RESEARCH REPORT

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GUIDING STUDENTS FROM BASIC EDUCATION THROUGH COLLEGE AND BEYOND FOR EQUITABLE POST-COLLEGE OUTCOMES

Introduction

Guided Pathways is a comprehensive reform model focused on student success by designing clear pathways for students, helping them to make informed decisions, and stay on their chosen path while striving to increase attainment in credentials with labor market value. Helping students to discern a path, reforms in helping students become college ready, and course maps for programs and predictable scheduling are strategies for advancing the initiative. College success and equity in closing gaps are equal goals of the reform in Washington.

The population of students that will provide colleges the best evidence of the effectiveness of their reform efforts are first-time ever in college (FTIC) students. These students are also the focus of a broader state attainment goal that 70 percent of all Washingtonians will have a college credential with labor market value.

Previous reports that we have written and that we reference in this report have looked at both academic transfer and professional-technical pathways. These two college paths are the basis for two of three colleges' missions. Historically, developmental education was also linked to these missions for making students college-ready.

Washington's colleges also have a third mission for Basic Education for Adults (BEdA). BEdA students on average are older than traditional age students and increasingly are an important population that the state will need to increase college access and success for if the state is to reach its 70 percent goal.

BEdA students who transition to college-level have been part of our first-time college cohort in our earlier reports; however, their participation and results have not been disaggregated and reported separately. In this report we identify 10,915 basic education students who are included in an overall population of 105,720 first-time in college students who started between 2010 and 2013. This time period provides an early-baseline for our reform initiative.

All of our students are studied for their highest college attainment within four years as well as post college outcomes of transfer to a four-year institution or employment. We ask and answer three important questions. (1) What is the highest educational attainment for BEdA students four years after starting in college-level courses? (2) What are the employment outcomes in their first year after leaving college for students who pursued a professional-technical pathway? (3) What is the transfer rate to four-year college within two years after leaving college for students pursuing an academic transfer pathway to a bachelor's degree?





David Prince
Policy Research Associate
e: dprince@sbctc.edu

We answer these questions for award-seeking students who participated in basic education anytime within a period two years before, or any time throughout the four-year period that we use to measure their college attainment. We call this extended period "Ever" basic education. Because IBEST (Integrated Basic Education and Skills Training) has become the major policy for transitioning basic education students to college, we distinguish between 3,901 "BEdA FTIC_Ever IBEST" and 7,014 "BEdA FTIC_Never IBEST" students.

Finally, because we are ultimately concerned with closing equity gaps among all Washingtonians, we look also look at the population for 94,807 "FTIC_Never BEdA" students who started directly on their college path and comprise the largest component of our FTIC cohort during this time period.

Key findings:

- BEdA students (both Ever and Never IBEST) who transition to college to enter a professional technical
 pathway are as likely to earn a credential, although most BEdA students do not transition. Overall these
 students do not seem to be disadvantaged by having started in BEdA.
- Students who transitioned to a professional technical path with IBEST had the highest overall
 attainment of a credential (58 percent). This was nearly 30 percentage points higher than either any
 other BEdA student transitioning to college, or other FTIC students starting directly on a college-level
 path.
- Professional-technical degree attainment is slightly lower (2 percentage points) --12 percent for BEdA transitioned students (IBEST and Never IBEST alike) compared to 14 percent for students starting directly on a professional technical path.
- Higher completion rates for IBEST are due entirely to the difference in awarding short certificates 43
 percent for IBEST compared to 16 percent for BEdA_Never IBEST and 13 percent for all other FTIC
 students.
- Compared to the other two groups, IBEST students are more likely to follow several key pathways within professional-technical education for health services (24 percent of IBEST students), business administration (14 percent), manufacturing (11 percent) and education (10 percent).
- Within these paths, IBEST is also substantially more likely to award a short certificate than either BEdA_Never IBEST or all other FTIC_Never BEdA students.
- A key component of the IBEST program is the certificate as a step towards a degree. However, in the
 most common IBEST program of health sciences, the typical certificate is terminal that has no degree
 credits.
- Post-college employment is a key indicator for measuring closure of equity gaps. BEdA students overall
 have lower earnings and less full-time employment than other FTIC in the first year after leaving
 college.
- The labor market value of certificates varies greatly along gender lines. We find in this report that while completion is higher in IBEST, post-college earnings are lower in fields where certificates are the predominant credential earned by females, such as nursing assistant. Thus, the higher completion rate is not supported or bolstered by strong and equitable post-program outcomes.
- IBEST males have nearly the same employment earnings and full-time employment as FTIC males overall and better employment outcomes than BEdA Never IBEST males.
- BEdA females in general have less full-time employment and lower earnings than other FTIC students. IBEST females have the lowest post-college earnings of any group. However, IBEST females who complete a degree versus a certificate have the highest earnings bump. They also have higher full-time employment and close the earnings gap they have with all FTIC_Never BEdA females.
- Academic transfer is the major pathway followed by FTIC students (59 percent) and for a large portion (42 percent) of BEdA_Never IBEST. In the time period studied it was a relatively new pathway for IBEST (13 percent of IBEST cohort students). Just five colleges had grown the path to enroll at least 10

