WATSONVILLE DIGITAL BRIDGE ACADEMY

REPORT I: STUDENT OUTCOMES EVALUATION
COHORTS 1 & 2

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Norena Norton Badway, Ph.D.

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Cabrillo College has been awarded a series of grants, beginning in 2002, to design and implement an innovative approach to serving Latino youth who are at risk of unemployment and poverty because they are under-prepared academically and behaviorally to compete in today's knowledge-based economy. The goals for this endeavor, titled *Watsonville Digital Bridge Academy (DBA)*, are to offer to minority, reentry, foster care and at-risk students, including young parents, a "new and unique opportunity to reclaim their educational experience and succeed in higher education and the work culture of knowledge-based careers".[1]   The Cabrillo Community College District (CCCD) has contracted with the Higher Education Evaluation and Research Group (HEERG) to complete interim evaluations of project outcomes to meet the requirements of the various grants and to inform future activities of DBA. This is the first formative evaluation produced under that agreement.

This evaluation focuses on outcomes of the DBA:
- the characteristics of DBA participants
- personal and academic growth related to participation in the DBA

Subsequent reports will evaluate the activities incorporated within the DBA, its potential for accelerating remediation of basic skills, and the potential for replication. This report reviews early outcomes from participation in the Foundation Course and the Bridge Semester for two cohorts of students.

This report analyzes data for the first two cohorts of DBA participants, Cohort I (C1) beginning in August 2003 and Cohort 2 (C2) beginning in January 2004. During this period, the DBA has been revised to improve student-learning outcomes and to become substainably integrated into the Cabrillo Community College District.

The timing of this evaluation is propitious: there has been opportunity to experiment with the format, content, personnel and other aspects of the DBA, but at the same time the program is young enough that it is not mired in standard operating procedures.

The Social, Educational and Economic Context of the DBA

Community colleges are a critical point of access to the American dream of economic and social opportunity for low income and minority individuals. But access alone is not sufficient. Unless individuals believe they can succeed in college and know *how* to learn once they enroll, a large portion of Americans are unlikely to pursue, and less likely to complete, an associate degree or technical certificate. Indeed, only about one-third of students enrolled in a community college as their first postsecondary enrollment complete *any* type of credential within the following six years.[2]

Overwhelmingly, community colleges attempt to support low income and minority students with a variety of academic, financial, and cultural support services. These efforts tend to be located in several offices on a campus, and

range from very basic to quite ambitious. Some student support services are targeted to Latino students, but many concentrate on a mixed ethnic/racial clientele, so they may not be as influential for Latinos. For campuses, and for individual students, coordinating and negotiating these offices and services can be bewildering.[3]

The Digital Bridge Academy has taken a substantially different approach to recruiting and supporting low-income, minority and first-generation community college students. The DBA applies a theoretical lens — building self-efficacy — to motivating students to attend college, enhancing basic skills, and building learning behaviors that are applicable in academic or workplace settings. In addition, the DBA combines multiple sophisticated components within the program, rather than as external "add-ons" to a student's college curriculum. Understanding the role of self-efficacy as the grounding theory of the DBA is critical to appraising the outcomes of this program to date.

Self-Efficacy in the Digital Bridge Model

The DBA is founded on a theory of self-efficacy, which refers to an individual's judgments of their capabilities to organize and execute courses of action required to achieve certain types of performance[4] and determine personal agency, predicting academic and career choice and performance.[5] If students believe they have the ability to perform certain tasks and have expectations of positive outcomes, they will try hard to achieve their goals. Low self-efficacy leads individuals to give up easily — to avoid situations in which they predict that they might fail.[6]

Two areas of self-efficacy research inform the structure and content of the DBA. First, research supports the correlation of students' self-efficacy beliefs with motivation and students' achievement in academic settings.[7]   In addition, researchers have found that efficacy beliefs shape the career choices of individuals, especially in fields related to science and mathematics.[8]   Because self-efficacy judgments influence the choices students make, the effort they expend, the perseverance with which they approach new tasks, and the anxiety they experience, the lower self-efficacy beliefs of minority students provide a strong explanation of why many of them remain academically at risk.[9]   Students with strong levels of self-efficacy beliefs are more likely to eagerly participate in academic tasks, use self-regulatory strategies that encourage independent study, persist longer, and earn higher grades than students who have lower beliefs about their ability to succeed.[10] Indeed, Bandura asserts that support programs are likely to improve student functioning only when they enhance students' self-efficacy.[11] To this end, the DBA has incorporated multiple activities in which students are exposed to and reinforced for awareness of their self-defeating feelings and in which students practice positive behavioral patterns that validate their ability to change.[12]

A subsequent report will apply an implementation lens to the DBA, evaluating the extent to which and the ways that the activities of the DBA are aligned with its theoretic approach of fostering self-efficacy. This report focuses

on self-efficacy outcomes rather than the activities that might have generated those outcomes.

Methodology

This report covers the first year of DBA and follows the progress of the first (C1) and second (C2) cohorts of students. Because of the variety of data forms collected by DBA, this report applies both quantitative and qualitative research methods to measure outcomes for the first two cohorts of DBA participants.

The quantity and type of data available from the DBA posed certain challenges for this evaluation report, largely because there is such a quantity and quality of data specific to this program. We want to acknowledge from the outset that we have not previously encountered *any* program that collects such a range of data and uses such a variety of methods to collect that data. We found data collection and the design of local instruments to be an exceedingly thoughtful process.

The quantitative analyses incorporated in this report rely on data from three instruments:

a) Cabrillo College transcripts dated June 2004

b) Cabrillo College Counseling Reports, gathered when the student enrolled in the DBA

c) Three versions of the application forms for the Foundation Course (July, 2003 Student Background Information Form; November, 2003; and 2004) The July 2003 form asked questions about home language, education, family background, employment, high risk characteristics. The November 2003 and the 2004 revised versions added questions about who referred the applicant to DBA, 2 aspects of the DBA that were interesting to the applicant, their reasons to enroll and what the applicant hoped to learn)[13] ;

d) The Bridge Semester Application (not dated).

We found that both simple descriptive as well as more sophisticated methods offered the clearest picture of DBA effectiveness. Descriptive analysis was used when more sophisticated statistical methods would have blurred the diversity of the DBA population. For instance, we report frequency rather than the mean and/or standard deviation for participant characteristics, because the participants fall into such discrete subpopulations. Knowing the average age of participants who range from 16 to 51 years of age is much less useful than understanding the variety of individuals currently served by the DBA.

