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Are We Helping? A Discussion of the Effects of TRIO Program Intervention on K-12 Appalachian Seniors RESEARCH

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Abstract

Postsecondary education is quickly becoming a requirement for many flourishing and emerging career fields. Because of this, an increased focus on postsecondary enrollment and attainment has been seen in the education community, particularly in K-12 education systems. To that end, a large number of programs and organizations have begun to provide academic and college preparation assistance to these students in the form of academic advising, college coaching, and personal enrichment. Since the enactment of the Economic Opportunity Act of 1964, there has been a burgeoning population of such programs like the TRIO family. This article focuses on a group of graduating high school students who were participants in such a TRIO program. Their academic metrics as well as factors like demographics and TRIO program participation were examined, and although these results will not be a component of this work, they prompted additional questions concerning what could be done to provide more effective support for these students. Concurrently, suggestions for policy were provided and include an increased focus on individual student contact and mentoring relationships, as well as a stronger focus on academic preparation in line with the academic metrics measured in this study.

Keywords: academic enrichment programs, early intervention programs, mentoring, pre-college, student success, TRIO Program, talent search

Introduction

Achieving the goals of preparing students for college and careers in the United States is the mandate of the Common Core State Standards (Common Core State Standards Initiatives, 2012). One of the greatest challenges of these goals will be to motivate the academic achievement and growth of students at risk. The new thrust to improve the way students are taught and the way teachers teach will undoubtedly face the harsh reality that standards alone will not transform the culture of learning for students struggling to learn. The standards must be coupled with other activities and interventions that are capable of analyzing and addressing the problems confronting this population of students. They must also be committed to sustaining the efforts of early intervention programs to academically help students to achieve the dream of gaining a higher education.

In United States it has always been the long-standing belief that in order to increase one's living standards, one should pursue greater education opportunities.

According to the Bureau of Labor Statistics report on earnings and unemployment rates by educational attainment, the medium weekly earnings of a person with only a high school degree is \$652.00. Bachelor's degree holders earn appropriately \$1,056.00 and professional degree holders earn in the range of \$1,624.00 - \$1,735.00. The unemployment rate also reflects that a person with the higher levels of education has the lowest rate of unemployment: For a person with less than a high school diploma, the unemployment rate is 12.4 per cent; for high school diploma holders it is 8.3 percent, and for bachelor's degree holders the rate is 4.5 percent (U. S. Department of Labor, 2013).

In addition to improved economic opportunities, greater education is thought to bring greater equality and economic status (Cross, 1984). For instance, education is believed to correlate with democratic principles. According to several authors (e.g., Lipset, 1953; Etzioni-Halevy, 1997), the more educated the population, the better the chances that the individuals will

experience democracy. Consistent with the values of education and the greater economic gains one receives by increasing their educational attainment, pre-college programs are able to amplify students' positive outlook on life by helping them follow a pathway towards college education.

Early Intervention and Pre-College Programs

Early intervention programs – sometimes called academic enrichment program, pre-college programs, and bridge programs – have played a key role in motivating and supporting students at-risk in their aspiration to attend colleges and universities. These programs are designed to address specific academic areas and many take a holistic approach to introducing students to college. The beauty of an early intervention program is that it helps students who would otherwise not consider attending college or think about what they can do and what they can be in life. These programs are the defining feature of many students' lives because they transform the person from a life of no possibilities to one of expanded opportunities.

A sizable number of research studies inform educators that college bridge programs work—they are designed to motivate learners to consider going beyond secondary education. Excellent programs exist on college and university campuses across the United States to assist low-income and at-risk students in enhancing their academic success and gaining the confidence to further their education beyond high school. The lower socioeconomic status (SES) students have a lower chance of attending college than their higher SES counterparts (Ackermann, 1991).

In a similar light, a study conducted by Rita and Bacote (1997) measured the effects of a summer bridge program on the academic, personal, and social development

of minority and low-income students during their first year at Bronx Community College. The authors found that summer bridge programs can help facilitate students' transition and adjustment to college life and improve their persistence rates. The researchers concluded that summer bridge programs can help at-risk students realize their dreams of successfully attending and completing college. A contributing factor was the well-designed academic components of the programs, which included strong curricular and counseling components, and teaching students how to participate and succeed in an academic environment.