students in the final cohort year covered in the study period.

- IBEST academic transfer students had the highest four-year degree completion (25 percent). This
 compared to 20 percent of all other FTIC and 13 percent of BEdA_Never IBEST. However, when looking
 at just the five colleges that were growing the "academic IBEST" pathway and the final cohort year
 (2013), we see that he completion rate is an even higher at 43 percent. Comparing these colleges to
 themselves for Never IBEST and all other FTIC, we find those academic degree completion rates to be
 10 percent and 23 percent, respectively.
- Completing college math and English within the first year is strongly correlated with completing a
 degree over the long-term. In the five colleges that have grown the academic pathway, 30 percent of
 IBEST students in the final cohort year (2013) completed college math in the first year of taking college
 courses. This compares to 12 and 16 percent completing college math for BEdA Never_IBEST and all
 other FTIC, respectively. The Ever IBEST cohort also performed on par with all other FTIC students in
 completing college English and substantially better than the BEdA_Never IBEST group.
- Four-year transfer is a key indicator among academic transfer students for measuring closure of equity gaps. Students who complete the transfer degree are substantially more likely to transfer to a four-vear institution.
- BEdA students awarded any transfer degree overall are less likely than other FTIC students to transfer to a four-year institution. Transfer rates for degree completers in the three groups are: 49 percent for Ever IBEST, 55 percent for BEdA_Never IBEST, and 62 percent for all other FTIC.
- However, when we focus in on the five colleges that grew the pathway, IBEST four-year transfer is 70 percent. This compares to 59 percent for BEdA_Never IBEST and 66 percent for all other FTIC. This college grouping keeps constant geographic factors that may influence transfer.

Who are the students in our cohorts?

Table 1 displays demographics based on their first year and quarter enrolled with a college-level purpose for either academic transfer or a professional-technical credential. Within our overall FTIC cohort, BEdA students are more diverse than the All FTIC, Never BEdA group of students. BEdA is also a major on-ramp for women. Ever_IBEST are comprised of more female and generally older students than all other students.

Table 1.

	BEdA FTIC_Ever IBEST	BEdA FTIC_NeverIBEST	FTIC_Never BEdA
Total	3,901	7,014	94,807
Male	37%	42%	53%
Female	62%	58%	46%
Not Reported	0%	0%	1%
Under 20	23%	22%	51%
20-24	22%	29%	20%
25-44	42%	40%	23%
45+	12%	8%	5%
Not Reported	0%	0%	0%
Black/African American	9%	10%	6%
Asian	6%	8%	5%
Native Hawaiian/Pacific Islander	1%	1%	1%
Alaskan/Native American	2%	3%	2%
Latino/Hispanic (of any race)	22%	18%	14%
White	51%	50%	61%

2+ races and other race	5%	7%	7%
Not Reported	5%	3%	5%

Paths Followed

Table 2 shows paths followed and the highest education attainment for our three student groups based upon the students' final program classification (CIP) codes or the highest credential they earned. We see several significant differences. Academic transfer is the most prevalent path for FTIC students in general. It is also the final path for a substantial portion of BEdA_Never IBEST students. Academic transfer paths for IBEST are relatively new within the study period with a substantially smaller portion of students following it.

