Journal of Access, Retention & Inclusion
in Higher Education

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Edited by Dr. John B. Craig

Foreword by
Tabetha Adkins, PhD

ACKNOWLEDGEMENTS

EDITOR'S NOTE

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Welcome to the second volume of the Journal of Access, Retention and Inclusion in Higher Education, (JARIHE). The overwhelmingly positive response we received from our inaugural edition of JARIHE was quite rewarding and affirming. Faculty, student success practitioners, legislators, educational consultants and others have lauded JARIHE for articles which are relevant, timely and pertinent to the work of helping students meet with success on our campuses. The National Organization for Student Success (NOSS) has officially endorsed JARIHE, which is extremely important and lends great credibility to this very important work.

This volume contributes to the field by providing research and best practice efforts being done for traditional-age students to non-traditional adult learners. The thematic focus of this volume is student success. At the heart of everything we do in higher education is this theme; however, sometimes this gets lost in the daily grind. To this end, we believe readers will find this volume exceptionally thought-provoking and informative. In a time when our institutions are seeking new and innovative approaches to ensure all students succeed, the contributors to this volume highlight approaches which have worked at their respective institutions. Granted, each institution is different; however, with adjustments, these approaches can be applied at other places.

Those of us who work with students understand that helping them succeed in college can be challenging. Now, more than ever, students are faced with myriad challenges, distractions and other things which are competing for their time. To this end, we must be creative in connecting students to appropriate resources, differentiating our instruction in an out of the classroom and creating a campus environment which is conducive to optimal learning.

Readers will appreciate the breadth and depth of the work contained herein. Let us continue to inspire, motivate and encourage our students to be great. In the words of Jesse Owens, "We all have dreams. But in order to make dreams come into reality, it takes an awful lot of determination, dedication, self-discipline, and effort." Our job is to help our students' dream of attaining their post-secondary education a reality. Let's do this with the most fervor, zeal and intentionality we have. Students deserve our best!

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FOREWORD

Tabetha Adkins, PhD

Those of us committed to student success know that the higher education landscape is more complex than ever. Students are required to make many choices: *what kind of institution do I want to attend? How will I pay? Will I get in? What will I study? Where will I live? What will I eat? Will I need to work?* These are important decisions students must face before they even arrive on our campuses. On top of these difficult decisions, we must also acknowledge that we live in a textually rich and complicated world. It is said that there is more information in one weekday issue of *The New York Times* than a European citizen alive in the 17th century would have consumed in their lifetime. Feeling a little overwhelmed? Me too.

I recently learned about the concept of cognitive depletion. The Educational Advisory Board (EAB), borrowing from the 2011 work of neuroscientist Daniel Levitin, describes cognitive depletion as fatigued analytical abilities, often brought on by the amount of information we consume every day in modern life, which often leads those who are suffering from this fatigue to make decisions based on "convenience or surface appeal, rather than make the most beneficial choices" (4). Put differently, an overwhelmed mind may make bad decisions.

The EAB goes on to explain that resource scarcity leads to attentional scarcity, a phenomenon that behavior psychologists call "tunneling" (4). In other words, our students who struggle the most with resources, financing, and access are the most prone to make decisions that are the most convenient but not necessarily the best long-term.

This finding emphasizes what readers of this journal already know: when it comes to access and higher education, sometimes it feels like the odds are stacked against those who lack resources or privilege. The implications for cognitive depletion and tunneling on students seeking a degree are especially serious for first-generation, underrepresented, and under-resourced students. For these reasons, as our world becomes even more complicated, it becomes more important for student success professionals to ensure that higher education does not present additional barriers. Whether it be in ensuring that developmental education supports student success rather than acting as an obstacle, examining the ways in which we communicate with students, rethinking the ways we work with adult learners, or designing high impact initiatives, this issue of *JARIHE* takes on the very real challenges we face.

I hope that you will come away from this issue with a renewed sense of inspiration for our work of supporting student success. While the landscape is complex, our mission is clear and more important than ever before.

The Educational Advisory Board. *The power of the dudge: a guide to behavioral interventions for student success.* (2019). Washington, DC: EAB.

Upgrading to Credit-Bearing Courses: Redesigning Curriculum with Students First

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ABSTRACT

Students who take remedial courses are often prevented from continuing their education because the classes do not count toward their degrees, so they lose financial aid. They also suffer from stigma and disengagement while taking classes that label them as underprepared for college-level work. To reduce such negative effects of developmental education while promoting retention, we redesigned our reading and writing courses. Elevating the rigor and better addressing the needs of our students as college-level readers and writers, our courses now earn college credit. In this article, we describe the rationale for the course restructuring, detail the steps we took to obtain credit, and discuss the challenges. Evidence suggests that these changes have positively influenced student effort and engagement while continuing to tackle student deficiencies.

Introduction

According to Complete College America (2011), approximately 40% of all students entering college require some form of remediation. Historically, colleges have enrolled students in non-credit-bearing classes to focus on the skills they need to develop. Students who place into these developmental classes are expected to successfully complete them before moving onto the next developmental course-sequence or a credit-bearing course that counts toward graduation. The findings in this report as well as the Department of Education's January 2017 report, *Developmental Education: Challenges and Strategies for Reform,* indicate that "traditional developmental course-taking can increase students' time to degree attainment and decrease the likelihood of completion" (Schak, et al., p. 7).

Unfortunately, faculty who do not teach developmental classes may brand students as underprepared or non-college ready when they see remedial classes on schedules or transcripts. In an effort to understand faculty perceptions about students we serve in our department, we offered an anonymous survey in Fall 2017. Faculty responded that students are largely unprepared and lacking skills, and some expressed frustration that these students were allowed to take their classes.

At our institution, many students take developmental education classes. 34.7% of our students are first-generation, and 18.5% are underrepresented minority students, with both groups heavily represented in these classes. In the past, students would take as many as 18 credits of classes that did not count towards graduation, extending their time until graduation and using up financial aid. Many students stopped receiving financial aid because, although the classes they took counted toward their GPA, they did not count toward their degrees, so they failed to make adequate progress toward graduation.

In an effort to reduce the stigma of developmental education and how it negatively impacts student retention, we remodeled the course-taking sequence of reading and writing courses in our department, reducing the number of non-credit course offerings. This change decreases the possibility that students will have to take two semesters of non-credit bearing classes, which would have put them in jeopardy against which the Department of Education's report warns. The report also suggests, among the reforms recommended, that curriculum changes incorporate high impact practices that promote higher expectations that will allow students to strengthen their metacognitive skills.

Students in greatest need of support and practice to achieve proficiency become discouraged when they must enroll in non-credit bearing courses and frequently do not continue to matriculation (Education Commission of the States, 2010). Complete College America's 2012 report, highly critical of remediation, recommends changes in developmental curriculum to "start students in college-level courses" with built-in support, and "embed needed academic help in" gateway courses (p.12). They suggest we view remediation not as a "pre-requisite" or pre-college program, but a rigorous, college-level course that carries credit towards graduation.

We decided to move toward earning credit-bearing status for the following reasons:

1.   Ethical argument: Students accrue debt for non-credit bearing courses that do not apply toward graduation. They often cannot continue into a second academic year because, even if they performed well in the classes they completed, those classes did not count as credit toward degree completion.

2.   National best practices: Universities across the country are moving away from traditional developmental instruction to more challenging courses worthy of college credit.

For those considering attempting to modify existing noncredit courses, we offer a description of our process, the arguments we made, challenges we faced, and the results.

Literature Review

Mitigated Financial Hardships

The financial cost of non-credit courses impacts students' ability to graduate, as they accrue debt but not credits toward graduation. American college students and their families spend a reported $1.3 billion per year on remedial courses (Jimenez, Sargrad, Morales, & Thompson, 2016). This curricular structure creates hardship for many students who are accepted to the university but then scheduled into courses below the 100-level that do not qualify as contributing to progress toward graduation. The lack of such progress limits their financial aid, so many are unable to return the following semester. Replacing non-credit bearing developmental courses with college-level, credit-bearing classes will ensure that students' tuition dollars impact their degrees.

Adopting Best Practices

Nationally, universities are replacing the non-credit bearing remedial courses with more challenging credit-bearing courses. For example, the University of Tennessee-Martin (Huse, Wright, Clark, & Hacker, 2005), Indiana University-Purdue University Fort Wayne Webb-Sunderhaus & Amidon, 2011), or more locally, Shippensburg University undertook such a process in their writing courses. Shippensburg now offers ENG 113: Introduction to Academic Writing to serve the same population.

Improved Course Completion and Retention

Students who do not receive credit for classes prolong graduation times and are more likely to drop out. According to Complete College America, only 35.1% of students who take remedial classes graduate with a four-year degree within six years, compared to 55.7% of students who do not need remedial classes (2011). The Department of Education's January 2017 report, *Developmental Education: Challenges and Strategies for Reform*, argues that non-credit-bearing classes "can increase students' time to degree attainment and decrease the likelihood of completion" (p. 7). Although students *need* the additional instruction to prepare them for their other courses, the time and money they spend in non-credit bearing classes delays and can even prevent graduation. If they earned elective credits that could count towards graduation, the developmental courses would not set them behind.

Students in greatest need of support and practice to achieve proficiency become discouraged when they must enroll in developmental courses and frequently do not continue to matriculation (Education Commission of the States, 2010). A briefing from the National Governors' Association (2011) affirms that incentives need to be adopted to move these students through developmental courses to improve retention and graduation completion rates. By offering minimum general education credit to students who successfully complete work in writing-intensive instruction for varied purposes and audiences in both informal and formal assignments, retention may be stimulated.

Raised Graduation Rates for Underrepresented Minorities

Black and Hispanic students, while underrepresented at four-year institutions, are overrepresented in developmental education, with black students "more than twice as likely to enroll in remediation" compared to their white counterparts (Zaback, Carlson, Laderman, & Mann, 2016, p. 7). Black and Hispanic students are more likely to be enrolled in more than one developmental course, as well (Zaback et al., 2016). Because underrepresented minority students are overrepresented in remedial college courses, they are too often delayed in or even prevented from graduating. It is thus crucial to revise remedial classes so that all students can stay on track by earning credit for their hard work. Many colleges across the country, including Historically Black Colleges and Universities, have used such curricular restructuring to achieve success (Miners, 2010).

Heightened Rigor

More than thirty years ago, composition scholars argued for the importance of having students in basic writing classes engage in authentic intellectual work (Bartholomae, 1986). Remedial courses are increasingly being replaced by college-level courses that include high-level writing and critical thinking tasks. In a study of developmental writing courses in community colleges, MacArthur and Philippakos (2013) developed a curriculum focusing on teaching five genres of writing, revamping the course from one that had focused mainly on grammar and paragraph writing in the past to concentrate instead on strategies for planning, drafting, and revising full-length essays. Likewise, faculty at the University of Tennessee at Martin enhanced their 080 and 090 developmental courses into credit-bearing 100 and 110 courses. Due to the pressure to eliminate developmental courses while continuing to serve the needs of underprepared students, curriculum writers shifted the focus of the class from looking for errors to giving challenging writing tasks, such as full-length papers. Although the curriculum was more challenging than in the previous iterations, smaller class sizes and built-in supports like

mandatory writing lab helped students better adjust to college writing as they progressed through the course sequence (Huse et al., 2005).

Course Redesign and Process

Prior to our quest for credit-bearing status, we offered two non-credit bearing writing classes and two non-credit bearing reading classes. We restructured our courses and increased the demands through greater rigor, higher expectations, high-impact practices, and more comprehensive, metacognitive assessment.