For other data we used standard statistical methods to compare student outcomes before enrollment in the DBA to subsequent outcomes. We coded 41 student transcripts dated June 2004 from the C1 and C2 cohorts, to differentiate PRE and POST Bridge Semester coursework for semesters enrolled, subsequent pairs of semesters, graded units attempted, units completed and grade points accumulated. PRE and POST Bridge Semester GPAs were then calculated. Six students had no PRE coursework, and two students from each of

C1 and 2 completed the Foundation Course but not the Bridge Semester. Because one student was in two categories (i.e., both had no PRE Bridge Semester coursework and did not complete the Bridge Semester), a total of nine students were eliminated from measures requiring PRE and POST comparisons.

Analysis of variance (ANOVA) was used to evaluate GPA, Retention, Progress and Persistence in PRE and POST semesters to determine whether indicators of strengthened self-efficacy were evident. A *t*-test was also calculated to provide a means test for the outcomes over the two periods of time (Foundation Course and the Bridge Semester).

We identified four measures as indicators of self-efficacy:
(1) student learning as measured by the proxy of GPA;
(2) retention through the semester, suggesting that a student believes he/she is capable of doing college work,
(3) progress toward an award (i.e., certificate or degree) by risking a grade versus selecting a credit/no credit option[14]
(4) persistence to the next term, suggesting that the student believes he/she can achieve college work and will try again the next term

Persistence was measured using the ratio of the number of terms in which a student attempted coursework, regardless of the grade earned, to the number of consecutive pairs of semesters for which the student registered for college. Progress was measured by the number of units attempted and the grade for each course to determine a Grade Point Average. GPA (indicating degree of learning) as well as credits accumulated (indicating advancement towards unit accumulation) was considered as indicators of progress.

Qualitative data was derived from three instruments:

a) Foundation Course Final Feedback Form, which asks students to identify the five most important things they learned in the Foundation Course, their ability to apply content from the Foundation Course in or out of class or to explain it to others, ways in which they have changed as a result of their DBA experience, their confidence and motivation to pursue further education, their motivation for changing their personal future, and satisfaction questions about learning exercises during the Foundation Course;

b) Leadership I Survey — Third Week Digital Bridge Academy, in which students are asked to rate improvement in their behavior related to 21 Traits of Highly Successful People;

c) End of Bridge Semester Survey (16th week of the Digital Bridge Academy), in which students again self-report growth on the 21 Traits of Highly Successful People; in addition to identifying the five most important things they learned during Bridge Semester; what they learned in the Foundation Course that they still could use; how well they understood (understands well, OK, or doesn't understand) the elements of the Bridge Semester (English 100, Computer Algorithms, Learning to Learn, Movement Class, Digital Leadership, and Digital Management); the academic and employability/ intrapersonal/ interpersonal skills they learned during the Bridge Semester; ways in which they have changed based on their DBA experience to date; confidence and motivation

levels for continuing further education and improving their personal lives. Students reported their progress on Likert-type scales, allowing some numeric analyses, and they also wrote short responses and essays about their progress, requiring a thematic analysis.

We believe this combination of methods offers strength to the conclusions drawn at this early point in the DBA, as well as suggestions for the future of this unique program. When data was not available — a condition we discuss in the final section of this report — the data field was set to "missing" in the statistical database used for this analysis.

Throughout this report, we sought DBA data related to accepted research on risk factors and desirable programmatic elements for postsecondary success for Latino students. In this way, we have established not only an evaluative but also a research context for this report.

PART II
PARTICIPANT CHARACTERISTICS

There are a number of factors that research has identified as contributing to the risk of not entering or not completing postsecondary education. Merely being Latino is a large risk.[15] The consistency with which young Latino adults experience these factors has created a disparity in educational outcomes between California's largest cultural groups: Latinos and whites. Understanding the dimensions of that gap is especially important to managers of programs such as DBA and community colleges such as Cabrillo, because nearly two-thirds of Latinos nationwide enroll in "open-door" institutions.[16] For the best-prepared Latino students, college selectivity is a choice. For the students participating in the DBA, community college is the only option.

As we analyzed the attributes of the DBA population, we were struck by the insufficiency of conventional types of data to capture the character of this population. For every variable we examined, we found that numbers gravely underestimated the full condition of these students' lives. One of our first conclusions is that for DBA participants, nationally accepted indicators for risk of college failure — personal and academic demographics — fail to acknowledge the full range of challenges this population faces.

Readiness to Learn

At the time of this report, four cohorts have enrolled in the DBA. Their readiness to learn is reflected in the primary language spoken in their homes, any delay in entering college following high school, and whether or not they graduated from high school (see Table 1).

Table 1: Readiness to Learn (reported as percentages of DBA students)

Cohort	#	Latino	Spanish language at home	Delayed entry into college	H.S. dropout
C1	29	93	79	39	24
C2	14	86	60	47	57
C3	26	92			
C4	24	100			
Total	93				

Language

One example of the insufficiency of conventional data is the issue of language spoken in the home; several layers of analysis were required to make sense of commonly used indicators of "at-riskedness". Research suggests that living in a Spanish-speaking household often leads to limited-English-proficiency for youth.[17] And, certainly, much the DBA population falls into this risk category: 79% of C1 and 60% of C2 live in a household in which the predominant language is Spanish.

However, a second layer of analysis appears to contradict the home language challenge. DBA participants do not generally feel they have difficulty communicating in English. Over two-thirds (69%) of students living in households in which Spanish was the main language reported they "seldom" or "never" faced challenges communicating in English; only 31% reported they "sometimes" faced such challenges.[18]

Nevertheless, a third level of analysis of composition examples as well as college academic placement tests revealed that, in fact, the written communication skills of DBA students are seriously below college-readiness. In short, the DBA data suggests that living in a Spanish-speaking home is a risk factor for college success, even though individuals themselves may not so identify it. Poor communication skill is one mark of being at-risk; misdiagnosing one's personal level of competency is an even greater risk factor.

It is likely that the language gap of the DBA students reflects the gap between "formal" and "casual" English rather than English versus Spanish language. The fact that the majority of DBA students don't believe they are challenged in communicating in English, even though their academic placement test scores are below college level, may well reflect their comfort with casual language in both English and Spanish, but their lack of competence in formal or academic English.

Previous Academic Progression
Students who do not complete high school, whose academic skills are below that required for college work, or who delay entry into college are at-risk of not succeeding in college. The special circumstances of the DBA population compounds those risk indicators.