Within professional-technical paths, health services, education, manufacturing and transportation appear to distinguish IBEST from all other FTIC students.

Table 2.

	BEdA FTIC _Ever IBEST	BEdA FTIC_ Never IBEST	FTIC_Never BEdA
Academic (Any transfer degree path)	13%	42%	59%
Agriculture, Food & Natl Resource	3%	1%	1%
Architect & Construction	2%	2%	2%
Business Management & Administration	14%	12%	7%
Education & Training	10%	3%	2%
Health Services	24%	7%	4%
Health Tech	2%	3%	2%
Hospitality & Tourism	0%	2%	2%
Human Services	4%	3%	2%
Info Tech	2%	3%	3%
Law, Public Safe, Corrections & Security	3%	3%	2%
Manufacturing	11%	5%	4%
Nursing	3%	6%	5%
Transportation, Distribution & Logistics	9%	4%	3%

Highest Education Attainment Four Years After Starting

We follow our cohorts for four years after they enroll as first-time college students and describe their highest attainment at the end of four years, or if they are still enrolled in a snapshot fifth year. We disaggregate our results based upon students' final professional technical or academic transfer path.

Attainment in Professional Technical Paths

Chart 1 describes students who pursued a professional technical path. Overall the BEdA _Ever IBEST had higher rates for credential attainment compared to both BEdA_Never IBEST and the larger FTIC population. This is entirely due to certificates.

Chart 1.

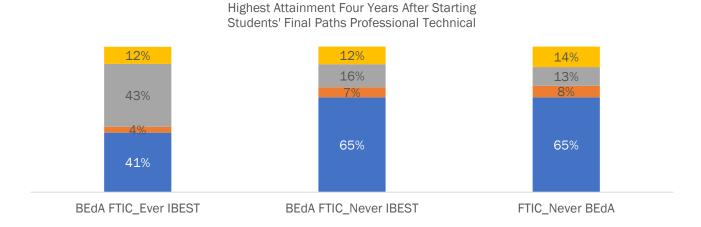


Chart 2a ab 2b describes attainment for students in four paths shown in table 2 as the most commonly followed by IBEST students. Health services and transportation are both areas where more degrees do not seem to follow along with higher certificate attainment. Conversely, manufacturing (and to a lesser extent education) appear to be two paths in which IBEST students attained degrees as well as certificates at higher rates than other students.

■ Exit, No Award ■ Still Enrolled, Same or Another College ■ Workforce Certificate ■ Workforce Degree

Chart 2a.

Completers vs Non-Completers in Select Pathways

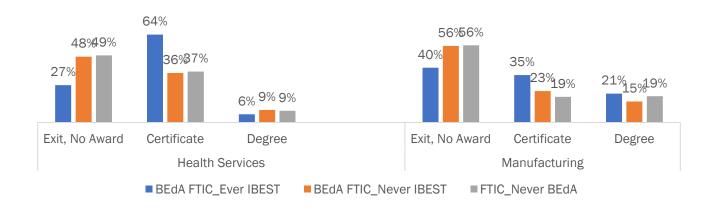
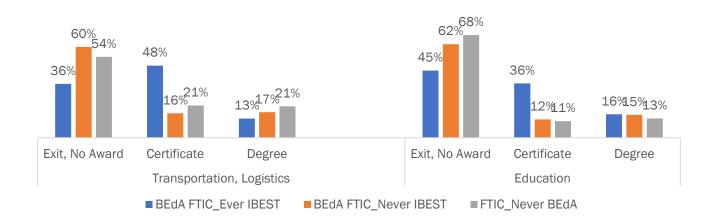


Chart 2b.

Completers vs Non-Completers in Select Pathways

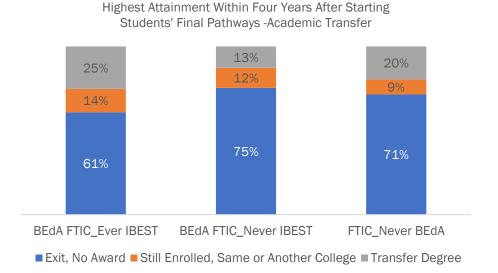


Attainment in Academic Paths and Completion of College Math and English

As previously noted, academic transfer is a relatively new path for IBEST students in the report time period. As shown in table 2, just 13 percent of students had this as their final path in the four-years that they were followed. Furthermore, just five colleges had grown the pathway to enroll at least 10 students by the last year in the four cohort years covered.