In Spring 2017, we submitted our initial proposals for our new credit-bearing reading and writing classes, College Writing Enrichment (ENRICH 101) and Reading Your World (ENRICH 110). Both were accepted as experimental courses for Fall 2017 and Spring 2018, meaning that students enrolled in those sections received credits toward graduation.

However, in order to gain permanent credit-bearing status, we needed to demonstrate to various university committees how these courses would benefit the university. In addition to updating our experimental course proposals, we were required to verbally defend the courses. Since our department taught almost exclusively non-credit courses, there were many questions as to whether or not these courses were college-level work deserving of credit.

We argued that the new, credit-bearing courses would

1.   Improve course completion

2.   Foster retention

3.   Raise graduation rates

4.   Mitigate financial hardships

Our proposed curricula required a number of revisions, such as added justification for credit-bearing status and streamlined learning objectives. Following these modifications, the university curriculum committee awarded both courses credit-bearing status effective Summer 2018. Following that, we deactivated the former courses.

College Writing Enrichment (ENRICH 101)

Before Fall 2012, students at our institution were required to take at least two credit-bearing first-year writing courses, English 101 and then English 201 or an approved equivalent course. Since 2012, students have been required to take only one credit-bearing first-year writing course, English 101. To construct an appropriate foundational course, the English department condensed and elevated English 101 to make it more rhetorical in its focus and to address some of what was accomplished in English 201. For example, a new student learning objective is that students will be able to "read, select, and use evidence critically to formulate and support arguments." However, many students would be better served if they were encouraged or required to take two credit-bearing, foundational writing courses prior to subsequent writing experiences in their majors. Thus, we transformed our developmental, non-credit-bearing course, Writing 2, into Enrich 101 to serve as a prerequisite for English 101 for those students who do not meet the criteria to start directly in English 101.

The master course syllabus for Enrich 60 was created in 1984 and had not been updated since then. The original learning objectives for Enrich 60 addressed primarily sentence-level mechanics. For example, they required mastering writing complete sentences.

These were no longer the appropriate prerequisites for English 101, as they predate most of the scholarship on developmental writing. Not a single goal required the students to go beyond writing a paragraph. The learning objectives of the new course, Enrich 101, reflect current best practices in addressing key areas of college-level writing and will more effectively support current students' preparation for English 101.

In addition to eliminating and replacing Writing 2 with College Writing Enrichment, we eliminated Writing 1, a remedial course offered in summer to conditionally-admitted students who were deemed (based on placement testing) not ready for Writing 2. By removing Writing 1 and Writing 2, we eliminated the possibility that students will take two semesters of non-credit bearing writing classes.

To provide college-level rather than remedial writing experience, we increased rigor in the course by requiring more sustained practice in generating and revising text in ways that demonstrate awareness of writing for multiple purposes and audiences. With goals in mind of creating texts and artifacts, incorporating evidence, and applying critical analysis to reading and writing as problem solving, we required the following in all sections:

- Exposing students to a variety of genres and texts including narrative, argumentative, descriptive, and research-based writing
- Coordinating literacy activities (i.e., critical thinking and collaborative work)
- Modeling, facilitating, and providing feedback on brainstorming, pre-writing, drafting and revising
- Exploring distinctions and connections between claims and evidential support
- Engaging in metacognitive reflection into students' writing progress to recognize positive gains and address areas of need

Additionally, to ensure we meet our goals, we added course assessment and survey components. The department requires an ePortfolio model containing sample student assignments as well as a student-written reflective essay explaining progress towards proficiency related to learning outcomes for the course. Faculty participate in annual course assessment by reviewing sample ePortfolios from each section. We conduct norming sessions with anchor ePortfolios using department-developed rubrics. Additionally, the department uses a pre-post instrument to measure student attitudes on engagement, confidence, self-efficacy, and motivation. The writing faculty in the department review and discuss the results, making adjustments to methods and learning outcomes as needed. This is largely an informal process that can include communication with members of the English department as individual instructors improve their course materials.

Reading Your World (ENRICH 110)

Students whose reading placement criteria fell below a determined cutoff were required to enroll in a one or two-sequence developmental reading course, Reading 1 and/or Reading 2. The master course syllabi for Reading 1 and Reading 2 were created in 1987 and had not been updated since then. The course-taking sequence for reading was reconstructed and the reading curriculum was redesigned to enhance rigor and provide college credit.

Reading Your World (Enrich 110) was designed as a credit-bearing course to replace Reading 2. Reading 1, which was only offered in the summer and counted as the prerequisite for

Reading 2, was deactivated altogether. Those enrolled in Reading 1 were conditionally admitted students participating in the six-week educational opportunity program. Our new curriculum format, which eliminated the developmental reading sequence, not only created an opportunity to retain and better support students who assessed at the mid to lowest levels of reading, but also improve course completion, continuation, and graduation rates.

Reading Your World moves beyond skill-based instruction toward a multidimensional approach that leads to what Gilles and Pierce (2004) refer to as creating a space for talk around literacy, with a focus on active engagement and student-centered instruction. Literacy is a way of making meaning and interpreting the use of text, through reading, writing, and communicating. In this course, students are given the opportunity to view literacy as more than just the written word and to develop "an understanding of literacy as a social and cultural practice" (Hull & Shultz, 2002, p. 21). As a result, these literacy practices help to create a culture that is a supportive and engaging environment conducive to learning and making meaningful connections to enhance reading comprehension skills so that students are more likely to succeed.

The course also incorporates high impact practices that promote higher expectations that will allow students to strengthen their metacognitive skills by understanding and "monitoring learning success" (Weinstein, Acee, & Jung, 2011, p. 47). In addition, the course helps students develop and practice skills that will transfer across disciplines (i.e. into general education, their majors, and minors). As a result, sustained literacy practices (modeling reading, writing, communicating, and storytelling) that are required in all sections of the course, can help motivate students to do the following:

- Strengthen comprehension
- Express individual literacy and critical thinking skills
- Access prior knowledge to improve comprehension by making meaningful connections to text
- Synthesize material and take notes
- Identify and provide supportive information and details to justify an argument
- Engage in reflective, intentional processing about learning by articulating an understanding of purposeful reading or ways of reading
- Reflect about, make personal connections to, react to, write about, and discuss assigned readings as well as other topics generated from the discussions
- Provide an effective oral and/or written response/reflection to certain questions based on information presented by the author
- Access, analyze, evaluate, and effectively utilize information regarding multi-media sources to research and present ideas

Similar to the writing curriculum, the reading curriculum has incorporated course assessment measures and a pre- and post-survey to measure student attitudes on engagement, confidence, self-efficacy, and motivation. The department uses an ePortfolio model containing sample student assignments, including various artifacts, and a sampling of students' written reading response reflections, as well as a final reflective essay to demonstrate proficiency and achieved learning outcomes for the course. The reading faculty participate in annual course

assessment and review three randomly selected ePortfolios from each section. The reading faculty review the results and make adjustments to methods and learning outcomes as needed.

Conclusion

Although our curricular restructuring has been recently accomplished, and we don't yet have empirical data to offer, assigning credit to our courses has positively impacted students' perceptions of the courses, and it has added visibility to the work we do in our department, all of which reduce the stigma surrounding developmental education and tackle the biases held by faculty. Preliminary survey and course assessment data suggest that students find the courses to be useful in improving their skills. For example, although one student in Enrich 101 reported that his original thoughts about needing to take the course were negative, he described learning helpful writing techniques and recognized his growth as a writer. Another student wrote about how much more confident she felt about taking English 101 after first completing Enrich 101. Similarly, a student in Enrich 110 stated that she enhanced her reading skills and comprehension within other courses. Another student commented on finding a passion for reading.

Additionally, faculty who teach Enrich 101 and 110, as well as undergraduate teaching assistants, report improved engagement and effort because the class counts toward graduation. By replacing non-credit-bearing reading and writing classes with these more rigorous counterparts, we continue to address student deficiencies while better preparing them for the demands of college.

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Biographies

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Mastery Based Course Redesign of Remedial Mathematics and Success in College-Level Mathematics Courses

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ABSTRACT

In the Fall 2014 semester the Mathematics faculty at Edinboro University instituted a mastery based course redesign of the remedial mathematics courses to address high failure rates in remedial and first college-level courses. This report will present the redesign model, changes made over time and results. The redesign objectives were to (a) increase student success at the remedial level, (b) increase student success in first college-level mathematics course, (c) remove course drift at the remedial level, and (d) decrease time spent at the remedial level. The redesign has been successful in meeting the objectives related to first college-level course and course drift. The success at the remedial level is mixed and further analysis is required to address the time spent at the remedial level.

Who We Are

Edinboro University is a public university located in Edinboro, Pennsylvania and is one of the fourteen member schools in the Pennsylvania State System of Higher Education. The following profile is a representation of the university during the first three years of the remedial redesign program. The undergraduate enrollment averaged approximately 4800 students. The acceptance rate for students at Edinboro University was approximately 98%. A large number of students at Edinboro are first generation college students with about 83% of the students being Pennsylvania residents.

History and Motivation

It is a problem uniting nearly all post-secondary institutions across this nation: students are coming to college unprepared for the curriculum. "It might take a remedial course just to fathom the statistics. At the City University of New York (CUNY) last year, 83 percent of students entering the system's community colleges had to take remedial courses in reading, writing, or math. In Bloomington, Minnesota, meanwhile, 75 percent of the incoming freshmen at Normandale Community College took remedial math, and almost 50 percent needed remedial writing" (Schachter, 2008). It is actually quite difficult to find consistent, current statistics across the nation in regard to the percentage of students who are enrolled in remedial classes their first year. Perhaps this is because institutions are not proud of those numbers, and thus do not wish to make it easily accessible for the public. One website, dedicated to convincing states to develop policy to make placement exams and procedures for remediation standardized, asserts that "Every year in the United States, nearly 60% of first-year college students discover that,

despite being fully eligible to attend college, they are not ready for postsecondary studies. After enrolling, these students learn that they must take remedial courses in English or mathematics, which do not earn college credits. This gap between college eligibility and college readiness has attracted much attention in the last decade, yet it persists unabated" (Beyond the Rhetoric, 2010). A government organization's website states: "In the United States, research shows that anywhere from 40 percent to 60 percent of first-year college students require remediation in English, math, or both. Remedial classes increase students' time to degree attainment and decrease their likelihood of completion. While rates vary depending on the source, on-time completion rates of students who take remedial classes are consistently less than 10 percent" (The Cost of Catching Up, 2016). Another article observes, "Developmental education has become an integral part of postsecondary education as evidenced by the fact that in 2000, more than 76% of all postsecondary institutions and 98% of all community colleges offered at least one developmental education course" (Williams, 2017). Many four-year institutions are shifting the responsibility of remediation to local community colleges, but we as a department at Edinboro value our remediation program and really want impact the success of these developmental students. Our redesigned model would have to allow us to make personal connections with these students in addition to instilling fundamental mathematical skills.

Edinboro University is far from alone in their attempts to solve the problem of low success rates in remedial courses, as well as low graduation rates among this population. One researcher summarizes that "findings of this research have driven efforts to devise, implement, and test models of mathematics remediation and supporting interventions that will improve the dismal rate at which students achieve college-level math competency and go on to complete postsecondary credentials" (Bahr, 2013). The strategy we wished to employ was supported by one case study, which observed that "effective remediation is believed to integrate multiple teaching and learning strategies and activities in instructionally and technologically enriched settings that are designed to promote student progress by focusing education on reflective and collaborative learning and achievement in a domain with particular attention paid to affective factors" (Lundberg, 2018). We believed that the introduction of technology in our classroom and the shift in focus from large group lecture to small groups and/or individualized mini-lessons would help us meet our goal of improving success in remediation. "Our analysis suggests that students, staff, and faculty view successful remedial math students not so much by placement score or level, but by the practices they take up in order to move through classes and programs" (Lundberg, 2018). We knew that we would have to sharpen more than mathematical skills; we would need to improve the study habits and mindset of these students in order to help them succeed.

