



Closing the Achievement Gap: An Investigation into the Efficacy of the Blugold Beginnings College Access Program

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Background

Mentoring programs have grown steadily in number over the past few years, and currently more than 5,000 such programs serve approximately three million youth nationwide (National Mentoring Partnership, 2006). College access programs are one form of mentoring, and have been developed over the past 20 years to create an atmosphere in the classroom where students can become more familiar with what a college education entails (Klopoff & Martinez, 2004; Krashen, 2005). College readiness is defined as possessing the skills to stay organized, understanding the course requirements needed to enter college, and maintaining a GPA above 3.0 to meet the requirements for being accepted (Conley, 2009).

The Blugold Beginnings College and Career Readiness Program works with local schools to provide a comprehensive college connection for 5th graders through high school seniors. The fifth grade program includes an afterschool program and recess program. Afterschool sessions include students being assigned a college mentor and completing the Blugold Beginnings program workbook. The recess program has college-themed flipbook with multiple students working with one mentor.

Some of the research used to develop the Elementary Blugold Beginnings College and Career Readiness Program include:

- Research suggests that college preparation programs should begin at a young age and students should receive information regarding academic requirements for post-secondary programs as early as possible (Camblin, 2003).
- Youth from families with few assets are more likely to see college as too expensive and academically inhibiting aspirations and academic effort (Orfield, Losen, Wald, & Swanson, 2004).
- Students who are informed about the availability of financial aid report significantly higher expected grades, with girls reporting a significantly higher number of anticipated hours of studying (Destin & Oyserman, 2009).
- Parents with a higher education tend to be more involved in their child's education and are more likely to enroll their child in honors programs. On the other hand, things such as work schedules, resource limitations and living in underprivileged areas are barriers for lower socioeconomic parents (Hill & Taylor, 2004).
- Students with parents involved in their academic lives report striving for significantly higher academic achievement than students with less parental involvement, regardless of ethnicity or gender (Jeynes, 2005).

The purpose of the current research is to investigate whether students in the program significantly increase their knowledge about post-secondary education over the course of being in the Blugold Beginnings College and Career Readiness Program, and to determine whether there are any differences in outcomes between students who attend recess versus afterschool sessions.

Method

Mentoring Sessions

Mentors meet independently with 5th grade students multiple times per week during recess and after school sessions. During this time, they assist their mentees in the with homework and spend approximately one half-hour discussing the contents of either the Blugold Beginnings College and Career Readiness Workbook or the flipbook. The mentor and mentee cover one of fifteen topics every other week (including study skills, organizational skills, becoming familiar with higher education, and how to set goals). Mentees then either complete a worksheet (afterschool) that encourages students to incorporate the skill for that week into their own lives or participate in a college-themed activity as a group (recess).

Instruments

The pre- and post-surveys consist of 15 multiple-choice questions to gauge students' retention of key concepts from the content of the program workbooks (used during afterschool sessions) and flipbook (used during recess sessions). One example of the multiple choice questions on the survey used to assess college knowledge includes:

"An opportunity at college where university students study for a semester in another country is called."

(A) Student Foreign Exchange

(B) National Student Exchange

(C) Study Abroad

(D) Peace Corps

Students are also asked to respond to several Likert scale questions to assess changes in students' self-reported levels of comfort regarding post-secondary education. Examples of these items include:

"I have someone I can talk to about college."

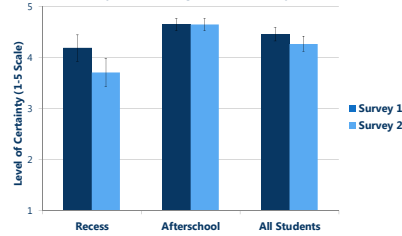
"I can afford to get an education after high school."

Blugold Beginnings Elementary Participants

Ninety-three students enrolled in the Blugold Beginnings: College and Career Readiness Elementary Program, with 53 students completing both the first survey and second survey and returning parental consent forms to participate in this research. Of those 53 students, 32 were enrolled in the after school program and 21 students were enrolled in the recess program. Fifth grade students who self-identified as being low-income, first-generation, and students of color are highly encouraged to participate in the mentoring program from seven area elementary schools.

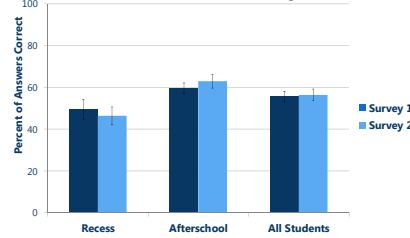
Results

Certainty of Obtaining Post-Secondary Education



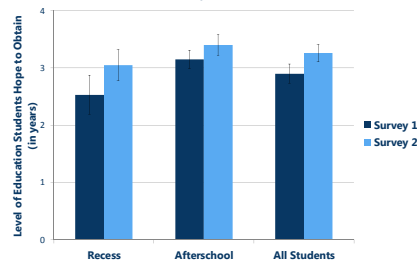
Among 5th grade students who completed the first and second survey (N=53) overall did not significantly change in their level of certainty of continuing on to post-secondary education from the first survey (M=4.46, SD=.94) to the second survey (M=4.27, SD=1.05), $t(52)=-1.28$. Among students who attended recess sessions (N=21) there was not a significant change from the first survey (M=4.3, SD=.67) to the second survey (M=4.5, SD=.60). Students who only attended after school sessions (M=32) did not significantly change from the first survey (M=4.5, SD=.72) to the second survey (M=4.6, SD=.50) all $p>.05$.