Delayed entry
A recognized risk factor is delayed entry into college. The U.S. Department of Education stresses the consequence of timing:
> A key [research] finding was that the odds of earning a bachelor's degree or higher change when entry into postsecondary education is delayed… Furthermore, the longer students delayed their entry into postsecondary education, the lower their average levels of educational attainment.[19]

For a good share of DBA participants, delayed entry does not appear to be an issue. In C1, 61% are age 19 or younger and so presumably within a year of high school graduation; 53% fall into this age category in C2. On the other hand, the bimodal nature of each cohort places 29% in C1 and 20% of C2 in the 20-30 year old group, and 11% of C1, 27% of C2 in the over-30 category. More age diversity occurred in C2, with two 40-somethings and one 50-something enrolled, whereas in C1 the oldest individual was in his 40's.

High school graduation
Not only did the majority of DBA participants move into college within about a year of finishing high school, they also fully graduated from high school.

Research suggests that not obtaining a regular high school diploma is another risk factor for completing college, but consistent with research about today's Latino youth, DBA students are likely to earn a regular diploma. [20] Only 7% of C1 and 8% of C2 were high school dropouts, and 7% of C1 completed through the GED examination. However, completing a regular high school diploma did not prepare DBA students for college, based on the high rate of remediation required for these students.

Academic preparedness

Latino youth are likely to graduate from high school with lower-level courses than other students. Geometry is the highest math course attempted for over half (58%) of Latinos, often resulting in remediation when they continue on to college.[21] This trend held true for DBA participants. In C1, basic math, Algebra I or Geometry was the highest math course completed by 46% of participants; 91% of C2 shared low success in mathematics. Compounding their under preparedness in math, these participants accumulated many more C and D than B grades, and there was only a single A in math reported by any DBA participant. Grades in English courses were similar: very few A's, the ubiquitous B's, and a disturbing number of C's and D's.

It is not surprising then that the majority of DBA students are assigned to developmental levels of mathematics, English and reading. Placement Testing practices appear to be uneven at Cabrillo College — not all entering DBA students were assessed for reading, writing and mathematics. But of the students tested for English grammar in C1, about half of the students scored below 60% accuracy. For C2, about equal numbers of students got half or fewer of the questions correct as got more than half correct. On reading as well, the two cohorts split with half of participants making errors on more than half of the questions.

On the Algebra readiness placement exam, about half of each cohort scored below 40% accuracy, resulting in a high rate of placement in a lengthy sequence of remediation courses prior to taking college level algebra.

Readiness to Pursue College

Even though the data from the first two cohorts of the DBA would not appear to place these students in a high-risk category for failure in college, a deeper analysis reveals that conventional methods of measuring at-riskedness ignore important predictors. On the surface, DBA participants have taken advantage of publicly supported opportunities to learn and could be expected to experience at least a modicum of success in college. They completed regular high school diplomas and moved on to post-secondary education. However, this pathway has ill-prepared them to achieve at the college level; overwhelmingly, even after doing what the research literature predicts as the pathway to college success, they are woefully under prepared. This lack of readiness for college is compounded by the social and economic circumstances of DBA students, which we discuss next.

Social and Economic Circumstances

Research on Latino youth describes living and working situations that deter college success. Lack of self-sufficiency, teen parenthood, and poverty are common indicators for college failure. Again, for the DBA population, numbers fail to tell the whole story.

Table 2: Social and Economic Characteristics (reported in percentage of DBA students)

Cohort	#	Financial dependents	Live with parents	Family income < $30,000	Father with 8th grade or less education	Mother with 8th grade or less education
C1	29	7	75	100	61	57
C2	14	23	62	100	31	38

Financial dependents

Although the research worries about the negative impact of teen pregnancy on college success for Latinos,[22] the DBA population has generally avoided this obstacle. Nearly all of C1 (93%) have never been married nor are parents. In C1, 7% are parents and in C2, 23% are parents. Even though some of their children are pre-school, creating additional family and financial responsibilities, using conventional indicators it would appear that the majority of the DBA population is not at-risk for college failure because they are responsible for the financial support of dependents.

But conventional data focuses on a single classification of dependent — offspring. Nationally recognized data elements fail to acknowledge others who may be dependent on the college student. Among the DBA Latino population, it is common for families to embrace non-biologically related individuals (comadres and compadres) and for students to have financial responsibility for the entire, extended household. Detailed interviews by DBA staff found evidence suggesting that students contribute part or all of their earnings to pay household bills.

Live with parents

College persistence is closely connected to residing on campus because residential students are more socially integrated into the college culture.[23] DBA participants, and community college students in general, do not enjoy such engagement, in large part because two-year colleges usually lack student housing and because this population lacks the family or personal resources for the student to move away from home. In C1, 75%, and in C2, 62% of participants live at home with parents or guardians. For about a third of C1, living at home might be relatively peaceful with only 2 to 4 family members. Another third share their home with 5 family members, and 36% of C1 live with 6 to 9 other persons.

For family-oriented Latinos, living at home might be viewed as part of the culture rather than a risk factor. It is possible for DBA participants that families provide a level of persistent support that would be unavailable otherwise. On the

other hand, living at home retains DBA participants in a social and economic neighborhood that might not value higher education, and might offer tempting recreational alternatives. Understanding further how DBA participants assess the advantages and disadvantages of living at home would be important in validating this risk factor, but we can be certain that these students remain inextricably tied to their extended families. A subsequent HEERG report will address the beliefs and values of DBA students regarding this and other factors that define this population as especially high-risk of not attending or graduating from college.

Relying on conventional factors, such as number of offspring or if students live at home, fails to take into account the family responsibilities these individuals often assume. Intake interviews with DBA participants reveal that most have responsibility of caring for one or more family members, including the children of siblings and older grandparents, aunts and uncles. Many DBA participants regularly fix meals, shop for groceries, take relatives to school or medical appointments, and do much of the housekeeping, so that both of their parents can work one or two full time jobs.

Low family income

Living in an extremely low-income household (< $15,000 in 1990 dollars) is another risk factor for completing postsecondary education.[24] For C2, 25% of participants live in such poverty, with incomes below $10,000 per year. Another 14% live with an income of $10,000 to $20,000 per year. The parents of DBA participants work hard for this meager living. More than half of the parents now work or have in the past worked in agriculture, emigrating from their birthplace in Mexico (86% and 85%).

Conversely, 21% of DBA students live in households with $30,000 or more income per year and 36% have family incomes from $20,000 - $30,000 per year. Again, at first glance, it would appear that the largest (37%) of the DBA population has incomes above the dire poverty level.