In the years leading up to our newly launched modularized model in the fall of 2014, we faced high failure rates in remedial classes, high failure rates in subsequent college-level math classes, and a significant drift in the delivery of remedial math classes. Specifically, in the five years prior to the change, only 43% of our students were passing our Basic Algebra course with a C or better, and only 46% were passing Intermediate Algebra with a C or better. Pass rates in College Algebra were 52%. The department was convinced the remediation was not serving its purpose - preparation for college-level mathematics. The need for a leadership team to devise a more standardized course structure producing better results at both levels was apparent.

In preparation for redesign, two members of the leadership team attended conferences and collected general ideas about mastery-based learning and flipping the classroom. One

invaluable resource was the National Center for Academic Transition (NCAT). Their six principles for course redesign became the guidelines for our model (Six Principles of Successful Course Redesign, 2005). As a first step in the fall of 2011, our department adopted the *Introductory and Intermediate Algebra* materials by Hawkes Learning System (Wright, 2012) for all remedial math classes. In the fall of 2012, all remedial classes were scheduled in the computer lab. Delivery, class standards, and student success still varied greatly across sections. The desire and the need for uniformity was increasingly clear.

Mathematics Placement Process

During the period leading up to and through this redesign, students completed the Accuplacer Elementary Algebra test during summer orientation to determine placement in a mathematics course (Accuplacer, 2017). The score on this test dictated if the student would take Remedial Algebra or simply enroll in whatever mathematics course was required in the student's academic program. Consistently, about 50% of freshman have placed into Remedial Algebra.

The Model

Our redesigned model is a technology assisted, flexibly paced, mastery model, designed and delivered by the mathematics faculty of the university in a two-course sequence. The first course is Remedial Algebra, Math 020, and consists of the first six modules of content. The second course is Intermediate Algebra, Math 090, and consists of the last six modules. All students placed in remedial mathematics start at module 1. The model has two exit points available depending on the mathematics course required in the academic program of the student. Students who need Finite Mathematics or Mathematical Reasoning I may exit remediation after mastering the first six modules. Students who need College Algebra or Applied Mathematics for Business complete all 12 modules, due to the intensive algebra expectations in these courses.

All remedial classes meet in a large computer lab of roughly 80 computers where students use the Hawkes Learning software to complete their work. Each class section has an instructor, student lab assistant, and some combination of Math 020 and Math 090 students with enrollment capped at 35. When needed, "double sections" were scheduled where two faculty team-teach in the lab during the same class period for the entire semester with two lab assistants.

Due to the nontraditional format of the class, faculty unfamiliar with redesign principles needed additional support. The leadership team produced a reference handbook that included an introduction to the new philosophy and format, a common syllabus, grading guidelines for each mastery exam, attendance policy, procedures for managing the gradebook, and other related topics. To help ease the transition, each member of our redesign leadership team mentored colleagues via team-teaching, putting 2 faculty, 2 lab assistants and 70 students in the lab at the scheduled class time. This practice of pairing faculty new to the format with experienced faculty has continued each semester.

The course structure permits each student to move at a flexible pace through the course material. To earn a satisfactory grade, students are expected to complete 6 modules per semester, however it is possible for a motivated student to complete all 12 modules of content within one semester and receive credit for both courses. If a student is unable to finish all 6 required modules, but completes at least one module during a semester, the progress made carries forward to the next semester when the student enrolls in remedial algebra again. As an example, suppose a student was only able to master modules 1 through 3 by the time the

semester ended. In the following semester, this student would begin work in module 4. This allows students who fall short of mastering 6 modules in one semester to pick up where they left off in the next semester, rather than moving back to the beginning of the course as would be the case in a traditional algebra class.

Students must move through modules in order, meaning mastery of module 1 is required before the module 2 exam is available. In each module, a student must demonstrate proficiency on a mastery exam. Each module has an associated pretest and posttest, and mastering either exam allows the student to progress to the next module. Students may prepare for a module pretest using their own strategies for one attempt before additional interventions are required. If a student does not master a pretest, students have the opportunity to posttest as soon as several assignments are successfully completed. These assignments consist of a guided note taking assignment and mastery lesson certifications completed in the Hawkes courseware.

Changes and Reasoning

One problem noticed immediately in the first semester of the redesign was poor attendance, which correlated to poor overall student performance. The option of embedding it in the course grade was not possible, as the course is pass/fail, with that grade determined by whether or not the student mastered the target number of modules. Issuing automatic failure for poor attendance seemed increasingly punitive, and in violation of the spirit of flexibility. Beginning with the second semester, a pretest privilege was implemented which required good attendance to be eligible for module pretests. As an additional incentive, the bar for mastery on a pretest moved from 75% to 70%. This improved attendance from our first semester of redesign to the next. Other issues addressed in the first few semesters included small adjustments to mastery exams, grading guidelines, and content as well as providing additional opportunities for testing when deemed appropriate. These adjustments helped improve student success in subsequent semesters.

Another issue encountered was the lack of study skills in this population of students. To address this a supplemental study skills text, *Winning at Math*, was added to the syllabus as a recommended text. (Nolting, 2014) The leadership team then developed a series of mini-lectures for class delivery over the first third of the semester to coincide with topics from that text. Each mini-lecture lasted 5 - 10 minutes at the beginning of class with topics ranging from test anxiety, time management and goal setting, learning from mistakes and taking good notes. A series of bonus assignments related to these topics were also developed and made available. Students could complete an assignment and earn five bonus percentage points on a posttest.

Another important change was a policy we refer to as "continuous progress." Originally, as long as a student stayed enrolled in the remedial math sequence, that student would always take progress from the previous semester forward to the next semester. However, students were signing up for the class and then never completing a module for an entire semester. The new policy required mastery of at least one module in order to carry progress forward to a new semester.

Our Results

At the onset of the planning for this redesign, we identified four goals to guide the project. In brief, evidence suggests this project is achieving some of these goals while improvement is needed relative to the others. Each section below presents a project goal and corresponding outcomes.

Goal 1: Increase student success at the remedial level.

This particular goal targets improved success rates in our remedial algebra classes. Prior to the redesign these courses experienced DFW rates over 50%, and we believed our modularized, mastery-based and flexibly paced structure would improve student success. Looking at the two tables below, we are still not pleased with the success rates in Math 020, but are encouraged by an increasing pattern of student success in Math 090.

TABLE 1: Math 020 Success by semester

Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
28%	35%	31%	43%	38%	42%

You might notice a pattern in the table above that represents what we call the "spring bump". The slightly higher numbers each spring semester can be explained by the fact that larger numbers of students begin remediation in the fall semester, and although we hope they complete the first 6 modules in a single semester, the flexible pacing factor often produces quite a few students who finish the course in the spring. We are not satisfied with these success rates in Math 020, and have continually worked to make improvements and adjustments in the hopes of increasing student success.

TABLE 2: Math 090 Success by semester

Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
46%	36%	40%	52%	59%

Turning now to Math 090, the fact that the first semester success number was 46% followed by a 10% drop is likely because in spring 2015 the vast majority of students in that group were the high achievers who successfully completed Math 020 in a single semester. Also in that mix would be students who did not complete the redesigned Math 020 class. Now that nearly all Math 090 students are products of our redesigned Math 020 class, the success rates appear to be on the rise.

There are a few things worth noting in the interpretation of the Math 090 results presented in Table 2. At first glance, a 46% success rate might not seem very successful at all. However, this is exactly the success rate for this class when delivered in a traditional manner prior to the redesign. An even closer look unveils some more interesting considerations. In this first semester, numerous students enrolled in the class did not complete the prerequisite course (Math 020) in our redesigned format. These students could have either completed Math 020 in a traditional format or transferred in credit for Math 020 from a different institution. Table 3 provides a breakdown of these two paths to Math 090 along with resulting grade in Math 090. To see a success rate in Math 090 that is 3 times higher for students completing the redesigned prerequisite course is phenomenal!

TABLE 3: Further Analysis of Spring 2015 Results in Math 090

Path to Math 090	Satisfactory	Unsatisfactory	Total	% Success
Redesigned Math 020	63	43	106	59%
Traditional/Transfer Math 020	10	44	54	19%

Goal 2: Increase student success in first college-level mathematics course.

        Despite the challenges above in Math 020 in particular, the results related to the
performance of students in their first college-level mathematics course are extremely
encouraging to us. Due to the two exit points from remedial algebra that lead students into two
different paths to complete the mathematics requirement(s) for their academic program, we will
report results according to those two paths.

        Path 1: One of two survey courses having Math 020 as a prerequisite. Quite a large
number of academic programs in the liberal arts and education areas require students to complete
one of two survey courses as the first college-level mathematics course. A random sample of
students who completed 6 or more modules of remedial algebra and then went on to complete
one of these survey courses was taken. The table below summarizes grades earned in those
survey courses. A success rate nearing 80% is extremely encouraging given that prior to the
redesign the success rates in these classes were in the range of 65 – 70%.

TABLE 4: Grade Summary in Survey Courses

Grade	Count	Percentage
A – C$^-$	203	78%
D	39	15%
F	17	7%
Total	259	100%

        If you also take into consideration that for some students, earning a D grade is good
enough for their program, then the success rate here could actually be closer to 90%, far
exceeding anything we would have anticipated from this project.

        Path 2: College Algebra or Applied Mathematics for Business courses having Math 090
as a prerequisite. This set of results (see Table 5) has us especially excited. Prior to the
redesign, pass rates in these courses have hovered around 50%. Our results suggest for students
who completed the redesigned Math 090, over 80% then successfully complete these courses on
the first attempt. This outcome is more than we would have imagined possible.

TABLE 5: Grade Summary in Math 105/150

Grade	Count	Percentage
A – C$^-$	91	82%
D	14	13%
F	6	5%
Total	111	100%

Goal 3: Remove course drift at the remedial level.

Without a doubt, this project has accomplished a more consistent delivery of remedial algebra. The implementation of common course materials, calculator policy, assessment structure and assessments along with scoring guidelines across all sections provides assurances of the content all students are expected to master. Certainly, with a mastery level of 70%, there is individual variability in terms of the content any particular student may not have mastered, but we believe this model ensures each student can perform at the "C level" across all objectives in the course. Prior to the redesign, it would have been common for students to perform very well on certain course objectives while failing completely on others, and still earn a passing grade.

Goal 4: Decrease time spent at the remedial level.

This particular goal has been especially difficult to assess due to challenges associated with obtaining data on our campus. What we can say is that for students who approach the class using reasonable strategies coupled with an adequate work ethic, success results. The number of students who take advantage of moving more quickly than in a traditional model is quite low, even though we anticipated the free credits might serve as a motivating factor. Overall (although some of the slower moving students simply need the extra time), lack of motivation seems to be at the root of the issue with our students relative to this particular goal. This goal is in need of further examination.

Unforeseen Benefits

Although our pass rates in Math 020 are still not where we would like them to be, we still believe the redesigned format is the best possible solution for our students. Not only are they having better success in subsequent courses, but also there are other benefits. Most students begin remediation in their first semester or two, struggling with the transition to college. This course instills study skills like time management and organization. It is common for students to need multiple attempts to master some modules, but the boost in confidence and sense of accomplishment is unmistakable and contagious. Students realize hard work and perseverance pay off in the end, which is a mindset that will serve them well in many other arenas.

In a traditional classroom, students often get away with passive behavior. Our format is far more student-centered, allowing for active engagement with faculty and lab assistants. The instructors agree the new model provides increased interactions, with individualized support and guidance occurring frequently.