With regard to early intervention college programs—which are in many ways quite similar to summer bridge programs, except that the early intervention college program extends its programs activities beyond summer months—they have a significant impact on students' college success (Kezar, 2001). In a study of 8th graders, it was observed that 8th-grade students enrolled in early intervention programs have higher expectations about attending college than those who are not enrolled in a program. Kezar (2001) also suggested that “students in these programs have more self-confidence, which can lead to other positive outcomes” (p. 56).

Some of today's students-at-risk are still challenged with insurmountable obstacles. The biggest barrier to acquiring a postsecondary education is poverty. Poverty creates a huge disparity between the fortunate few and the majority of families with low, or no incomes. As noted in the United States Census 2010 report, Kentucky remains high in poverty rates among all populations (The Lane Report, 2013). The report indicated that the state's median annual income decreased from 2007 to 2012. “African Americans in Kentucky have been hit particularly hard by the recession . . . median income for non-Hispanic whites in

Kentucky dropped 6.1 percent in inflation-adjusted dollars between 2007 and 2012. . . .” (p. 1)

Poverty has a devastating impact on student achievement. Those who are successful in overcoming this hardship are individuals with a strong work ethic and a powerful self-concept. Low-income students face a wide disparity in access to postsecondary education – a challenge they share with other minority groups (Bozick & Lauff, 2007; ACT, 2010). Approximately 40% of low-income students choose to attend college in comparison with 84% of non-low income students (Bozick & Lauff, 2007; Engberg & Allen, 2011).

Furthermore, even if these students possess the academic skills to succeed in higher education, they may lack the financial resources to enter college (Kane, 1995, 1999; McPherson & Schapiro, 1991, 1997; St. John, 2003). High levels of poverty and unemployment, like what are present in Appalachia, are also linked to populations without a college education (Eckholm, 2010). Attempts to increase a student’s possibility of college enrollment, through outside means and the illustration of long-term financial benefits, are limited by the student’s personal resources based on his or her socio-economic status (Becker, 1993; Paulsen, 2001). Additionally, low-income students have difficulty finding and understanding information pertaining to the financial aid process (Bell, Rowan-Kenyon, & Perna, 2009; Luna de la Rosa, 2006).

Researchers have investigated the negative adversities of students-at-risk and identified peer pressure, bullying, discrimination and stereotype threats, just to name a few. Academic support programs have been successful in assisting students-at-risk in overcoming the frustration and stress associated with seemingly hard-to-overcome barriers. One such finding on overcoming adversities in learning

communities is the importance of an academic self-concept (Shaharas, 2006; Trautwein, Lüdtke, Köller, & Boumert, 2006). The research indicates a relationship between self-esteem, self-concept, and achievement. Pre-college programs customarily incorporate elements of self-esteem and self-concept in the activities that are offered. Burnett, Pillay, and Dart (2003) found that students with a high self-concept were good at learning and tended to use a “deep approach” to learning (p. 5). Feeling good about oneself and having a high self-efficacy has always been thought to have a positive impact on learning. On this basis, the Educational Talent Search programs across the United States have been motivating students to feel good about their prospects about attending college.

Educational Talent Search Overview

The Educational Talent Search program investigated for this study was founded in 1985 and is located at a regional university in south-central Kentucky. The program is designed to serve 765 students in six counties throughout the state of Kentucky: Clay, Estill, Garrard, Jackson, Lincoln, and Southern-Madison. The focus of the program is serving low-income and/or first-generation youth in an effort to increase the college admission, retention, and postsecondary graduation rates in Appalachian areas of Kentucky. The impact of the program’s services can be seen in the standardized test scores of its students after being exposed to program material as well as increased student confidence, financial aid knowledge, high school graduation rate, and college matriculation rates.

ETS accomplishes this through a combination of in-school and out-of-school activities. The primary means of educating the program’s students are the monthly in-school workshops that provide instruction in a wide variety of areas, from study skills and

assertiveness to essay writing and high school course selection. Each grade is served with a different age/grade appropriate workshop every month from September through May with the exception of November and March in which field trips are provided.

Evening financial aid workshops are provided every winter to educate seniors and their families about the FAFSA process. Hands-on assistance is provided and outside resources, such as agents of the Kentucky Higher Education Assistance Authority (KHEAA), are brought in to ensure that the most accurate and up-to-date information is provided to students. These workshops are done as a partnership with each county's respective high school to promote inter-agency assistance and student success.