Chart 3 shows two-year transfer degree attainment for IBEST, BEdA_Never IBEST and all other FTIC students during this period. Given the caveat on program newness, IBEST students have the highest degree completion.

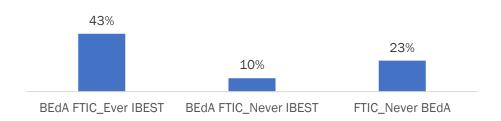
Chart 3.



In chart 4 we restrict our attainment analysis to the final year (2013) five colleges that were growing the pathway for the period covered (2010-2013). IBEST has substantially higher completion for this select group of colleges in the final cohort year included.

Chart 4.

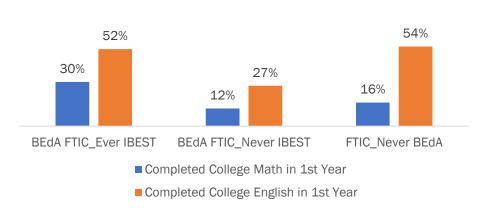
Completed Transfer Degree within Four Years After Starting (2013)
Five Colleges Growing IBEST Transfer Pathway



College math and English completion within the first year has been shown to be closely associated with degree completion. Chart 5 describes completion for the five select colleges. IBEST students were most likely to complete math and as likely as all other FTIC to complete English.

Chart 5.





Post College Outcomes for Students Following Professional Technical and Academic Transfer Paths

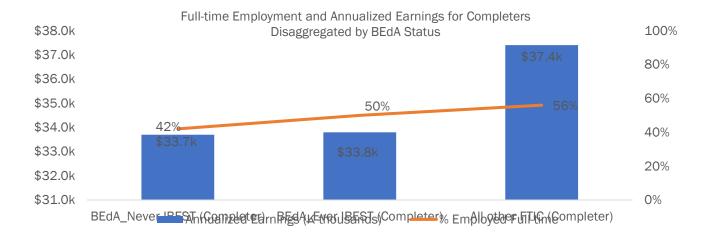
In this section we describe the post-college employment outcomes for students seeking professional-technical education and transfer to four-year institutions for students with transfer goals.

Post-College College Employment Outcomes

We begin by describing employment outcomes one year after leaving college for students following professional technical education paths into the labor market. Chart 6 shows full-time employment and

earnings for completers in the three student groups. FTIC students Never_BEdA had the highest earnings and full-time employment. IBEST helps close the full-time employment gap, but not the earning difference for students that transitioned form BEdA.

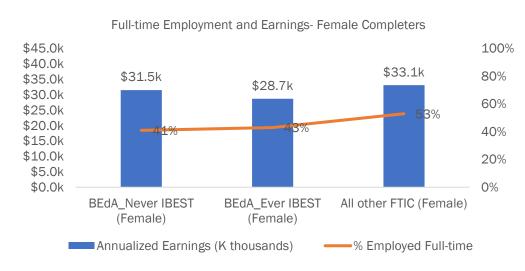
Chart 6.



In our previous research report ¹describing professional-technical pathways, we associated weaker prospects for full-time employment and earnings for women compared to men due to program selection. Women comprise larger shares of Ever_IBEST (68 percent) and BEdA_Never_IBEST (57 percent) than the general FTIC population (47 percent). In chart 7a and 7b, we disaggregate employment outcomes for males and females based upon the highest credential attained.

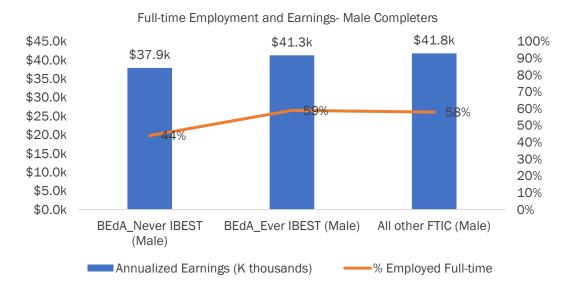
I-BEST closes both the full-time employment and earnings gaps between its male students and all other FTIC male students. However, BEdA females in general are less likely to attain full-time employment and Ever_IBEST females also have lower earnings.