In addition to building strong relationships with the remedial students, faculty teaching in the redesigned classroom find themselves getting to know their student lab assistants on a more personal level. These lab assistants are usually upperclassmen with majors in math education or a related field. The experience of being in the classroom is most certainly beneficial to their careers, but the mentorship that develops with their cooperating teacher is also significant.

We are not content with our Math 020 pass rates, so we will continue to troubleshoot to improve those outcomes. Potential considerations include adjustments to common exams, the grading rubric, or supplemental resources (like our notetaking guides). This redesign has been in place for just over three years now, and the results thus far provide a solid foundation moving forward.

Recommendations

After going through the course redesign process we can advise other institutions wishing to attempt this endeavor to separate the process into two components. The first piece is to address the content and assessments, which in our case had to be aligned with the University goals and objectives for each course. Additionally, the team must make decisions such as the number of modules to use, the mathematical content to be included in each module, and the level at which to set the mastery bar. They must also work as a team to create the mastery exams. This portion of the redesign is highly dependent on the specific needs of an individual university and can vary. Despite the tremendous amount of time the planning phase required, this was the easier component to develop. The second piece, which aims to modify student engagement and behaviors, proved to be an ongoing challenge. A few areas that need to be carefully addressed by the redesign process include attendance, study skills, motivation and time management. It is absolutely critical to have a clear and meaningful attendance policy, and to develop strategies to get students who have missed too many classes to return to the classroom. Addressing study skills through mini lectures, bonus assignments, and making use of the text, *Winning at Math,* was extremely helpful for us. Keeping students motivated and using their time appropriately is vital. Due to the flexibly-paced nature of the course, students are tempted to wait an extra day or two to start the next module or take a mastery exam. Many students are hesitant to ask questions or take advantage of the free tutoring. Finally, students will consider their remedial class as a low priority compared to their other classes. Engaging the students each day in one on one conversations in class is an easy way to identify content, motivational, or time management issues that need addressed and offer a chance for faculty to provide the students with individualized advice.

In closing, we as educators understand the dynamic nature of any classroom. We thus continue to adapt and advance the various components of our remedial format to continually improve the program. We as a group appreciate the circumstances facing the under-prepared student, and do our best to be sensitive to their individual needs while working towards a common goal of college-level mathematical competency.

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Biographies

Dr. Melanie Baker is in her 9th year as a faculty member of Edinboro University. She received her doctorate in mathematics from Bowling Green State University in 2011, with a concentration in functional analysis. Dr. Baker enjoys teaching a large variety of mathematics, from Remedial Algebra to Real Analysis.

Dr. Douglas Puharic is in his 14th year as a faculty member of Edinboro University. He received his doctorate in mathematics from Bowling Green State University in 2006. Dr. Puharic enjoys playing board games and is willing to take on the challenge of teaching any class thrown at him.

Dr. Corinne Schaeffer a faculty member at Edinboro University with over 25 years of teaching experience in higher education. She received her doctorate in 2003 in mathematics education from the University at Buffalo. Dr. Schaeffer is interested in student-centered teaching strategies and the incorporation of technology in the mathematics classroom.

Call for a Paradigm Shift in Institutional Communication Norms

Ann Colgan, *West Chester University*

Many faculty, staff, and administrators can recount stories about students who missed important information, and the resulting consequences ranged from hilarious to tragic. The ability to comprehend, act upon, and disseminate essential communication plays a critical part in student success in higher education. Yet most institutions persist in engaging in forms of communication to which students and families give inadequate attention, such as mailings with complex instructions and undefined jargon, and mass emails to students accounts already saturated with too much ephemera. Academic discourse in convoluted formats remains especially challenging for first-generation and under-represented minority students and their supporters. Therefore, academic personnel must diagnose missing comprehension by detecting students' selective hearing, partial reading, or limited grasp of complex, detailed instructions.

Before students even arrive on campus for Orientation, employees of colleges and universities inundate the newly matriculated, and quickly overwhelmed, students and their families with jargon unique to higher education. Many advisors and admissions administrators know students and families stop reading after the good news: "Congratulations! You've been accepted to State U!" Yet, year after year, colleges and universities use similar formats to communicate vital information regarding acceptance conditions and important next steps, and the stakes only get higher when students arrive on campus.

Miscommunication in higher education has many causes: students' fear and perplexity, their emotional baggage regarding fitting in and transactions with authority, educational experiences which attenuate a student's "zone of proximal development" (Vygotsky as cited by Derry, 2013) wherein optimal learning and communication take place; all these factors, and more, complicate genuine exchanges between human minds. Consequently, before students even set foot in class, they encounter many potential problems with clear understanding of expectations in higher education. Even well-resourced students miss meaningful data, so how much greater must the challenges be for students whose families and communities have limited experience with the contexts and requirements of higher education? Importantly, just because university and college employees convey information does not mean it has been understood enough to become actionable. Communication is far more complex than a simple delivery: receipt of information parcels. Academic personnel, therefore, must diagnose when and whether crucial information reaches students and must also develop the capacity to elicit relevant information from students which indicates satisfactory comprehension of vital details. Most fields of endeavor require effective communication, and academia can benefit from a brief exploration of the literature which includes other domains. An example with accompanying analysis, followed by questions for institutional consideration leads to a call for developing more effective tools for reaching students and their advocates with critical information.

Communication in Academia

College students collect and transmit vast quantities of communication, both deliberately and implicitly. While much of the flood of information occurs prior to their arrival on campus, once enrolled, students must navigate new policies and rules, new knowledge, and new social and academic expectations in a new physical environment among new people. Acknowledging the complexities of students' experiences in a completely new environment, especially for first-generation students, means that academic personnel should regard the specificity of contexts and vocabulary in higher education as intercultural communication. When higher education "natives" engage in self-reflection regarding communication practices, the development of "intercultural communication competence" as described by Yi Zhang (2015, p. 49) should facilitate genuine exchanges with new students rather than persisting in communication methodologies of questionable efficacy. This paper focuses on academic communication, but other types and formats of transmission certainly affect the academic. College personnel need to comprehend the entirety of students' experiences: academic, social, and emotional, to draw accurate conclusions and provide realistic and actionable recommendations and instructions, which students will more likely implement. Effective advising, by faculty, staff and managers, remains one of the best ways to connect students to their curricula and institutions; advising communication is "central to retention and to student development" (Shockley-Zalabak, 2012, p.16). Often, students do not arrive in their professors' office hours or their advisers' offices until the middle, or end, of the academic term. Faculty and advisors cannot begin to diagnose and rectify communication problems if students do not arrive equipped to ask for help. Hunter and White (2004) mourned missed opportunities for timely graduation, and meaningful engagement with lessons on the part of students who "dodge advising systems" (p. 21) although such dodging might be inadvertent. Students choose, actively or passively, when and whether to participate in office hours and advising.

Moreover, students constantly receive feedback from faculty in the form of grades and comments on papers but may not yet have the skills to correctly interpret or apply such corrective information. Feedback from professors may identify gaps in content knowledge or gaps in cognitive skills, but student receptivity to this critical information varies widely (Price, Handley, Millar & O'Donovan, 2010, pp. 278-279). University personnel, then, must identify to what extent students have grasped their professors' evaluations. Students often have a 'one and done' approach to faculty feedback; in other words, many students see their grades as closing the door on that particular content. Because the message is not explicit, they might not understand grades and comments from faculty as suggestions, a dialog, regarding areas that need further development. "Feedback can only be effective when the learner understands the feedback and is willing and able to act on it" (Price, et al, 2010, p.279). However, students frequently misunderstand the most common form of academic communication in higher education. A commonly heard faculty lament focuses on students' failure to come to office hours to ask for help, but academics often have not communicated what office hours are and how students should use them. Institutions cannot retain students who need assistance but do not even know how to ask for support.

Ostrich Effect and Gen Z

Additional impediments to effective academic communication include time constraints which dictate the length of meeting times, the sheer magnitude of detailed tasks involved, and more. In addition to such structural obstacles, faculty, administrative supporters, and students may suffer from selective exposure: in other words, people use information management to allocate attention based upon their prior conditioning and beliefs (Karlsson, Loewenstein, and Seppi, 2009, p.96). Thus, information which conflicts with students' world-views, beliefs, or self-perception will meet internal barriers to effective communication. Furthermore, Karlsson, Loewenstein, and Seppi (2009) described an active avoidance technique which they labeled the "ostrich effect" (pp. 96-97). Brashers, Goldsmith and Hsieh (2002) observed medical patients who avoided diagnostic testing and results in order to reduce anxiety (pp.260-261). Mindset, as described by Carol Dweck (2016), may impact a person's susceptibility to the ostrich effect and motivated ignorance since "people in a fixed mindset often run away from their problems" (p. 242). Humans may avoid information with the potential to cause cognitive dissonance, and the ostrich effect explains why some students avoid seeking accurate information; they simply do not want to confront anticipated negative news.

When students make choices not to engage with classroom and advising professionals, they actively employ a form of "information management," described in a medical context by Brashers, Goldsmith and Hsieh (2002) as "communicative and cognitive activities such as seeking, avoiding, providing, appraising, and interpreting those environmental stimuli" (p.259). Avoidance as information management might have benefits for both patients and college students. Inexperienced, developing students, especially, exhibit a tendency to reach conclusions in the absence of information, and dissuading them from the resulting inaccurate conclusion, thought-processes, and generalizations challenges the most experienced university professionals. Yet, many faculty and staff find information avoidance common among Gen Z students, those traditional college students born between mid-1990s through the early 2000s, resulting from students' learned expectations that authority figures will nurture their preferences and opinions regardless of the context (Tulgan, 2015, p. 188-189). In fact, Tulgan (2015) found that Generation Z students carried an expectation of exceptional treatment into the workplace; for example, managers clarifying the need for timeliness described active resistance from young employees who exerted their "special case" status (p. 13) and did not see a reason to "conform" to workplace norms (p. 16). Students who have learned to view the majority of communications they receive as conditional may not take course and program requirements seriously enough.

Another pattern of frequent misapprehension occurs in students' choices of majors. Gen Z students often prematurely determine their academic majors based on mistaken ideas about programs and careers, and such students may resist precise reflections of their realities because they 'know they can do it they just put their minds to it,' or if they take a course with a different instructor. Since they are digital natives, Gen Z students "try on personas virtually," (Tulgan, p.16) and apply cultural relativism to academic and employment contexts, resulting in major choices based on perceived attractiveness of potential careers. Foreclosed students, those who engage in premature decision-making prior to acquiring necessary information, of which these students are a subset, may resist corrective communication because of the positive reinforcement they experience from certainty (Shaffer and Zalewski, 2011, pp.65-69). Concerns about getting

the "wrong" answer can paralyze students who have had to demonstrate learning by taking standardized tests throughout their entire prior education. The fixed mindset of foreclosed students often stems from internalized fear of failure or from self-characterization as someone who has failed in a particular area (Dweck, 2016, 206). University personnel must effectively communicate program requirements so students position themselves to make informed decisions.

Faculty, staff and administrators are, no doubt, familiar with a similar self-protective called "motivated ignorance" (Frimer, Skitka, & Motyl, 2017). People engage in this kind of selective exposure, according to Frimer, Skitka, and Motyl (2017), because of a need to defend against beliefs and truths which conflict with their self- and group-identities (pp. 1-2). College personnel sometimes observe motivated ignorance in college students. Students whose self-perception relies upon incomplete information, such that they circumvent exposure to conflicting data like poor test scores, frequently develop avoidance techniques, for example: not being physically present when tests results are posted. Students manage overwhelming, new, hugely varied information from sources including faculty, texts, fellow-students, and more. When that information conflicts with ingrained beliefs, students face a dilemma: do the work of analysis to determine which world-view has more basis in truth and work to integrate it, or find some rationale for declaring the invalidity of the new data. Upon reflection, the unconscious beliefs we have about self and others and events, which may impede academic success and communication, can yield to logic, analysis, and work (Dweck, pp. 225-226). To facilitate open-mindedness and accurate communication, university and faculty, staff, and management must accurately distinguish when and whether communication occurred. Students cannot succeed in the absence of effective communication.

