year colleges and only 12% enter 4-year colleges, in contrast to the students in the highest quartile of which 12% enter 2-year colleges and 77% enter 4-year colleges. Fifty-five percent of African-American students and 58% of Latino students enroll in college directly after high school graduation, in contrast to 67% of white students.

The National Education Longitudinal Study 1988-1994, Descriptive Summary Report, describes a study conducted by the National Center for Education Statistics (NCES) of students who were eighth graders in 1988 and who were deemed at-risk of dropping out of high school due to socioeconomic and family circumstances that existed at the time. According to the report, the factors constituting risk were whether the student:

- lived in a single-parent family
- was from a family with an annual income of less that $15,000
- had an older sibling who had dropped out of school
- had parents who did not finish high school
- had limited proficiency in English and/or
- was at home without adult supervision more than three hours a day

The NCES notes that these five selected factors are only some of the many factors that could be used to determine which students are “at-risk.” The factors used in the report were the same ones used in a number of previous NCES reports.

Moreover, those who indicated “luck” as the major reason for their success had a mean score of 3.1 on Academic Perseverance, significantly lower than those students who indicated “being prepared” (3.4).

Those who indicated “luck” had a mean score of 3.1 on Engagement with Adults, significantly lower than those students who indicated “ability” (3.7).

Those who indicated “luck” had a means score of 3.0 on Coping, significantly lower than those students who indicated “ability” (3.3) and “being prepared” (3.3).

Those who indicated “luck” had a mean score of 3.2 on Professional Conduct, significantly lower than those students who indicated “ability” (3.7) and “being prepared” (3.7).

Those who indicated “luck” had a mean score of 3.0 on the overall Youth Development dimension, significantly differing from those who indicated “ability” (3.4) and “being prepared” (3.4).

And this is important because we found in our analyses of ISA students’ responses to the Youth Development and Student Learning Inventory that:

- Those students who indicated that they do not have a part-time job had a significantly higher mean score on the overall Youth Development dimension (3.4) than those students who work 6-10 hours each week (2.9). This does not mean that working is not good for youth development: the students who had the highest mean score were those who worked between 1 through 5 hours each week.
- Those students who indicated that they worked 6-10 hours each week also had the lowest mean score on the overall Student Learning dimension. The students who had the highest mean scores were those who did not have a part-time job or worked between 1 to 5 hours each week.
Those students who indicated that they usually take care of a younger brother or sister or other relative had significantly higher scores on overall Youth Development (p. = .002) and overall Student Learning (p. = <.001) and the overall YDSL (p. = .002).

Those students who indicated that they are routinely responsible for helping an older relative (a person who is not their parent or guardian) had significantly higher scores on overall Youth Development (p. = .007).
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

University of Maryland
ERIC Clearinghouse on Assessment and Evaluation
1129 Shriver Laboratory
College Park, MD 20742
Attn: Acquisitions

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0283
e-mail: ericFAc@inet.ED.gov
WWW: http://ericFAc.Piccard.cac.com

PREVIOUS VERSIONS OF THIS FORM ARE OBSOLETE.