However, these students live in Santa Cruz County, California where the median home price in 2004 was over half a million dollars. In short, all of these incomes are quite low, further evidence that conventional measures of poverty fail to adequately address large family size or regional cost of living issues.

Even so, less than half of DBA participants are employed, and those who are working are likely to be in jobs with uncertain schedules and few if any benefits (retail, food service). We suspect that there is a sort of "division of labor" rule operating in these families, in which the mature adults/ parents work one or two jobs at a slightly higher wage than the youth could earn, and the youth assume homemaking responsibilities in lieu of the parents.

Educational legacy

Parents of Latino youth are far less likely to have attended college (49.4%) as are other parents (72%)[25] but the gap for parents of DBA participants was much greater. In the C1, 11% of fathers and 7% of mothers, and in C2, 23% of fathers and 7% of mothers, had attended some college. But at the lower end of

the educational legacy, 61% of fathers and 57% of mothers in C1, and 31% of fathers and 38% of mothers in C2 had only had an elementary education. More mothers (21% and 23%) than fathers (11% and 15%) had earned a high school diploma.

It was noteworthy that about 15% of C1 and one third of C2 participants did not know their parents educational background. Among recommendations for preparing young people for college, researchers suggest family conversations about expectations in higher education. Several researchers have designed informational materials for parents of Latino youth, noting that parent-child conversations about education are critical to college success.[26] For a significant portion of DBA participants, these parent conversations have not yet occurred.

Law and substance abuse offenders
A generally ignored barrier to postsecondary success is gang-affiliation, probation or parole adjudication, and/or substance abuse. The operationalization of gang membership varies across researchers, but there is general agreement that gang activity is often related to owning and using firearms, to breaking and entering, and to stealing cars.[27] DBA has collected data on these special risk factors, with 14% of C1 and 36% of C2 reporting at least one of these circumstances. Living "outside of the law" creates special challenges for individuals who may wish to attend college, but most states no longer gather data about criminal offender status due to confidentiality and equal protection concerns.

Positioned for Disappointment
In ways large and small, DBA participants are underprepared for college, even when compared to their Latino peers. Although they may not have children of their own, anecdotal data indicated they have significant financial and care obligations for family and extended family members. They also rarely benefit from academic peer or workplace learning. They are substantially connected to their neighborhoods: they live at home with parents who have not attended college, they are often not employed, and they have little discretionary income. In these circumstances, it is difficult for young Latinos to perceive themselves as able to achieve in an academic setting, given that their low basic skills will require hard work and perseverance to progress through a lengthy series of developmental education coursework.

It is exactly this disheartening mélange for which the DBA was constructed as an alternative to conventional "add-on" support services. The designers of this project sought a complementary mix of cognitive and affective components to so that students can "reclaim their educational experience and succeed in higher education and the work culture of knowledge-based careers". Much of the Bridge Semester component of the DBA was originally modeled to accelerate the remediation that this population requires before they can begin college-level studies. The program goal of accelerated remediation has been frustrated because of state regulations that limit the pace at which under prepared community college students might progress through developmental education.

We comment further on those regulations in the final section of this report. However, even with this constraint, DBA is making considerable advancement towards the goals of this project. The next section of this evaluation reviews the extent to which the DBA is meeting those goals.

An important early contribution of the DBA has been to identify and begin to describe a special category of "high-risk", expanding upon existing definitions of "at-riskedness". For this group of students, conventional data ignores important aspects of their lives, a finding that supports recent national research completed at the Community College Research Center (CCRC).[28] This DBA evaluation concurs with CCRC that the limited characteristics currently incorporated in federal, state and local data fail to take into account the full circumstances that this population must balance to progress in college.

PART III
ACADEMIC AND PERSONAL GROWTH OF PARTICIPANTS

The DBA combines unique components in an exceedingly non-conventional delivery system. Conventional programs serving at-risk community college students incorporate tutoring, improving basic skills, and identity building, elements that have some similarity to DBA program components. However, in typical programs for at-risk students, these services are delivered as "add-on" or supplemental functions to a traditional college academic set of courses.

For instance, since 1984 the Puente Project has served first generation, low-income Latino students enrolled in California's Community Colleges. Its key elements include intensive writing instruction, a focus on Latino literature, counseling and mentoring. Working with students early in their college career, Puente attempts to validate the experiential background of Latino students while supporting their academic skills.[29] In the same way, other well-known programs such as Extended Opportunity Program Services (EOPS) or Student Support Services (SSS) offer tutoring, counseling, mentoring and a variety of additional services, while participants are enrolled in regular college classes. In each case, the program relies on a variety of auxiliary services, delivered *parallel* to academic coursework.[30]

The DBA applies a novel structure as well as content to improving the self-efficacy of Latino at-risk students, what Director Navarro has come to call a "curriculum-driven persistence model". The initial phase of the DBA is called the Foundation Course, the purpose of which is to "rekindle an internal fire for learning" rather than to improve specific academic skills. Through a series of team and individual activities, DBA attempts to change the self-perception of students from feeling incapable of even thinking about attending college to believing that they can succeed in higher education.

During the subsequent Bridge Semester, students learn information extracting and processing techniques adapted to their strengths, and form synergistic groups. Applying self-managed work team strategies, students investigate a social or local problem, practicing research and interview techniques. These skills, developed in the context of a social issue, are the competencies required in knowledge-based work environments such as IT.[31]

As students progress in the DBA, many participate in an Internship, in which they earn a small income so they can see how their new skills can result in satisfying work. During the Internship, DBA participants essentially handle recruitment and orientation for DBA applicants and potential future Interns, so that advanced DBA students mentor Bridge Semester DBA participants, thereby applying the same skills needed to be successful in knowledge-based careers.

As innovative as the DBA delivery system may be, that innovation — by itself — has little value unless it contributes to the personal and academic growth of participants. The early evidence for student success appears strong.

Retention evidence

Retention for the two segments of the Bridge Academy has been quite high. For the Foundation Course, the completion rate was 100%. For the subsequent Bridge Semester, in which students complete 19.5 college credits, retention and completion of C1 was 86%, C2 was 100% and C3 was 93%.

Table 3: Percentage Completion and Successful Course Completion during DBA Program, Cohorts C1, C2 & C3.