ETS provides a yearly field trip for each of its six counties (three in November and three in May). These field trips are to in-state universities and colleges, both public and private; are held during the school day; and are designed to give the students (many of whom are from culturally-isolated regions) a chance to visit various campuses to get an idea of where they might want to pursue their postsecondary education. Each visit usually involves a tour of the respective campus, a Q&A with the admissions staff, and local cultural events and experiences whenever possible.

The summer component of the ETS program consists of two different camps based on the student's grade level. Both offer similar content in terms of team building, self-efficacy, and providing postsecondary and financial information; however, the second of the two programs is aimed at better preparing high school students for standardized testing on the ACT and in college. Both programs are housed at the host university's campus where students sleep, eat, and participate in activities with university staff.

In an effort to improve relationships with parents and include them in their child's educational process, the ETS program hosts a wide variety of events catered towards parental education and involvement. ETS holds a yearly Career and Family Day where students and their families can come to the host university's campus and be exposed to thorough sessions on admissions and financial aid as well as be provided the opportunity to visit the various campus facilities and meet with the host university's various academic departments.

The last facet of the ETS program is the individual attention provided to each student. Upon request, and at scheduled times throughout the year, each student has the opportunity to sit down with their coordinator to discuss academic, personal, and/or advising issues such as scheduling, peer conflicts, and/or the need for additional academic support. All of these services are provided in addition to the regularly scheduled monthly workshop as part of the requirement that each student receive at least two services from the program each month. This is just a brief overview of what the program offers. For a more complete look at how the program functions, its justifications, and its format, visit the program's website at www.ets.eku.edu.

Measuring Program Efficacy

Although the format of this article is primarily narrative in nature, for the purposes of clarification and understanding, a description and concise explanation of the evaluation process is outlined below.

Participants. The subjects of this review were 112 seniors from the graduating class of 2012. Six high schools from six counties in rural Kentucky contributed to these numbers. In addition, all 112 students were participants in the Federal Educational Talent Search program (ETS) being hosted at Eastern Kentucky University. Admission

criteria for participation in the program include being a potential first-generation college student, qualifying as low-income per federal income guidelines, exhibiting special circumstances that demonstrate significant need for the program's services, or some combination of these factors. Federal guidelines require that at least two-thirds of all participating students be both first-generation and low-income and this is represented in table 1.

Data. Academic data was gathered retroactively after students had graduated to safeguard that there would be no influence by the researcher on the subject's performance or outcome. The metrics gathered included students' grade point averages, ACT scores, their completed number of rigorous electives, post-secondary enrollment status, demographic information, as well as, their participation in specific ETS program activities.

Analysis. The data were analyzed to determine what effects, if any, were present between the academic metrics, demographics, and program participation of the students being examined.

The major findings of the analysis were:

1. The only aspect of ETS program participation exhibiting a positive effect on student academic outcomes involved individual counseling and mentoring sessions (which are not a required part of the curriculum).
2. Strong correlations exist between student academic performance and their enrollment into post-secondary education.
3. The majority of students (N=84 or 75%) enrolled in some form of post-secondary education following their graduation, suggesting the ETS program has some effect on college attendance.

Recommendations Based on Findings

Mentoring. As mentioned above, student mentoring and individual contacts proved to be the only significant positive influence among program participation variables. This poses interesting questions as these individual contacts are not required by the grant that governs the program's operation nor the Federal guidelines that all TRIO programs must operate under. However, despite this, many of the students in the sample participated in these activities, with the sample's mean participation being 2.39 and some students having as many as seven individual contacts.

Therefore, it is recommended that mentoring be made a permanent, mandatory part of the program's progression for students. Given that the program serves students in grades 6-12, there is a wealth of opportunities for students to receive support, academic and career advising, and personal encouragement, as well as be exposed to a strong, positive role-model in the form of the program's professional staff on a more regular, familiar basis.

Specifically, the mentoring should be broken down in such a way that students are given an opportunity twice a month to sit down for a period of fifteen to thirty minutes with the program staff to discuss the student's academics, plans for the future, and (if needed) any personal obstacles that the student may be facing. These opportunities are currently offered, but as mentioned above, they are not required and as such many students are hesitant of and/or unaware that this service is available to them.

Files are kept for each student as part of the program's standard operation procedures; however, nothing more is noted about the nature of an individual meeting other than the fact that it occurred and the time/date of said meeting. In an effort to make a more meaningful impact with these

meetings and to ascertain that student goals are tracked and obstacles managed, each individual session should be summarized in a manner similar to counseling or medical notes so that they can be reviewed and discussed with the student to mark their progress in the mentoring relationship.