Chart 7a.



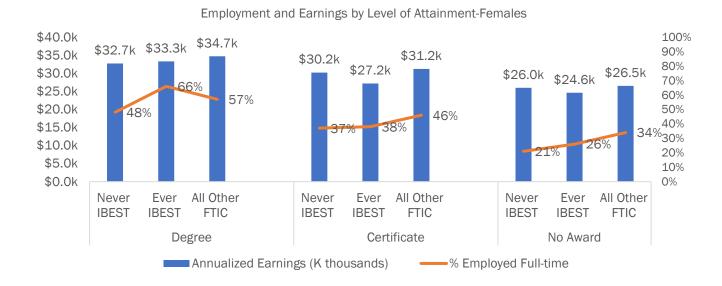
 $^{{\}color{blue} {}^{1}} \underline{\text{https://www.sbctc.edu/resources/documents/colleges-staff/research/research-reports/19-1-guiding-students-to-and-through-professionaltechnical-workforce-pathways-final.pdf}$

Chart 7b.



Degrees matter, in particular for females in largely female-dominant occupation. IBEST full-time employment for female degree recipients exceeds both other groups. However, employment and earnings for certificates is lower for IBEST awardees. In chart 8 we disaggregate employment outcomes for women based upon their highest award. An IBEST assisted degree comes close to closing gaps between BEdA and Never_BEdA FTIC students.

Chart 8.



Post-College College Four-Year Transfer Outcomes

In previous research regarding transfer² for FTIC students as a whole, we showed that transfer degree completion makes a substantial difference in transfer rates between degree completers and non-completers. Other SBCTC research has shown that the transfer degree also makes a major contribution to

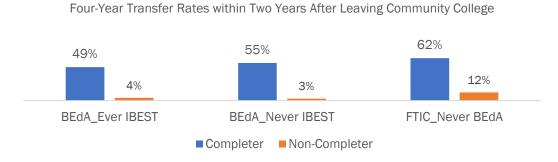
² https://www.sbctc.edu/resources/documents/colleges-staff/research/research-reports/transfer-degree-to-guided-pathway-18-6.pdf

eventual BA attainment.3

Chart 9 describes transfer status for our three student groups. As is the case for FTIC students overall, the transfer degree substantially increases transfer for students with basic education backgrounds. However, the transfer rate is below the rate for FTIC students overall. Transfer is lowest for IBEST, 13 percentage points lower than FTIC students when comparing degree completers.

Several demographic factors suggest basic education students may be more place bound (and therefore have fewer transfer options) than FTIC students. Basic education students and IBEST in particular are older and generally more female.

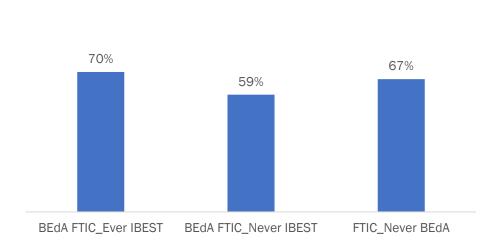
Chart 9.



Given the relative newness of this pathway for IBEST, in chart 10 we look exclusively at the five select colleges most advanced in implementing the new path, in their final year 2013. IBEST students were the most likely to transfer.

Four-Year Transfer Rates- Select Colleges Furthest Along in Implementing Transfer Pathway in IBEST (2013)

Chart 10.



Discussion

This brief analyzed students who transitioned to first-time in college from basic education. Because IBEST has been the major policy initiative that promotes this transition, we compared BEdA, Ever_IBEST students to students who transitioned on their own BEdA, Never_IBEST. Given our focus on implementing Guided

³ https://www.sbctc.edu/resources/documents/colleges-staff/research/transfer-research/18-3-role-of-transfer-2018.pdf

Pathways with all first-time college (Never BEdA FTIC) students, we offer the additional comparison to this group.