	Foundation Completion	Bridge Semester Completion	Passed all Classes (Successful Completion Rate)
C1	100	86	83
C2	100	100	71
C3	100	93	65

Comparing these outcomes to statewide data is instructive. Over the past decade, about 69% of all students successfully passed transfer-level courses, about 59% passed basic skills courses, and about 80% passed vocational education courses, for a weighted successful completion rate of all courses of about 69%. The statewide goal for the current term (2005-2006) is an overall 70.5% successful completion rate for all courses.[32] The most appropriate for comparison for the DBA population is the basic skills successful completion rate (59%). For each of the first 3 cohorts, DBA has considerably exceeded the state average.

With no further analysis, DBA has achieved amazing retention rates for any group of community college students. Further, beyond these simple outcomes of persistence and achievement, we think the picture this data portrays about student self-efficacy is equally as remarkable.

Self-efficacy evidence

There are a number of points during and at the end of the first two components of the DBA (Foundation Course and Bridge Semester) at which participants reflect on their personal growth and the acquisition of self-efficacy skills. We describe those outcomes using both qualitative and quantitative methodologies.

Growth in Self-Efficacy during Foundation Course

At the end of the Foundation Course, participants complete the Foundation Course Final Feedback Form in which they rate the learning activities and describe the importance of what they learned, their belief that they can continue on to the Bridge Semester and later graduate from Cabrillo College with an associate degree, and how their personal motivation has changed in any area of their lives. The results of this survey indicate that students expanded their

horizons of hope, as well as gained frameworks from which to analyze past, present and future behavior.

To a person, students listed a variety of communication skills as one of the five most important things they learned in the Foundation Course. They also linked the use of communication to family, school, work and community. Students wrote comments like [communication skills] "are important because I need this skills [sic] for the future, and at work and at home."

A number of students commented on their ability to apply the HP Dynamic Leadership and non-violent communication skills they had learned. One reported she can now "try to put myself in an accuracy mode and authentic mode rather than a pretend and anger mode to help myself and others." Yet another wrote "I've learned about what's being said. In my personal life, how I used to yell a lot and now I don't do it".

Listening was a frequently listed new skill, and students applied the non-violent communications framework from class activities to their own lives: "I was listening with jackal ears and not the giraffe, but now that I learn [sic} all these I am chang [sic]. I have better communication." Students learned "there are many purposes to listening, like to gain information and get to know them." "I learned to listen in an educated way" said others, and yet another noted that "People open up when they feel heard". Students also acknowledged a distinct skill set for listening: "I know the different steps to start listening," and "Communication and listening are acquired skills". Another reported "Because I didn't know that everyone had purposes and concerns and now I know that in order to be a good leader, I need to be a good listener to other's purposes, concerns, and needs."

Another important step to understanding themselves was to identify learning and task-completion styles. Every single student mentioned "learning styles" as one of the most important things they learned in the Foundation Course. Students reflected that "I learned how I am" and "I know why I act the way I do." Another exclaimed "So now I know [the] kind of who I am and why things happen the way they do!"

As part of the end-of-the Foundation Course survey, students described how their motivation had changed in any area of their lives. The optimism was contagious. One student said "I have changed in the way of thinking of life. That no matter what we go through, never is [sic] too late to get an education". In the same vein, another wrote "I thought school was over for me, but with this great program I learned that it's not hard to do whatever your goals are". Described another way, an older student noted "Because in this life everybody has conflicts in our lifes [sic]. But we learn from them, and it is our choose [sic] if we want to make a change in our lifes [sic]. It's all about choise [sic]".

Students found comfort in realizing their life trajectories were similar to the experiences of others in the DBA. One student wrote that "my motivation has changed in a lot of ways. One is that I am not alone" and another said "The 1st most greatest [sic] thing is when Alicia cam [sic] in to talk and our life stories were similar. I have never known anyone else with the same experiences as I [sic]".

Students also acknowledged the role of the social issues project. "I feel more motivated to keep up on what's going on in Watsonville," said one student. Students were excited to talk to city officials, and another commented on how much he liked reading the front page of the daily newspaper.

About 2/3 of students felt "well-prepared" to continue on the next phase of the DBA — the Bridge Semester —, and the other third felt "sort of prepared". No student reported feeling "not very prepared to" enter the Academy's Bridge Semester.

Twice as many DBA participants felt they were "more likely" than felt they were "somewhat likely" to graduate from Cabrillo with an associate degree because of their experience in the DBA during the Bridge Semester. No student reported feeling "less likely" to complete an associate degree.

The ways in which the Foundation Course opened heretofore unknown vistas to students is captured in the comments of several students. One-third of participants reported that in the Foundation Course, the Science/Physics Lab was very important. One said "It opens up a new door of possibilities for me in what I might want to do, like fiber optics."

Yet others wrote movingly about their futures. "It did not change just my life but the life of all those who loves [sic] me." And the student comment that captured the optimism of many others': [The Foundation Course changed me] "wanting a future. Before I never thought of it, till now".

Growth in Self-Efficacy during Bridge Semester

At the end of the Foundation Course (during the third week) and at the end (sixteenth week) of the Bridge Semester, participants assess (Leadership I Survey) their progress related to 21 Traits for Highly Successful People. Several aspects of the results of this survey are strong indicators of growth of self-efficacy among this population.

The greatest area of growth reported by students at the end of the 3rd week of the Bridge Semester was being ready to learn and caring about school. Over half of students reported they had improved in this area and another 14% reported with certainty they were ready to learn and cared about school.

Half or more of the students reported they had become more likely to be punctual, to make and keep agreements, to respect others, to pay attention, to acknowledge others, to be less judgmental, to be more aware about themselves and their surroundings, to be responsible for their own life choices and to be more understanding and compassionate of others than they were before the DBA.

Dependability remained a challenge for these students at the third week of the Bridge Semester. They felt they had improved, yet needed more help in being dependable, staying focused, completing assignments, as well as knowing what they have to do, how to do it, and when to start working on it.

At the end of the 3rd week, participants were also unsure about some communication skills. For a third or more of these students, non-violent communication and being aware of what they are saying before they speak — thinking before speaking — remained a challenge.

Two Traits speak directly to growth in self-efficacy: Speaking in Front of Others (Q9) and Asking Questions or Sharing in Class (Q14). We summarize the students' positions at Week 3 and Week 16 in the next section.

Students also complete surveys at the end of the Bridge Semester (16th week), about 13 weeks after the prior (3rd week) survey. In this survey, students are again (replicating 3rd week survey) asked to rate their improvement on the 21 Traits for Highly Successful People and again (replicating the Foundation Course Final Feedback Form) asked to describe the five most important things they had learned during the Foundation Course or Bridge Semester. In addition, students are asked which of the Foundation Course skills they can still use and still understand well, as well as how well they learned the content and skills of the Bridge semester.