Diagnosing Academic Communication

College professionals, then, must navigate institution-to-student and student-to-institution communication. They must determine when communication has not actually happened and, if possible, take steps to correct the situation. To detect misunderstandings, academics must place themselves in the students' contextual reality. Champlin-Scharff (2010) recommended application of Martin Heidegger's hermeneutic philosophy to understand the whole student by comprehending each student's shifting contexts. Gen Z students interpret information and events through the lenses of their post 9/11, post-recession experiences, roles, beliefs, so college personnel seeking to ensure equitable access to information need to engage with how students make sense of their own lives. Champlin-Scharff advocated participating in open-ended discussions with advisees to "allow students to reveal their contextualization through conversation about their everyday lives" (p. 63). Contextualizing students' actualities leads to insight regarding what they have understood and adds depth and complexity to students' reports of their experiences.

The key to fully engaging with students' contexts lies in encountering the whole student in a dialogic process, which yields insight regarding students' realities. Academics who encounter students in an I-You dialog of shared self "construct a reality in the space between them" (Colgan, 2016, para. 13) enabling faculty and staff to participate, for that moment, in the student's understanding of his/her experience. This application of Martin Buber's dialogic philosophy of the self provides a range of tools for diagnosing and addressing communication

issues by firmly placing students' experiences, learning needs, feelings, and more within the comprehension of college employees. Such depth of perception permits advisors and faculty to diagnose students' interpretation of communications. Personnel can imbue their meetings with students with the kind of acceptance and openness to other which does not require a leap of faith or what Hagen (2008) called a "leap of the imagination" (p. 19). Since I-You dialog preludes the need for such a leap (Colgan, 2016), the advisor's self recognizes the other with gentle appreciation for a student's own self-sense. The scenario that follows explores several circumstances of diagnostic perception.

"Yes, you have to attend the lab."

Alexa considers herself a developmental adviser and works with mostly first-year students. She deliberately asks open-ended questions about students' academics to gauge their transition to college in several areas. One fall semester, as she worked with that year's new students, Alexa discerned a disturbing pattern.

About five weeks into the semester, she welcomed Jamil into her office and asked, "How's everything going?" Jamil responded, as students often do, "Good." Alexa always uses that categorization to define terms, so she said, "Good, to me, means As and Bs." "Oh," Jamil clarified, "I'm pretty sure I have that in most of my classes, but I'm not sure about BIO." "Why aren't you sure about BIO? How'd you do on the test last week?" Alexa wanted to know. "I don't know," Jamil explained, "We get the test grades during lab." After deliberately waiting several seconds, so he could hear the echoes of his own statement, Alexa clarified to make the situation plain, "You didn't go to lab. Why not?" "Oh," Jamil waved his hand breezily, "Lab is optional." Alexa's astounded response: "Wait! I'm pretty sure it's not optional." The advising session continued with Alexa's admonition to return to attending lab because lab quizzes, administered every week, count towards the final course grade and 25% of test questions on exams come directly from those quizzes. This critical information was easily located in the course syllabus, but since Jamil was a first-year student, Alexa knew he had limited exposure to the importance of the syllabus.

By itself, this incident provides an emblematic example of selective listening since Jamil isolated and gravitated to partial information out of context of the total conveyed by the professor during the first class. He did so because the partial information corresponded with his view of the effort he planned to invest in the course. Alexa worked with Jamil to discover accurate material which contradicted his shallower impression of the course requirements and urged him to revise his conception of the professor's intent. However, in the week that followed Alexa had similar conversations with two additional students, and none of the students were acquainted, so they did not simply share erroneous beliefs.

Baffled, Alexa contacted the professor, a friend of hers, and asked, "Max, are you telling the BIO100 students that lab is optional because I've met with several students who think it is?" Outraged, Max sputtered, "What? That's not what I said!" Once Max calmed down, he explained, "What I tell students on the first day, and what's written in the syllabus, is that students will earn 30 extra points towards their final grades if they attend ALL the labs."

Analysis

The professor told students they could earn extra points, but more than one student engaged, perhaps unconsciously, in a rationalization. The students reasoned, without examination of total course requirements or consequences: '30 extra points for all labs; I will not need 30 extra points; I can skip labs.' The professor and the syllabus portrayed the course expectations clearly, but students' internal calculations distorted the intent of those communications. Students' attention, or lack thereof, to the combined communications from syllabus and professor, resulted in their failure to update critical behaviors based on new reference points unique to higher education and, thus, impacted the utility of information (Karlsson, et al, 2009, p.99). They employed information management strategies developed in secondary education, where frequent "extra-credit" opportunities may permit students to cherry-pick the intensity of their participation in more rigorously academic coursework. Further, students who attended under-resourced schools prior to college may not fully grasp the utility of textbooks and labs since they frequently have limited experience with those assets. Additionally, the experiential remoteness of the learning environment for this course, held in a large auditorium with more than 200 students, also impacts new students' capacities for sustained attention to the professor.

Recent high school graduates, further, often have vague notions regarding the amount of effort required for college success. Their self-perceptions affect their mindsets about the messages provided by grades and professor feedback (Dweck, 2016, pp.66-77). The students in the scenario above may have had an additional reason for avoiding lab: they dreaded confirmation of their fears regarding their test grades. Student aversion to acquiring negative performance information (Karlsson, et al, 2009, p.99) may originate from a need for academic stress reduction based upon a perceived lack of coping and recovery skills (Brashers, et al, 2002). Consequently, while the failure of the students described above to attend lab resulted from interpretive mistakes, they may have been driven by an unconscious craving for self-protection. Critically, this type of communication failure occurs frequently in higher education, yet institutions continue with practices that served in the past but which no longer demonstrate effectiveness.

Questions for Consideration

The most obvious question in this type of scenario is what could the professor, and perhaps the advisor, have done differently to circumvent students' misapprehension of decisive components of the course and syllabus? This question assumes that newly post-secondary, transitional students likely experience inevitable misunderstandings, but is that necessarily true? In addition, the first question assumes the capacity of members of the University community to employ a theory of mind to the effect that we recognize what students have most likely mis/understood. Assuming the possibility of obtaining that depth of understanding, how can academics develop methodologies to guarantee the consistent application of effective tools for ensuring communication?

Call for Paradigm Shift: What's an Academic to Do?

College personnel observe the interplay of new students and the various constituencies of their unfamiliar learning environment. A commonly heard refrain bewails the lack of student engagement with, and response to, habitual communication methods, such as email, syllabi, letters and post-cards from Admissions, even postings on learning management systems. However, reflecting on what we know about today's Gen Z college students, especially first-year students, our recurrent, futile attempts to deliver critical information smack of insanity: doing the same thing over and over while expecting different results. While hermeneutic and dialogic connections positively affect communication, college professionals must accurately diagnose gaps and misunderstandings with the potential to negatively impact student success. Using hermeneutic communication advocated by Champlin-Scharff (2010) by applying the dialogic advising described by Colgan (2016), academic and student affairs personnel develop a complex and profound appreciation for each student's intersecting contexts. Applying open-ended questions and listening carefully enables college professionals and administrators to diagnose students' access to necessary resources.

Typically, the adults in the relationship, employees of colleges and universities should expect to be engaged in student development. Professionals in higher education would do well to reframe their communication paradigms to engender genuine student contact and to teach appropriate responses regarding significant information. According to Tulgan (2015), Gen Z students respond to positivity and want feedback even though their own communication practices are "informal staccato and relatively low-stakes . . . because of their constant use of hand-held devices and the mores of social media and instant messaging (p. 123). Academics observe the reality of students' communication preferences, but instead of meeting them where they are, college professionals often castigate students. Integrating contextual realities enables a more accurate perception of students' reasonings and encourages a growth mindset related to continuing analysis of whether and how communication can happen, rather than blaming students for failures to communicate. Additional tools and methodologies from outside academia have the potential to assist in the development of new diagnostic techniques.

Perhaps the time has come to send text reminders, use Snapchat teasers for new course material, put a review question on Instagram, and more. Administrative and institutional sponsorship for effective communication of critical information to students should take the form of funding, technical support, and assessment to evaluate what works. Further, college personnel sometimes complain about the influence of peers on their students, "His roommate told him that the lab was optional, so he didn't even bother to read the syllabus!" Instead, let the professionals harness the power of peer-to-peer communication for vital information; the Biology professor invites a former student to present her experiences with the course and the key behaviors that led to her success. She uses humor and phrases that exactly echo what the students in the auditorium feel and comprehend in that moment. She communicates. Student Affairs offices already make effective use of this method during pre-college visits and Orientation, among other occasions. Professionals in higher education need to spend more time developing tools, techniques, and methods which effectively impart critical information and less time complaining that students do not respond to methods which we know do not work.

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Biography

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Creating a Supportive Learning Community for Adult Students from Admissions to Graduation

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ABSTRACT

With a growing number of adults entering or returning to higher education, colleges and universities need to consider their unique needs and strengths within the classroom as well as in the larger campus community. This article describes how one university has approached supporting adult learners from the admissions process to the classroom to student support services. We discuss some of the challenges we have faced, how we have used the existing literature to inform our approaches and the creative solutions we have developed in the absence of research to guide our practices. Adult learners bring their wealth of lived professional and personal experiences to the campus and therefore we view our efforts to increase access and persistence for this population as a means of enriching the university experience for all students.

Introduction

Colleges and universities throughout the United States are experiencing declining enrollments among students who are traditional college age, with this trend expected to continue well into the future. At the same time, the number of adult learners in higher education is increasing and colleges and universities are looking to them to bolster falling enrollments (EAB, 2019). Although there is no universal definition of an adult learner, age is generally considered to be the defining characteristic. However, some scholars argue that the classification should encompass other factors beyond age such as delayed entry into college, attending part-time, having dependents and being financially independent (Choy, 2002).

Adult learners enter higher education with a greater range of life experiences than traditional-age students. These experiences, which Astin (1991) calls inputs, are important to understand because they impact learning outcomes and assessment strategies. In addition, the wide variety of adult learner inputs require that faculty and staff deploy a unique set of skills to help students critically examine their life experiences and challenge pre-conceived and sometimes deep-seated beliefs (Chen, 2017). In addition to their roles as students, adult learners tend to juggle other roles related to family, work and community. These additional roles can be assets, but they can also make it difficult to prioritize education (Ross-Gordon, 2011). Adult learners may also experience challenges related to writing and technology use and may make assumptions about academic environments, especially if they transferred from another institution or have been out of school for an extended period of time.

The authors of this article are all faculty and staff at West Chester University (WCU), a public university that is part of the Pennsylvania State System of Higher Education (PASSHE). All of us have worked at WCU's branch campus in Center City Philadelphia, which has been in existence since 2013 and currently has approximately 350 students. Compared to WCU's main campus where the adult learner population is approximately 9%, the majority of students on the Philadelphia campus are part of this demographic. Our experiences teaching and supporting adult learners led us to apply for an internal WCU grant to sponsor a series of professional development workshops for faculty and staff focused on the distinct needs of these students. We also presented insights from the workshops at WCU's annual Scholarship of Teaching, Learning and Assessment Conference in January 2019. Our conference presentation provided the inspiration to write about adult learners.