Our findings suggest that our students transitioning to college programs face the same challenges and attain the same success as any other FTIC student. Importantly, we find that after BEdA students get on their college pathway, their completion rates are at least as good as any other FTIC student.

Consistent with all prior research, we found that IBEST has a substantially higher completion rate in professional-technical programs than BEdA students who transition on their own. In fact, we found IBEST completion rates were also higher than all other FTIC professional-technical students. This was due to the large percentage of IBEST certificate completions, a far higher percentage than within either BEdA, Never_IBEST or Never BEdA FTIC.

Since its early days, IBEST has steered students towards a few distinct professional technical paths. Typically, an IBEST student will follow one of these professional technical paths far more frequently than another BEdA, Never_IBEST student on their own and for that matter far more than any other FTIC student. The largest example is health services. IBEST students end on this path having started out with a goal to become a registered nurse.

Our prior research has shown that nursing is an extremely competitive and difficult path to enter for any FTIC students. In the case of IBEST we see a high proportion of nursing assistant certificates resulting from this path. However, nursing assistant is a terminal credential in that students earn no credits that are core towards pursuit of a nursing credential, or for that matter any degree.

We have written much about professional technical degrees versus certificates.⁴ The labor market value of certificates varies greatly along gender lines. We find in this report that while completion is higher in IBEST, post-college earnings are lower in fields where certificates are the predominant credential earned by females. Thus, the higher completion rate is not supported or bolstered by strong and equitable post-program outcomes.

This finding causes us to re-think the so-called tipping point⁵ that twenty years ago found that a year of college and a credential was an important goal for program structuring for low-skill adults. In fact, we would suggest that in many female dominant fields at minimum a bachelor's degree is needed and that the pathways for these students would be stronger if they lead to a Bachelors Applied Science (BAS).

This conclusion is contrary to conventional thinking that has focused on immediate employment with an opportunity to ladder to higher wage jobs. We posit that a problem with this approach is that at best it puts off and at worst ignores the fundamental need to develop academic skills. Furthermore, only in a few cases is there any evidence that laddering works.

However, we have a very positive finding from our other major (academic transfer) pathway that suggests this conventional approach in building professional technical pathways can be successfully challenged and tested.

Our analysis includes an early look at IBEST students who pursue an academic transfer pathway. We found in the five colleges that were most invested in growing the path that their IBEST students' academic transfer degree completion is substantially higher than all other FTIC students. Furthermore, the strength of this completion is bolstered by a four-year college transfer rate on par with (actually slightly higher than) other FTIC students.

⁴ https://www.sbctc.edu/resources/documents/colleges-staff/research/workforce-research/resh-rpt-15-1-labor-market-results-of-wf-students.pdf

⁵ https://ccrc.tc.columbia.edu/media/k2/attachments/pathways-success-low-skill-adult-brief.pdf

FOLLOWING BASIC EDUCATION STUDENTS THROUGH COLLEGE AND AFTERWARDS

We connect this higher degree attainment rate to a higher first year college math completion rate. Here we posit that IBEST was perhaps one of the earliest groups to adopt and embrace reforms by guiding students to a math pathway aligned with their desired program of study. This includes integrating and contextualizing academic support in the college-level coursework to bring students to and through college level math and English, thereby helping to secure stronger completions. Much goes into these completions beyond raising skill levels. For example, stronger advising to enroll students in courses that will move them further and faster to completion. Our point is colleges need to build on these innovations in professional technical paths as well, rather than fall back to conventional wisdom for getting a student started on the lowest rung of a low wage job and assume that they will advance to higher levels of education and employment.

Looking at our academic transfer rates, we observe another challenge for basic education students transitioning to college that is not different than any other student. While the transfer degree makes a difference, a substantial portion of students who earn the two-year transfer degree do not transfer. We have written about this observation before. We believe that the academic transfer mission should be re-branded as a bachelor's degree pathway and the BAS degree should be included in that path and discussed with academic transfer students.

Finally, we believe in many ways the findings in this report strengthen the call for mission integration for all students in Guided Pathways. All of our students need academic and professional-technical skills and knowledge. Our pathways need to be built backwards from the highest level of attainment needed for a secure labor market entry and progression in particular occupational fields.