Overall Increase in Knowledge



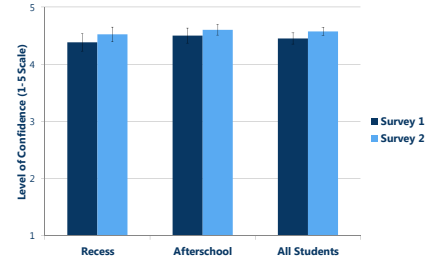
Fifth grade students who completed the first and second survey (N=53) did not significantly change in their overall increase in post-secondary knowledge from the first survey (M=55.60, SD=18.40) to the second survey (M=56.36, SD=20.40), $t(52)=-.30$. Students who attended only recess sessions (N=21) also did not significantly change from the first survey (M=49.52, SD=22.16) to the second survey (M=46.34, SD=19.71), and students who only attended after school sessions (M=32) did not significantly change from the first survey (M=59.60, SD=14.47) to the second survey (M=62.93, SD=18.29) all $p>.05$.

Post-Secondary Aspirations



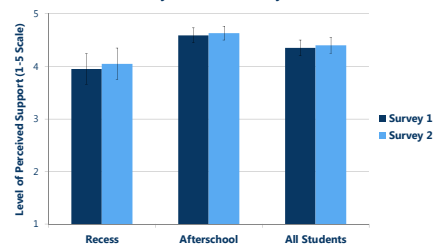
Within all fifth grade students who completed the first and second survey (N=53) there was a statistically significant change in level of education they hoped to obtain from the first survey (M=2.90, SD=1.22) to the second survey (M=3.26, SD=1.07), $t(52)=-2.46$, $p=.017$. Students who attended only recess sessions (N=21) significantly increased from the first survey (M=2.53, SD=1.53) to the second survey (M=3.05, SD=1.19), $t(19)=-2.25$, $p=.037$. Students who only attended after school sessions (M=31) did not significantly change from the first survey (M=3.15, SD=.93) to the second survey (M=3.40, SD=.99) $p>.05$.

Confidence Level in Academic Abilities



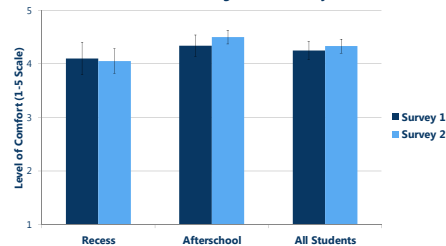
Overall, students who completed the first and second survey (N=53) did not significantly increase in their self-reported level of confidence in their academic abilities from the first survey (M=4.45, SD=.70) to the second survey (M=4.57, SD=.54), $t(52)=-1.10$. Students who attended only recess sessions (N=21) did not significantly change from the first survey (M=4.38, SD=.67) to the second survey (M=4.52, SD=.60), and students who only attended after school sessions (M=32) also did not significantly change from the first survey (M=4.50, SD=.72) to the second survey (M=4.59, SD=.50) all $p>.05$.

Availability of Post-Secondary Guidance



Among 5th grade students who completed the first and second survey (N=53) overall did not significantly change in their availability of post-secondary guidance from the first survey (M=4.35, SD=1.06) to the second survey (M=4.40, SD=1.05), $t(52)=-.43$. Students who attended only recess sessions (N=21) did not significantly change from the first survey (M=3.95, SD=1.32) to the second survey (M=4.05, SD=1.36), and students who only attended after school sessions (M=32) also did not significantly change from the first survey (M=4.59, SD=.80) to the second survey (M=4.63, SD=.75) all $p>.05$.

Level of Comfort Discussing Post-secondary Education



Among 5th grade students who completed the first and second survey (N=53) overall did not significantly change in their level of comfort discussing post-secondary education from the first survey (M=4.25, SD=1.20) to the second survey (M=4.33, SD=.90), $t(52)=-.41$. Students who attended only recess sessions (N=21) did not significantly change from the first survey (M=3.10, SD=1.33) to the second survey (M=4.05, SD=1.05), and students who only attended after school sessions (M=32) also did not significantly change from the first survey (M=4.34, SD=1.12) to the second survey (M=4.50, SD=.76) all $p>.05$.

Discussion

Researchers on this project failed to find overall significant results for the group of students who had taken both the pre-assessment and the midway assessment. These findings were reflected in both the students' retention of key concepts, and in their self-reported levels of comfort and confidence regarding post-secondary education. One measure on which student showed a significant increase was regarding their aspirations for the level of education they wished to obtain.

While many of the changes appear to be in the anticipated direction (with the exception of their certainty of obtaining higher education and their overall increase in knowledge for students in their recess sessions), the lack of significant findings merits the further development of programming materials using the feedback gathered from both mentors and mentees throughout the past two academic years.

One limitation in this study is that students self-selected into participating in the program. Another limitation is the small sample size of the elementary cohort which made it difficult to detect changes in student outcomes within recess and afterschool participant groups. Another limitation was the inconsistent attendance of students to mentoring sessions, which made it difficult to determine the amount of content covered over each two-week period. Furthermore, many of the elementary mentors received less training than mentors working in the middle school and high school programs. Most of the elementary mentors are volunteers therefore not required to attend 25 hours of training sessions. However, since the elementary mentors are unpaid, this may still provide a cost-effective means for recruiting students into the Blugold Beginnings Middle School Program.

Because the second survey was administered halfway through the academic year, students may further increase on survey measures through the end of the program. Researchers will again assess student outcomes in May to investigate whether further changes on these measures occur.

The Blugold Beginnings Program will continue to develop the program curriculum and mentee workbooks and activity books to ensure that the concepts covered during mentoring sessions are taught effectively and also that the material is engaging to the students who participate.

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Acknowledgements

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