By the end of one semester (including Foundation Course and Bridge Semester), participants confirmed the value of study skills by joining study groups, organizing work and study hours to allow time for homework, using flash cards to master terminology, and finding the seating location where they could learn best. In addition, participants validated specific learning-to-learn skills that were part of the Bridge Semester. Highlighting, making questions, mind mapping, and various forms of note taking were mentioned as contributors to their academic progress.

Participants identified growth in several affective behaviors as well. Improvement in communication skills, particularly non-violent communication, was a frequent response. Participants report paying attention to their own and others' body language and movements and being aware of their surroundings. Finally, participants linked knowledge of their learning style(s) with their ability to know themselves better and to become better persons.

Student growth on the Traits for Highly Successful People between the 3rd and 16th weeks was clearer from written comments than from changes in Likert-scale responses. In general, the Likert-scale responses failed to capture the changes that occurred from the 3rd to the 16th week; the open-ended questions on Traits for Highly Successful People and the Most Important Things Learned surveys were much more revealing.

Attitudinal traits were often reported as an area of improvement. Students overwhelmingly (78%) said they were respectful of others, with half saying they had developed this trait at the DBA and a quarter saying they had mastered the skill prior to joining the DBA. One student admitted "I talk to people more- people I wouldn't talk to because of different neighborhoods." Even students who realized the importance of respect reported improvement: "I've all ready knew that respecting other is always what you have to know but, [I'm] seeing a different me by respecting others."

Students (71%) also learned to acknowledge others during the course of DBA. One student observed "I have changed now. I can acknowledge people when they have done something nice or good. Before I wouldn't have gave [sic] it even much thought."

About half of students felt they were less likely to judge others. As one said "Learning styles has teach [sic] me that everybody learns in different ways

and that sometimes we see that they are not doing their job or assignments but they are trying their best." But another 29% of students agreed with one who said "I need more help because I like to judge people." Over half (57%) felt they have become more understanding of and compassionate with others. One student realized "If I hear something dumb I listen before saying [sic]. Maybe the other person has a point."

Students (64%) reported feeling more aware of the world around them "better at being aware of noticing others, my surroundings and myself." This self-awareness led to a student to say "I know when I am [aware] and why I act the way I do." Being able to reflect on how they feel was mixed. About a third (36%) of students felt they could "see the "why" I feel the way I feel", but another 21% said some version of "I just can't figure out my self."

Behaviors that are related to academic success in the classroom were still a struggle for DBA students at the end of the Bridge Semester. Students (50%) felt they still needed help staying focused. Although they acknowledged the exercises they learned in the Foundation Course, several agreed that they continued to need assistance to concentrate more on reading." Students felt they paid attention better than when they started the DBA, even though they sometimes disrupted others or their minds tended to drift off. They had improved on completing assignments (72%), but felt they still needed help turning in assignments on time.

Students felt they were more punctual, getting to class on time with greater consistency than before they enrolled in DBA. One student found the idea of punctuality to be novel; "Before I enjoy the program, I didn't care if I was one minute late. I thought being couple minutes late nothing is going to happen, but now that I've being in the program these weeks, I've learn a lot and one of them is being on time." Another student found that punctuality generalized to their work life: "I have change [sic] in waking up in the morning. I say to myself I have to go to school and be on time. I have improved in the way I manage the crew at McDonald's."

Students were more ready to learn and to care about school, overwhelmingly for vocational reasons. They reported several versions of "I have changed in the sense that I care about school now and have realized that if I have a good education I can get a good paying job." But nearly all (86%) students still feel disorganized. As one said "I'm doing OK in the *doing* part. It's being organized with stuff and things that I need to work on."

Over half (57%) of students wanted more help in thinking before they spoke to them get along better with others: "I need to be tactful. My mouth tend to get me in trouble and has gotten me in trouble." And thinking ahead before speaking helped students begin to be more coherent: " At times I know what I'm talking about, but then after awhile I'll loose myself. I can't carry on a conversation for very long."

Perhaps the most revealing improvement reported by the majority (85%) of students was assuming responsibility for choices they make in their lives. One student said "I don't blame others anymore for what I've done", and others agreed that they are "starting to make wiser decisions".

Qualitative data related to self-efficacy growth

All of the student responses about growth in skills from the Foundation Course or Bridge Semester, as well as Traits for Highly Successful People, are intuitively related to students' belief and actions of accomplishing academic goals. In addition, two questions on the Bridge Semester surveys reflect current research on the development of self-efficacy: Speaking in Front of Others (Q9) and Asking Questions or Sharing in Class (Q14). Asking questions in public is a measure of self-efficacy. In order to ask a question in public, a student must be able to understand the concept, notice areas that are unclear and articulate his/her uncertainty to others. These academic question-asking constructs are linked to self-efficacy.[33] Over half of students reported improving their willingness to ask questions and to share in class, and to speak in front of others.

In addition, students must have some level of self-confidence to ask a question, and self-confidence and self-efficacy are inextricably linked.[34] Students perform a sort-of mental cost-benefit analysis before asking questions, weighing the risk of being ridiculed by their peers against the benefit of enhanced learning that can occur through interaction with instructors.[35] Increased willingness to ask questions and to share in class indicates that DBA students are taking ownership of their learning.

At the end of the Foundation Course, most students reported improvement in their willingness to get assistance by asking questions. As one student said, "I have improved. I would only ask a little bit of questions before but now if I have a lot of questions to ask I'll ask them and not hold back." Another student noted the down side of not asking questions when he said, "Being aware of if I don't ask I won't learn." One success story was particularly poignant: "Before no one make [sic] me speak in front of others. I was so shy and every time I knew that I have to speak in front my heart started to pump. Now I can go and speak in front of others and my heart won't pump anymore."

Between the end of the Foundation Course (Week 3) and the end of the Bridge Semester (Week 16), about half of the students reported continued improvement while half reported no change on the Likert scale. We believe two phenomena account for a leveling off of the rate of self-reported improvement.

The first 3 weeks of the DBA is focused on "lighting a fire for learning" rather than direct academic endeavors. Students are placed in an especially enriched environment; they encounter and rapidly develop traits that are quite novel for them and their excitement about their individual potential for improvement creates a steep learning curve.