In this article, we discuss the challenges and opportunities of working with adult learners and share lessons learned from the literature and our own experience related to admissions, pedagogy, student support and student engagement. We emphasize the importance of creating a supportive environment for adult learners inside the classroom and beyond. In this article, we define adult learners as students 25 years or older, which is the common definition in the literature and also the one used by our university and PASSHE. We also use the term "adult learner" rather than "post-traditional student" because this is how our university refers to this population.

Admissions

While the classroom environment is key to student retention (Tinto, 1997), student success begins prior to enrollment with the admissions process, where expectations about the educational experience are forged. Yet, adult learners are a forgotten population of students in the conversation about educational access (Perna, 2016; Knowles, 1984). As colleges and universities seek to attract more adult learners to begin or complete their degrees, discussions about equitable educational access must include this demographic. The adult learner college access literature asks that a critical lens be placed on understanding the needs of the adult learner in revamping college admissions practices (Conley, 2010; Perna, 2016). Some higher education institutions have already begun to redesign their application processes, for example by removing barriers such as standardized test scores that do not provide the best indicators of long-term success (Bethea, 2017).

According to a white paper produced by the University Professional and Continuing Education Association (2017), current structures of postsecondary federal education policy are suited for students who take the traditional route to entering college immediately upon graduation. Given declining enrollments, college admissions offices are now faced with having to rely on more than just the traditional student from the high school pipeline. Thus, institutions, including our own, are incorporating adult learners into their recruitment and strategic enrollment management plans. The shift of focus to consider adult learners is also happening at the national level with organizations such as the National Adult Learner Coalition under the University Professional and Continuing Education Association (UPCEA) and the Council for Adult and Experiential Learning (CAEL) advocating for adult learner support.

While conversations about college access are starting to consider this demographic, adult learners are not matriculating into colleges and universities at the same rate as they are expressing interest (Perna, 2016; National Association for College Admission Counseling,

2018). National data indicates that the percentage of adult learners who entered the inquiry phase of admissions increased by over 50% between 2000 and 2012, but actual adult learner enrollment only increased by 25% (National Center for Education Statistics, 2018; National Association for College Admission Counseling, 2018). Research suggests that adult learners are not enrolling due to concerns about work-life balance, adequate financial support, and span of time since high school graduation (Hagelskamp, Schliefer, & DiStasi, 2013).

Considering the barriers and understanding the challenges of adult college applicants is paramount as admissions offices craft their recruitment plans (Bethea, 2016; Conley 2010; Flores & Horn, 2017). While numerous scholars have offered theories to explain the factors that influence an adult learner's decision to go to college, the UPCEA (2017) has introduced four practical considerations that admissions offices should incorporate when evaluating adult learner applications: 1) information on necessary labor market skills and required credentials can seem confusing and overwhelming; 2) applicants need to complete credentials with more flexibility and in quicker time; 3) access to adequate technology is lacking, which impacts access to online applications; and 4) state education regulations do not consider online learners, which is the modality that many adult learners prefer.

Adult learners typically enter the college application process with institutions that do not have adequate responses to these challenges despite possessing the resources needed to address these issues (Hagelskamp et al., 2013). The disconnect often occurs in the relationship between admissions and academic offices. Admissions professionals have to be equipped with as much information as possible to make good decisions. To this end, admissions offices must build better partnerships with academic deans and faculty to be able to provide adequate information during the recruitment season.

There are numerous best practices and examples of institutional success with regard to considering the needs of adult learners in the admissions process. For example, more than 70% of adult learners who have gained admission to four-year colleges participated in some form of pre-application event or an application process that is just for adult learners (Carnevale, Stroh & Gulish, 2015). Pre-application events allow prospective students to complete their application on site, have their academic credentials evaluated and speak directly to faculty and staff (Carnervale et al., 2015). Our university hosts onsite application completion boot camps where adult learners can work with a professional staff member to complete their application. Data is still being collected on the matriculation of these applicants, but WCU was able to see increases in completed applications from this demographic (Freed, 2018). Other institutions, such as Penn State University and the University of Michigan, are taking their accommodations a step further by offering an adult learner specific application process. For example, adult learners are not required to submit standardized test scores and the applicants' time-in-career can be considered as merit in making an admissions decision.

The Classroom Experience

According to Knowles (1972, p. 35), the fundamental difference between a child's and an adult's perception of experience is that "to a child, experience is something that happens to him; to an adult, his experience is who he is." For this reason, it is critical that educators convey respect for the lived experience of adult learners. Many professors view the experience of adult students as an asset to the classroom (Brinthaupt & Eady, 2014; Day, Lovato, Tull, & Ross-Gordon, 2011). Students' vast base of experience fosters a sense of self-identity and serves as a

resource for peer learning. However, greater individual differences and potential biases based on anecdotal experiences may also negatively impact learning (Knowles, Holton, & Swanson, 2015). Professors can capitalize on this experience and minimize potential friction by using classroom discussion, activities and assignments to help students make connections between their previous experience and class concepts (Ross-Gordon, 2003; Day, Lovato, Tull, & Ross-Gordon, 2011; Holyoke & Larson, 2009). Some adult learners may be skeptical of the value of education, making comments such as "I am only here for the degree." These students may feel that their knowledge and experience is not valued in formal education programs (Kasworm, 2003; Kasworm, 2008), so it is particularly important for professors to validate knowledge gained through lived experience in addition to other forms of knowledge.

Another challenge of working with students with extensive life and professional experience is that sometimes they can over-rely on anecdotal evidence. One approach to adult education, transformative learning theory, provides a useful framework for students to critically reflect on their assumptions and knowledge gained through previous experience (Mezirow, 1997). Mezirow (1990) asserts that "by far the most significant learning experience in adulthood involves critical self-reflection - reassessing the way we have posed problems and reassessing our own orientation to perceiving, knowing, believing, feeling and acting" (p.4). Classroom dialogues present an opportunity for students to challenge their own, as well as their peers, thinking and approach to problem solving.

It is particularly important for professors teaching adult learners to think about how the classroom environment can create an opportunity for students to form relationships with each other as well as the faculty member. The classroom is often where adult learners develop a sense of community within the university, as many of them do not have the time to participate in extra-curricular activities (Kasworm, 2003; Kasworm, 2014; Panacci, 2015; Ross-Gordon, 2003). Knowles (1984) suggests that professors engage students in stating their preferences throughout all aspects of their education. This may involve consulting students about when to hold classes or about their preferred classroom format (in-person, blended, or fully online). While research indicates that many adult learners prefer the convenience and flexibility of online learning, some students may struggle with the associated technology or feel more connected to the material and their classmates with an in-person format (Hannay & Newvine, 2006; Moskal, Dziuban, & Hartman, 2010; Nollenberger, K. (2015). Our experience is consistent with this research. In addition, we have found that the optimal classroom also format depends on programmatic norms and the expectations and needs of students within that particular program. For example, our RN to BSN program meets 100% online, our BS in Management program uses a mix of in-person and online classes and our Social Work Program offers classes primarily in person.

Negotiating classroom policies is another way that professors can elicit the help of students to navigate a balance between accommodating student life circumstances and maintaining certain classroom standards. For example, instructors at WCU's Philadelphia campus have found it helpful to begin the semester by asking students what they want the class to look and feel like. As some students complain that this exercise feels unhelpful because people often assert platitudes like, 'everyone should be respectful of others,' instructors then ask students to be more concrete in their suggestions. What behavior would they observe if everyone was behaving respectfully? Is showing up late disrespectful of others? Is texting during class a sign of disrespect?

Navigating this balance with adult learners has produced contention specifically about classroom cell phone policies. Some students insist, for example, that they need to be available to a babysitter or an ailing parent at all times. However, a systematic review of research on cell phone usage in the classroom indicates that cell phones are a distraction and impair learning abilities (Chen & Yan, 2016). Even if a student is not using a cell phone, merely having it out could affect a student's concentration and ability to retain information (Lee, Kim, McDonough, Mendoza, & Kim, 2017). Furthermore, the use of cell phones can influence both the individual student as well as other students in the class, as 90% of students notice when others are using a cell phone during class time (Berry &Westfall, 2015). Some instructors at WCU's Philadelphia campus use discussions as a way to jointly problem solve with students about how they can minimize distraction, while acknowledging their home life needs. Other examples of complicated issues that adult learners face and that professors can address in collaboration with them are: 1) whether or not they can bring their child with them to class; 2) how to meet with them if they are not available to come in person to office hours; 3) the time of day that electronic assignments should be submitted; 4) how to handle absenteeism and requests for extensions in cases of work, family and personal crises; 5) how to handle group work assignments when students have limited time to meet outside of class.

In the negotiation of class policies, professors may need to limit the scope of negotiation. For example, there may be certain aspects of the class that are required by an accrediting body. While these limits can be legitimate, Kaplan and Renard (2015) caution professors not to limit classroom possibility by confusing interests, or overarching goals, with positions, or how goals are accomplished. For example, a professor's interest might be for students to improve their writing skills and their position may be to require them to go to the writing center outside of class time. To keep possibilities open and consider adult learners' limited time availability outside of class, an alternative position that some faculty have implemented is to bring a representative from the writing center to the classroom. As more traditional age students are experiencing many of the challenges faced by adult learners (Zerquera, Ziskin, & Torres, 2018), some of these negotiation strategies and alternative positions may be relevant to all college classrooms.

Student Support

In addition to effective pedagogy, academic, social, and financial supports are vital to student success (Tinto, 2012; Kuh et al., 2006). We have a collective responsibility as staff, faculty, and administrators to design systems that successfully induce students to use those supports.

At WCU's Philadelphia campus, this labor has taken shape in the Student Success Center (SSC). Like many institutions working to enmesh support services, the SSC represents our intention to design supports that are flexible and responsive to the needs of our students. It has evolved from a writing center into a robust resource center with local and intra-campus writing, research, and career development supports. In addition to receiving in-person and online tutoring support with course writing assignments, students use the SSC to order materials from our university library as well as access and print resources and research articles using our learning management system Desire 2 Learn (D2L). Since more than 80% of our students are adult learners, helping them to navigate resources through high-touch, one-on-one support has proven to be meaningful given the demands on their time and the discomfort that often results from an extended absence from higher education environments. These "tenacious persisters" have clear

career goals, significant demands on their time, and often carry specific self-perceptions which may affect their use of support services (Kinser & Deitchman, 2008). As a result, our practices have focused on acknowledging and complementing the diverse roles, experiences, and masteries of adult learners (Kasworm, 2007; Soares, Gagliardi, & Nellum, 2017).

This work is perhaps most visible in the ways we have connected the SSC with our largest departments: the Bachelors and Masters of Social Work programs. Since its founding in 2013, the Philadelphia campus has developed quickly, with student enrollment tripling in less than four years. This growth, unsurprisingly, resulted in several resource gaps. In response, faculty, staff, and students in Philadelphia, led by Social Work colleagues, initiated university-wide conversations about designing supports that would respond more effectively to our particular institutional context. The Social Work departments encouraged the growth of more robust support structures by providing space for in-class workshops connecting library and research support, collaborative grant-writing initiatives, and service learning. The SSC has also hired graduate assistants from the Masters in Social Work program, expanded hours to better serve students with constrained schedules, organized social events and discussion groups, and added discipline-specific training modules and resources for staff and students respectively. Our most recent collaboration has involved discussions of labor-based writing assessment (Inoue, 2019), a key consideration of which has been how to adapt such models to the needs of adult learners.

Unsurprisingly, this collaboration continues to drive how we think about support and serves as a case study highlighting both our successes and future challenges. While the SSC's roots lie in the advocacy and collaborative spirit of our social work colleagues, we recognize that continued growth will require new adaptations. We have grown thus far by doubling-down on the luxury afforded by our modest size, but more work remains as we scale these supports with new departments and an even wider array of services. Thus far, we have collaborated with a discipline keen on understanding their client's systems, strengths, and motivations, and as we continue to gather data and consider the impact of our support policies and practices, we cannot help but acknowledge the interesting correlatives between social work research and our labor to support the development of adult learners.