Upon the entrance and completion of the program, students would undergo a form of counseling to determine their specific needs, goals, and obstacles (entrance counseling), as well as their evaluation of program services, future plans, and continuing needs (exit counseling). With these mechanisms in place, the mentoring aspect of the program will go from a background notion to a solid cornerstone of ETS' mission and ensure that students are given the opportunity to take full advantage of the resources offered to them.

Academic Assistance. Currently the ETS program provides students with a wide variety of services including, but not limited to: academic advising, tutoring, mentoring, career counseling, personal counseling, college coaching, and life-skills training. However, the program lacks a strong focus on academic preparation in regards to several key factors. Although ETS serves students in grades 6-12, there is not a strong focus on teaching or preparing for the battery of tests comprising the Educational Planning and Assessment System (EPAS).

In the state of Kentucky students are required to participate in all three levels of testing: EXPLORE (8th grade), PLAN (10th grade), and ACT (11th grade). Given that most post-secondary institutions utilize the students' ACT score as a critical part of the admissions process (in conjunction with their grade point averages and AP test scores), it becomes crucial to develop and focus on enhancing these metrics wherever possible to bolster student success.

The ETS program differs from other TRIO programs in its structure and delivery

of instruction in that its services are provided at designated weekly intervals throughout the school year. This yields a large amount of time that can be devoted to ensuring student readiness in the academic areas subject to testing by EPAS; time that can be utilized to gather information about students' respective academic deficits, designate a plan of action, and work with students in small groups or individually to ensure that they make progress towards subject mastery.

The ETS program could also enhance student learning by providing Saturday programming at its Richmond offices designed around an entire day of focus on one to two different EPAS subject areas with test strategies and instruction to be provided by ECU academic faculty.

This plan can be further developed by implementing student study groups and liaising with the middle and high school faculty/staff to guarantee that students requiring additional assistance are put in touch with local tutors and other academic resources. Further, changes can be made to normal program offerings during the spring and fall semester of the K-12 academic year to provide workshops on test-taking strategies, study skills, and the role/function of the EPAS system.

Facilitating these changes will enhance the effect that the program has on the readiness of students for the ACT, as well as streamline the process of determining the particular academic needs of each student.

Synthesis. By incorporating these two recommendations into the existing framework of ECU's ETS program, students will gain access to better and more varied resources for test preparation, study skills, practice materials, and direct academic assistance. This, coupled with the mentoring component, will instill a sense of confidence and self-efficacy in students and will ensure

that students requiring additional academic attention are not only identified, but placed in touch with the individual and services they require to be successful, score well on their respective placements tests, and undergo a positive transition into the realm of post-secondary education.

Conclusion

This article focuses on answering questions about the effectiveness of one Educational Talent Search program in its attempts to increase the academic metrics and college enrollment rates of a group of K-12 Appalachian high school seniors. Educational Talent Search is part of a family of programs under the TRIO umbrella formed after the Economic Opportunity Act of 1964 with the goal of ameliorating the poor college enrollment and sub-standard academic performance of students from low-income or first-generation families.

The participants in this study were 112 graduating seniors from six area high schools surrounding the program's host institution. All participants were from either low-income or first-generation backgrounds or both backgrounds concurrently. Academic data was gathered from program

materials collected during students' participation in the program and results were fused from these metrics in the interest of determining what key findings were present.

The findings of the study reflect the lack of effect that the program's standard curriculum has on academic performance outcomes such as academic metrics or post-secondary enrollment. Despite this, individual student mentoring was shown to have a positive effect on student academic outcomes. These results reinforce existing beliefs about the impact of K-12 academic preparation on students' enrollment into post-secondary education. However, these two findings are strangely synthesized given that the majority (75%) of the sample enrolled in some form of post-secondary education; this suggests that the Educational Talent Search program has some effect on post-secondary enrollment although that effect is currently unclear. Suggestions for program modification are provided and include an increased focus on mentoring and academic preparation. Through increased funding and greater support for academic pre-college programs, students-at-risk will have a more promising outlook on their future.

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Table 1
Frequencies of Federal Talent Search Guidelines Present in Subjects

Admission Criteria	N	% of N
First Generation	101	90.2
Low-Income	89	79.5
Both First-Generation and Low-Income	81	72