During the next 13 weeks of the Bridge Semester, students become more realistic about their own abilities as they engage in academic exercises. Students moved from dream to reality — they came to understand that the standards against which a college student must measure him/ or herself are much higher than they had previously realized. This reconstruction of their skill set resulted in dissonance between the exhilaration of the Foundation Course and the challenges of the more academic Bridge Semester. We are encouraged that students became more sensitive to the demands of college success by

acknowledging that they were not improving on the same scale as they did during the Foundation Course, and that they continued to build on and sustain their earlier accomplishments.

Two other questions on the End of Bridge Semester Survey ask questions related to students' confidence in achieving their goal of completing an associate degree: "In what ways have you changed based on your experience in the Academy so far?" (Q26) and "How much more likely are you to graduate from Cabrillo with an AA/AS degree because of your experience in the Academy?" (Q27) Overwhelmingly, students believe they have made considerable gains.

Over three-quarters (77%) of students believe they are more likely to graduate with an associate degree as a result of their participation in the DBA, a positive precursor to academic success.[36] Some of the written responses to Q 26 reflect growth in self-efficacy. Students commented "It's easier for me to concentrate," and "I feel more confident in myself so I can continue in school." Most academicians can relate to the student who reported "I have discovered how I learn the best even though I don't like it because it is too time consuming." And another moving testimony: "I've change [sic] not to be embarress [sic] in front of people."

Quantitative data related to self-efficacy growth

It is exciting that students felt more able to meet their academic goals as a result of their participation in the DBA, but we also found evidence that improved self-efficacy was linked with improvements in academic achievement.

The DBA had a substantial impact on the self-efficacy of students, as reflected in their relative improvements in GPA, retention, persistence, and willingness to risk letter grades, which are necessary to accumulate credits required for a degree. There were significant differences PRE and POST for all four of these indicators.

Table 4: ANOVA and T-Test Results

Indicator	F score	Probability	PRE Mean	POST Mean
GPA	23.28 **	<.0001	1.6696 *	3.0155 *
Retention	42.93 **	<.0001	5.8198 *	10.2187 *
Progress	50.31 **	<.0001	2.7842 *	8.1458 *
Persistence	12.85 **	<.0007	0.27798 *	0.51302 *

* significance at .05 level on t-test
** significant PRE-POST differences

GPA improvement

GPA was calculated by the ratio of grade points to units attempted. PRE GPA was calculated using cumulative numbers as of the last term prior to the Foundation Course (CIS 160DI) and POST GPA was calculated as the difference between total units attempted and grade points and the PRE units attempted and grade points. Higher GPAs would indicate increased learning under the assumption that grades are indicators of learning and are positively impacted by self-efficacy.

Student learning increased significantly (F=23.28, p<.0001) as shown by the higher mean of GPAs in the POST semester. The mean GPA nearly doubled (180% increase) for DBA students subsequent to their enrollment in the DBA. The dramatic increase in mean GPA from 1.67 to 3.02 demonstrates the impact of the increase in self-efficacy on student learning.

Retention improvement

Retention was measured using units completed and the number of semesters enrolled to determine the average number of units completed per semester PRE and POST DBA enrollment.

Retention also increased dramatically compared to pre-DBA enrollment. Only five of the forty-one students (12.2%) dropped out of the DBA following the Bridge Semester, and of these students it is not possible to determine if the family moved and the student is continuing at another college. This is a very favorable outcome compared to the general population of students at Cabrillo College, including students with transfer or degree attainment goals. For the general population at Cabrillo, 18.3% received a grade of "W" (withdrawal) in their courses.[37]

A more similar comparison can be made with Latino students enrolled in Basic Skills and Pre-collegiate Basic Skills, of whom 84% withdrew from at least one course and 16% withdrew from all courses in Fall 2003, the last year for which this information is available. For the DBA population, less than 5% (2/41) of students attending the DBA Foundation Course appeared to withdraw from all classes in the following semester. Retention for the DBA students, as measured by average completed units, increased significantly (F=42.93, p<.0001) from the PRE to POST Foundation Course where the units students completed increased from an average of 5.8 units per term prior to DBA to slightly more than 10 units per semester following enrollment in the DBA.

Improvement in Progress towards Program Completion

Progress was measured by using average units attempted in graded courses and the number of semesters where grades were noted on the transcript. Average units were calculated between PRE and POST enrollment in the DBA.

Strengthened self-efficacy was also established in the significant (F=50.31, p<.0001) increases in student progression towards program completion. Only two of the 41 POST DBA-enrollment students accumulated no graded units. The number of units students attempted for a letter grade evaluation increased from an average of 2.78 units per term to 10.2 credits after the Bridge Semester. The tremendous improvement in DBA students' ability to progress towards a program or degree completion resulted from a change in their behavior in selecting the graded (rather than credit/ no-credit) coursework option, and suggests that these students believe they are able to take risks that they were unwilling to take prior to enrollment in the DBA.

Persistence

Persistence was measured using the ratio of the number of terms students attempted coursework, regardless of grades, to the number of consecutive pairs of semesters (e.g., Fall and then the following Spring; Summer and then the following Fall; etc.). Both Summer and Fall terms were considered as consecutive to Spring since Summer classes are optional in most educational settings. The Bridge Semester was not used as a consecutive pairing for the pre-DBA ratio because DBA staff made contact with students for recruitment during the semester prior to their enrollment in the DBA and we cannot control for that influence on student re-enrollment.

Although the data is sparse in subsequent POST Bridge Semester grades, enrollments in subsequent semesters is evidence that these students believe they can succeed in their coursework and were willing to re-enroll in the following term. This is a significant ($F=12.85$, $p=.0001$) increase in term-to-term persistence for these students. Only 7 of the forty-one DBA students (17%) had not re-enrolled in the subsequent semester as of the data that the transcripts were run (6/21/04). It is possible that not all grades had been posted to transcripts by that date, which would have impacted the POST Bridge Semester term counts; however, even with this timing problem, these students' re-enrollment behavior has changed dramatically. We look forward to subsequent evaluation reports that will track persistence over a longer period of time.

Multiple Dimensions of Self-efficacy Growth

There are multiple dimensions to consider in evaluating the development of self-efficacy in the DBA population. The first dimension is that the program even pays attention to this aspect of academic success. For most student success interventions, self-efficacy is a by-product of whatever academic achievement a student might gain with the assistance of supplemental services. It is uncommon among intervention programs for self-efficacy to be strategically incorporated into the content or to be measured. Adopting self-efficacy as a keystone theory is an important contribution of the DBA.