Student Engagement

One of the greatest challenges on a campus serving mostly adult learners is student engagement outside of the classroom. With many competing demands on their time, such as full-time employment in addition to internships, part-time jobs, and children or other caregiving responsibilities, extracurricular activities are typically not a priority for adult students; the interest in such activities may exist, but the time and energy simply do not. Astin (1984) called this the "zero-sum game" of student involvement – what is given here is lost there – and argued that student behavior, specifically the time and energy they apply in the classroom and other programming, is perhaps the greatest predictor of learning and development. Tinto (2012) has noted that institutions must determine which forms of involvement are most likely to impact their students' success, which is a question we consistently ask in developing co-curricular programming.

In the five and a half years the Philadelphia campus has been in operation, we have offered various types of programming and methods of engaging students on campus outside of the classroom. The most well-attended have been the co-curricular events, often speakers,

occurring during class time with faculty requiring, or providing an incentive (i.e. extra credit points), for students to attend. Additionally, we have found students to be most interested in programming viewed as beneficial in attaining their academic and career goals, as opposed to those that are predominantly social. Examples of successful programming offered include the Human Rights Speaker and Film Series, Career Services workshops (i.e. best practices for resumes and interviews), Balance Day, a de-stress event the week before final exams, Mental Health First Aid Training and the Growth Mindset workshop.

In order to involve the greater campus community in program and event planning, we began the Student and Community Engagement Committee (SCEC), inviting all faculty, staff, and students to participate. The committee meets once per month to discuss ideas and tasks related to extracurricular programming on our campus. Student participation on this committee is critical in determining student interest in campus programming, as well as in the dissemination of information about upcoming events. The SCEC typically conducts a student survey each semester in an effort to gauge student interest in various types of programming and to determine the best times to offer such events.

Additional ways of engaging our students aside from campus events have included a Peer Mentor program for new students, Student Ambassadors to represent our programs at New Student Orientation and recruitment events, and a Student Advisory Board serving as a focus group for the campus. With the understanding that our students' time is limited and valuable, we have worked to make involvement as accessible as possible. For example, we offer students the option to participate in committee meetings, such as the SCEC, via videoconferencing. We also utilize discussion boards in our learning management system to elicit feedback from students who are not able to participate in committee meetings in real time.

Conclusion

In this article, we have discussed strategies to support the unique needs of adult learners beginning even before matriculation. Drawing on the adult learner literature and our own experiences, we argue that higher education institutions must be prepared to offer tailored experiences for adult learners that begin with the admissions process, continue in the classroom and extend to support services and co-curricular programming. For those of us who teach adult learners, this work is also mission-driven in the sense that it is a co-labor between faculty, staff and students that highlights our common purpose: social justice. When we work to make admissions processes, pedagogy and student support structures more equitable, and when we do right by those whom we serve, we are doing social justice work. This work is inextricable from the tasks of recruiting, retaining and graduating students who succeed in their life's work. It is no surprise, then, that the beliefs inherent to social justice frameworks, especially empathy and social responsibility, are key predictors of retention and graduation rates (Sparkman, Maulding, & Roberts, 2012). Our efforts on WCU's Philadelphia campus are attuned to these beliefs, which have in turn enabled us to develop a supportive learning community for our students that extends from admissions to graduation.

Our work responding to the unique experiences of adult students is ongoing. Much of the infrastructure currently in place was implemented by the Social Work faculty and staff, who were uniquely qualified to push for a more effective, supportive and socially-just campus. Yet, as we work toward creating a more socially-just learning environment, we are aware that our successes are certainly serendipitous and a luxury of our size. Other questions remain, such as

how we will adapt these collaborative experiences with the addition of new degree programs and increased enrollments. One of the benefits of working at a branch campus is that the smaller size makes it easier to collaborate with staff and faculty from other departments (Harper, Owens, Funge, & Sullivan, 2017). This spirit of collaboration will guide us through growth and change.

No strategy is foolproof, and we recognize the opposing argument that before we can begin to understand adult learner strategies and adequately enact them, we must first focus on equity and access for all students. However, we believe that true understanding and collaboration are required to support increased access to higher education for adult learners. Leveraging any new idea or philosophy in an educational space will be met with supporters and skeptics; change is difficult, especially in spaces where learning is taking place in a non-binary way. Thus, it is the responsibility of any advocate working in the field of college access, and in particular with adult learners, to understand that they are creating a new learning experience and contributing to a more just future.

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Special-Admit Students' Perceptions of Academic Success

Courtney Lloyd, *West Chester University*

ABSTRACT

Research has shown many high school students enter college with weak academic skills and experience a culture shock when trying to make the transition from high school to college. In this quantitative research study at a regional, comprehensive four-year institution in the Northeast, 57 special-admit students completed an online survey to provide insight on how students perceive their final grades in courses as it relates with their definition of being academically successful. Students who participated in the academic support programs provided valuable insight into how students viewed success in college courses after one semester. Each academic program encompassed different academic requirements, and results of the study revealed there was not a significant relationship between the special-admit populations and how they defined being academically successful.

Introduction

Previous research has shown many students enter college with weak academic skills and experience a culture shock when trying to make the transition from high school to college. Low graduation rates are partially due to students not recognizing high school behaviors will not always translate into performing well at the college level (Moore, 2006). High school students entering college need to have an open-mind, be able to ask for assistance, dedicate additional time to their studies, and put forth the effort to succeed in their courses. Students receiving unsatisfactory grades need to adjust their time management and study skills early into their academic career. Students are often unaware of the amount of work and dedication it will take to be a successful college student, and the term "academic success" can be defined in various forms, as students do not always define it by grades alone.

A study was conducted at a regional, comprehensive four-year institution in the Northeast, with a population of almost 20,000 undergraduate and graduate students, and with more than 100 undergraduate and over 80 graduate programs. This study was conducted to determine how students perceived their final grades after one semester and how it correlates to their definition of academic success. In 2016, over 2,000 first-year students were admitted to the university, of which, approximately 500 were accepted under special admittance (admit) terms. A major limitation of this study was the low response rate of students completing the online survey. The data collected and analyzed was very limited, as a higher response rate would have provided the researcher with a lower risk of a non-response bias (Stat Trek, 2018). The response rate, 13 percent, had an 87 percent nonresponse bias, which directly impacted the reliability and validity of the research findings. The researcher continued with the study, as to lay the groundwork for a more complete research study in the future.

Under the special-admit terms, two separate cohorts of students had specific admissions criteria, and each program included mandatory requirements before and/or during the first academic semester. Students who require extra attention and support have often been referred to as developmental, preparatory, or remedial (Mulvey, 2008). For the purpose of this study, the two special-admit programs include students who participated in a Provisional Admission Program (PAP) or a Special Admissions Program (SAP). First-year students, especially special-admits, require different levels of assistance to support the students with making the transition in to college. The special-admit students need to know they are being supported throughout their academic career and feel comfortable seeking the assistance.

When students are accepted to college, it becomes the responsibility of the university to provide academic and personal support services, especially to the students who have a weaker academic background. Students who participated in the PAP and SAP were asked to complete an online survey to provide insight to their experiences in a special-admit program and to assist the researcher in determining what grade range they felt represented doing well in their courses. The following research question and hypothesis was used in this study:

- Research Question: What grade range represents doing well in college-level courses?
  - o Hypothesis: Students who participated in the PAP and SAP will define academic success by achieving a grade in the range of 93-100%.

The special-admit students' responses to the online survey were analyzed to show if there was a correlation between how students define success and their academic performance after one semester.

Background

At this university where the study was conducted, the Office of Admissions uses a coding system to differentiate the regular admits to their peers in special-admit programs. This allows the administration to track students' retention and graduation rates. The four admit types used to code students include the following: FY1, FY2, FY3, and FY4. This study only focused on students who were coded with the FY2, FY3 and FY4 codes. The criteria for the admit types includes:

- FY1: Regular Admit (RA) – Students who met admission criteria. This includes a strong academic record, including GPA, standardized test scores, and requested program of study.

- FY2/FY3: Provisional Admission Program (PAP) - Both admit types are students in the PAP program who are provisionally accepted into the University. Students must successfully complete a summer bridge program before being matriculated. FY2 students are funded by the Act 101 program, which allocates state funds to provide services to academically and financially disadvantaged students ("Act 101", 2017). FY3 students are also PAP students, but are not supported by the Act 101 funds. State and federal funds are distributed according to students' socioeconomic status. When discussing students in the PAP, both admit types will be discussed collectively.

- FY4: Special Admissions Program (SAP) - This cohort of students is accepted into the university, but had lower SAT score and/or high school grades as compared to their regularly admitted peers.

The first special-admit program, PAP, included 180 students who were provisionally accepted into the university. Students were required to successfully complete a five-week summer bridge program before being matriculated. This short summer session is designed to build academic skills and to prepare students for their introductory 100-level college coursework (McCurrie, 2009). During the summer, students were enrolled in a total of six credits (credit and non-credit bearing) and were required to complete several academic program requirements. Academic support structures were created to assist the students during this transitional period, as students were required to live on campus and participate in mandatory tutoring, coaching, workshops, and social events. By allowing students to enter during a summer session, they began to build the academic skills and confidence that would be necessary to perform as well as, or better than, their peers who were regularly admitted. During the fall semester, PAP students were restricted to 12 credits and were required to participate in mandatory tutoring in certain math and writing courses.

The second special-admit program, SAP, included 290 students who had the option to enroll in 12 or 15 credits during their first academic semester ("University Fact Books", n.d.). Students who enrolled in 12 credits were not required to participate in the mandatory program, but were encouraged to participate. Students who enrolled in 15 credits were required to meet with an academic coach and attend various academic workshops. Graduate consultants, who served as academic coaches, were assigned to assist students in navigating the university system and to make referrals to campus resources.

The university recognized the need for additional support based on high school grades and/or SAT scores. The SAP was designed to provide academic support while assisting students in making the transition into the university. SAP students were not offered the same level of academic support as their peers in the PAP, but students were given academic tools and resources to assist in making the transition. Table 1 is an overview of the academic support and program requirements for the two special-admit programs during the fall 2016 semester.

TABLE 1

PAP and SAP Support and Program Requirements

Program Support	PAP	SAP
Provisionally Accepted	Yes	No
Summer Bridge Program	Yes	No
Mandatory Tutoring	Yes	No
Graduate Consultant Assigned	No	Yes
Restricted Credits	Yes	No
Mandatory Workshops	Yes	Yes
Restricted Credits	Yes – 12 credits in fall	No – 12 or 15 credits in fall
Developmental Courses	Per placement results	Per placement results

Literature Review

The literature reviewed for this study included topics on developmental education, motivation and performance, and academic success to provide a comprehensive understanding of

the special-admit populations, how students can be motivated, and how students can be successful if provided the critical support. For the purpose of this study, developmental education is under the purview of students who have low SAT scores, poor high school grades, and/or the need to complete developmental courses. Students who participated in the PAP were considered developmental at the time this study was conducted.

Developmental Education

Developmental education is a broad term that is often related to remedial courses and services that are organized and delivered to help retain and graduate students (Boylan & Bonham, 2007). Support programs, including mandatory tutoring, workshops, and one-on-one meetings, are designed to assist the special-admit students in completing coursework while learning how to navigate the college system. It is important for students to obtain the necessary academic skills early in their academic careers to be retained from semester to semester. For special-admit students to become acclimated to campus life, academic support services need to be provided during this important transitional period and beyond (Fowler & Boylan, 2010). Special-admit programs offer a variety of services to students during their first academic year and make many support services a requirement of the program. Services typically include assessments, orientation, tutoring, advising, counseling, peer support, early alert programs, and study skills workshops.