A second dimension is student perception. Students responded with thoughtful appraisals of the rekindling of a fire for learning within them. They reflected on how different they are than when they entered the DBA, and in many cases clearly rejoiced in the personal growth they perceived. Although some survey instruments were confusing, as we previously discussed, positive trends in accepting responsibility for their own behavior and believing they have within themselves the power to control their futures was evident among the DBA students.

FORMATIVE CONCLUSIONS

The Digital Bridge Academy is an intervention for Latino and other individuals to improve chances for college success. It differs from other programs in its structure. Students enroll as a cohort and move through an organized set of learning activities and college coursework. The core of the program is self-efficacy, skill building, and behavioral skills, and the curriculum moves from rekindling each student's fire for learning to development of project management skills and team work style skills. The Director of the DBA has captured this structure in his choice of terminology: the DBA is a "curriculum-driven persistence model".

While the evaluation of the activities within the DBA is the subject of a subsequent report, the set of activities incorporated in the DBA has led to beneficial outcomes in the form of student self-efficacy, retention, persistence and progress towards an associate degree. All students completed the Foundation Course, a three-week immersion of self-examination and readiness for learning activities, where, as Director Navarro says, "they face the monsters inside of them".

The goals of the subsequent Bridge Semester are evolving in response to external mandates. The Bridge Semester was constructed for academic acceleration, so that students could advance through several layers of developmental education in an intensive, contextual program of study. The Bridge Semester is integrated into a learning community of instructors and students, in which faculty collaboration has sequenced learning activities across several courses. For the initial two cohorts, retention in the Bridge Semester has been remarkable: 83% and 79% respectively. Because of the tightly linked curriculum, students who completed the Bridge Semester earned 19.5 college credits. However, fears about state regulations proscribing such acceleration have thwarted this innovative aspect of the DBA, a condition we address in the next section of this report.

Student growth on the Traits for Highly Successful People was considerable. Students noted improvement in communication skills, particularly non-violent communication. They became aware of their learning styles, able to acknowledge diverse contributions to work teams and more perceptive of the world around them.

Student surveys convey new hopefulness and confidence. But feelings alone will not move an individual towards broader career opportunities. Self-efficacy theory holds that feelings of capability are translated into action, and for these students, the evidence of greater engagement with academe is remarkable. DBA students significantly improved their pre-DBA grade point averages, completed each semester and enrolled in a following semester, gained the confidence necessary to choose to be evaluated by letter grade instead of the credit/ no credit option, and gained a more realistic and mature understanding of the challenges of academic success.

Across methods of analysis, and across indicators of success, the first two cohorts of DBA students made impressive strides towards the college degrees

necessary for employment in knowledge-based industries. And, perhaps most important, they are learning to take responsibility for their own life choices. These are truly marks of self-efficacy related to social and academic accomplishment.

PART IV
FORMATIVE RECOMMENDATIONS

The data incorporated in this evaluation is early results, and the DBA has already enrolled and completed coursework for a third and fourth cohort. To maintain the momentum, and to continue to document the effects of the DBA curriculum based persistence model, we make the following recommendations:

1. As previously discussed, the DBA will be well served to select one or more recognized instruments for assessing growth in self-efficacy and academic motivation. HEERG has examined a number of potential instruments, but the DBA philosophies as well as population are so unique that it is likely an instrument will need to be designed rather than purchased off the shelf. HEERG will compile alternatives and recommendations for this instrument.

2. DBA is already modifying survey instruments to improve their clarity. Completion and pilot testing of the revised instruments will assist in data consistency.

3. DBA relies on Cabrillo College admissions personnel to be certain that all DBA students complete all placement exams in English grammar, reading and mathematics. In some of the early cases, students had not completed one or more of the placement exams. Gathering a thorough baseline of skill for DBA students will aid in documentation of the value of the program.

Advancing Critical Contributions from the DBA

There are at least two other areas where the DBA is well positioned to make critical contributions to the research about serving this population of students. The first is theoretic and the second is applied.

Critical Contribution 1: Redefine "at-risk"

Based on anecdotal and interview data collected by DBA staff, it appears that conventional definitions and criteria for "at-riskedness" are woefully incomplete. Commonly used definitions apply variables that purportedly capture the nature of students' lives from narrow, snapshot questions asked at a moment in time and in circumstances that encourage socially acceptable responses. DBA has the opportunity and expertise to begin shaping more comprehensive criteria that extend our understanding of program design. As the Community College Research Center has recently noted[38], identifying more refined measures of important student characteristics can be expected to strengthen the explanatory power for innovative programs.

DBA already has in place an extensive application process, during which students share information about their family background, employment,

demographics and educational goals. In addition, DBA personnel conduct formal and informal interviews with participants, review course papers and document in class experiences to gather more information as students gain greater trust in DBA personnel. Continuing and systematizing the interview process will aid DBA in portraying the full measure of challenges that a very
high-risk population faces when they want to attend college.

Critical Contribution 2: Elaborate alternatives for accelerated remediation

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The DBA should experiment with a pre- and post-placement testing regimen to substantiate the improvement in basic skills that a contextualized, coherent set of learning activities can offer. DBA has painfully learned that the accelerated development of basic skills conflicts with the segmented approach to development education that most community colleges have adopted – students may not "skip" a course in the developmental sequence and there are no pathways to "accelerate" developmental education. Especially in this time of great financial scarcity, DBA should experiment with accelerated developmental education that is both effective and efficient. If the DBA can demonstrate that students complete more than one "course" in a developmental sequence in a semester, especially if students master basic skills in the context of the Foundation Course (for which the goal is personal rather than academic development), DBA may be in a position to promote an innovative approach for improving the reading, writing and mathematics skills of under prepared students.
HEERG believes this topic is of such merit and benefit to the community colleges of California that we intend to do a report that focuses solely on this aspect of the DBA.

Summary

At this early juncture, DBA had evolved in a thoughtful and reflective manner. Decisions are made with a good deal of consideration, and adjustments have been made to continuously refine this novel curriculum-driven persistence model. Substantiation of student growth through recognized instruments and publication of a more comprehensive definition of risks for college success are ideal short-term goals for the DBA. It is clear that the DBA staff has composed and delivered an effective mix of components.
The next evaluation will focus on the activities that account for these remarkable student-learning outcomes. Understanding and analyzing the curriculum, and exploring its suitability for replicable units that can be used to train other directors in the philosophy and pedagogy of the Digital Bridge Academy will be another important contribution to the national discourse on under prepared students.

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