A study conducted by Vick, Robles-Piña, Martirosyan, and Kite (2015) determined students who were tutored were more likely to persist in their coursework and be successful in future courses if they continued to utilize tutorial services. Students may not appreciate the mandatory, intrusive support, but those who are willing to seek the assistance are often the students who will be more likely to be academically successful and will continue to ask for support throughout their college careers. Special-admit students are not always equipped with the necessary skills to be successful in college right after high school. Research has shown that when students are able to be successful in remedial courses, they are empowered to continue their college-level coursework (Boylan, 2010). This university recognized the academic differences between the special and regular admits; therefore, programs and services need to be created and provided to support the students.

Motivation and Performance

Students tend to believe happiness and satisfaction are the true measures of success, and academic achievement plays a less substantial role in defining their college career (McCurrie, 2009). Students may view their academic success differently than the administration, as it is not always about receiving the highest grade possible. For students to be both happy and able to meet high academic standards, they should begin building these necessary skills as early as middle and high school to be ready to put in the amount of work, time, and dedication needed to be successful in college. When students are given the tools and skills needed before attending college, the transition from high school to college might not be a transition at all.

The quality of study skills, academic ability, and how students learn affects how they study for courses. According to Plant, Ericsson, Hill, and Asberg (2005), the amount of study time students utilize is a very weak predictor of how well they will perform in college-level courses (as cited in Marrs, Sigler, & Hayes, 2009). The total number of hours students claimed to have studied, no matter how many, will not always result in an excellent grade if the quality of studying is weak. When students receive feedback and grades on assignments, they need to

reflect on the methods utilized to prepare for the assignment and not assume the same level of work or methods will increase the grade on the next assignment.

It is equally important to look at what motivates a student to try to do well academically. Self-determination theory (SDT) is a theory of motivation, personality, and development. The theory proposes that "intrinsic motivation, or motivation derived purely from the satisfaction inherent in the activity itself, is more conducive to learning than extrinsic motivation, or motivation to achieve an external reward or to avoid a punishment" (Guiffrida, Lynch, Wall, and Abel, 2013). Students with intrinsic motivation have lower anxiety, feel good, and perform well in school. Students who have a sense of personal control are self-determined and take ownership over the activities they engage with and choices they make (Brooks & Young, 2011). Highly intrinsically motivated learners delay gratification because they are invested in the activities taking place in the classroom. Academic delay of gratification is positively related to students' rating of their professors' effectiveness in the classroom, as well as a partial correlation between final grades and other variables. Students who can delay gratification will often be more academically successful if they are willing to push away distractions (Bembenutty, 2009).

Academic Success

Special-admit students may have a difficult time making the transition from high school to college because of the skills and behaviors learned in high school. College is an unfamiliar system with different terminology and processes. Learning to navigate can be a daunting task for any student, especially the special-admit population. Students who lack study or time management skills also have difficulties in their courses and struggle when trying to make this transition (Gofen, 2009). Selecting key faculty and staff to work with the special-admit population is a key component in helping to motivate and empower students.

College is new, exciting, different, and unfamiliar. Each student will experience college differently, and some may end up with academic difficulty as they encounter a culture shock. Students realize that the academic behaviors and choices that were insignificant in high school are now penalized in college (Moore, 2006). Special-admit students are particularly in danger of having this "culture shock", as students face many challenges in their academic and often in their personal lives. Literature on special-admit students has shown students can have a hard time learning how to manage it all, while trying to be a successful college student. Students often do not realize they are doing poorly or not adjusting well until it is too late.

Cognitive, affective, and personal factors influence how students perform and the likelihood of college success (Boylan, 2009, p. 14). Research grounded in the theoretical work of several scholars of adult development and learning, most notably Arthur Chickering and Erik Erikson, have driven innovative models for using a combination of cognitive, affective, and personal information to target a variety of course-based and learning assistance-based interventions for special-admit students (Boylan, 2009). For example, placement exam scores could be inaccurate and the need to assist special-admit populations through alternative interventions is necessary. By determining available resources on campus and paying attention to students' high school profiles, creating a learning plan for each student can provide individual experiences that assist students on a personal level. When programs spend the time investing in their students, relationships are created and students feel more comfortable seeking assistance when appropriate.

Problem Statement

As of fall 2016, PAP students had a four-year graduation rate of 34.3 percent and a six-year graduation rate of 59.3 percent, both about twenty percentage points below their RA peers ("University Fact Books", n.d.). The SAP program was a pilot program created to address the graduation gap. SAP students who enrolled in 15 credits agreed to participate in this support program, which students were required to participate in mandatory workshops and meetings throughout the fall semester. The goal of the pilot program was to allow students to enroll in 15 credits like their RA peers, while being provided assistance as the students transitioned into college. PAP students were restricted to 12 credits during the fall semester; however, some of the students earned three to six college-level credits during the summer bridge program. This allowed students to begin their college career with credits and a GPA. Students can feel discouraged if they are not completing credits towards graduation, and remedial courses can delay graduation if students need to complete or repeat multiple remedial courses in order to advance into college-level courses.

The data collected from the survey was analyzed by grouping the special-admit students together to determine if what grade range they felt represented doing well in their courses. This discussion only analyzed one aspect of the survey that the students completed, as the researcher wanted to focus on how students viewed their final grades in courses and how that was related to their definition of academic success.

Methods

After receiving approval from the Institutional Review Board, the researcher contacted PAP and SAP students, via email, asking them to complete an online survey regarding their experiences as students who participated in a special-admissions program. A total of 484 first-year, special-admit students were invited to participate, and a total of 22 PAP and 35 SAP students ($N = 57$) completed the survey. The instrument used to conduct this study included a survey that was created in Qualtrics by using a five-point Likert scale. When students agreed to participate in the study, they were directed to electronically sign a consent form in Qualtrics. The survey asked students various questions related to their experiences in the special-admit programs and asked students to define what "doing well" meant in college by selecting a grade range. A quasi-experimental research design was used to determine if a cause-effect relationship existed among the independent and dependent variables. The dependent variable included final grades and the independent variable included the special-admit populations. By collecting the above information, a cross-tabulation analysis was conducted to identify the relationships between the variables.

The results of the survey provided valuable insight into how students viewed their success in college courses after one semester. Student responses were analyzed by conducting a chi-square test for association in SPSS (statistical software). There are two assumptions that must be met in order to run this analysis. Two variables should be measured at an ordinal and nominal level and the two variables should consist of two or more categorical, independent groups (Laerd Statistics, 2018). The chi-square test was performed to examine whether one variable was independent from another one, and whether its results would reveal if there was a statistically significant relationship between the special-admit populations and the grade range they felt represented doing well in college courses.

The age range for the special-admit populations fell between 17 and 19 years of age, as each program only recruits recent high school graduates. When students apply to the university, they self-report ethnicity, and since students voluntarily shared their student ID numbers, survey responses were matched to the students' demographic information. To provide a profile of the students who completed the survey, demographic information and term grade point average (TGPA) was requested from the program coordinators to assist in the data collection process. Demographic information of the students who participated in the survey is displayed in Table 2.

TABLE 2
Special-Admit Population by Ethnicity and Sex

Sex by Population	Ethnicity				
	White	Black	Hispanic	Multi-racial	Total
SAP	20	6	6	3	35
Female	16	5	3	3	27
Male	4	1	3	0	8
PAP	9	11	2	0	22
Female	8	8	1	0	17
Male	1	3	1	0	5
Total	29	17	8	3	57

As the table shows above, the TGPA for SAP students at the end of the fall term was 3.07 and 2.82 for PAP students. Table 3 illustrates the breakdown of the special-admit populations by ethnicity and average TGPA, as to build a profile of the students who participated in this stuy. At the end of one semester, the average TGPA for SAP students was slightly higher than their peers in PAP.

TABLE 3
Average Term GPA

Population	White	Black	Hispanic	Multi-racial	Total
SAP	3.09	3.19	2.84	3.13	3.07
PAP	2.74	2.90	2.75	-	2.82
Total	2.99	3.00	2.82	3.13	2.98

Results

Table 4 presents the chi-square results testing to see if there was a statistically significant relationship between the special-admit populations and the grade range that represented doing well in courses. The results revealed there was not a statistically significant relationship ($p = .153$) as the p-value was greater than .05. Since the chi-square test revealed no significant relationship, and since the study is flawed due to the limitation of the sample size, the average term grade point average (TGPA) was analyzed to have a better understanding of the grade range students received after one semester.

TABLE 4
Results of the Chi-Square Test

	Value	df	Asymptotic
Pearson Chi-Square	6.699a	4	.153
Likelihood Ratio	9.431	4	.051
N of Valid Cases	57		
a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .39.			

Another report from the chi-square test showed the cross-tabulation results between the special-admit programs and the responses to "what grade range represents doing well in courses." The cross-tabulation showed students in both programs had a higher response rate for the 83–89% grade range (Table 5).

TABLE 5
Cross-tabulation (Program* "Doing Well")

Program		70–72%	73–79%	80–82%	83–89%	90–100%	Total
SAP	Count	1	1	6	15	12	35
	% within	2.9%	2.9%	17.1%	42.9%	34.3%	100%
	% within	100%	100%	100%	50.0%	63.2%	61.4%
	% of Total	1.8%	1.8%	10.5%	26.3%	21.1%	61.4%
PAP	Count	0	0	0	15	7	22
	% within	0.0%	0.0%	0.0%	68.2%	31.8%	100%
	% within	0.0%	0.0%	0.0%	50.0%	36.8%	38.6%
	% of Total	0.0%	0.0%	0.0%	26.3%	12.3%	38.6%
Total	Count	1	1	6	30	19	57
	% within	1.8%	1.8%	10.5%	52.6%	33.3%	100%
	% within	100%	100%	100%	100%	100%	100%
	% of Total	1.8%	1.8%	10.5%	52.6%	33.3%	100%

Table 6 presents the Phi and Cramer's V results for the chi-square test. Phi is a chi-square-based measure of association. The chi-square coefficient depends on the strength of the relationship and sample size. Phi eliminates sample size by dividing chi-square by n, the sample size, and taking the square root. The Cramer's V is the most popular of the chi-square-based measures of nominal association because it gives good norming from 0 to 1 regardless of table size (Nominal

Association, n.d.). The strength of association between the variables was not significant (p = .153).

TABLE 6
Nominal Association: Phi and Cramer's V

		Value	Approximate Significance
Nominal by	Phi	.343	.153
	Cramer's V	.343	.153
N of Valid Cases		57	

Discussion

Through the comparison of the two special-admit populations, new knowledge was gained from understanding how students' experiences helped define academic success. The special-admit students shared their experiences as students who were required to fulfill mandatory program requirements, and the quantitative results of the study indicated students do not need always need to receive a grade of an A to feel they were academically successful. Each special-admit program had different mandatory requirements, and as a result, the findings revealed there was not a significant difference between the special-admit populations and the grade range they felt represented doing well in college-level courses.

Many states' funding formulas are being tied to student retention and graduation rates, and new strategies to support students and to help improve student success are necessary to secure funding (Zhang, Fei, Quddus, & Davis, 2014). If universities accept and label students with having weak academic backgrounds, how can students be expected to perform as well as, or better than, their regularly admitted peers if support is not offered? It becomes the responsibility of the university to ensure a solid support system and a care team is available and ready to assist this population.

Additionally, universities must have adequate information to make good admission decisions. In place of traditional assessment measures such as high school ACT and GPA, schools of higher education need to include writing samples, in-house assessment tools, interviews, and portfolio data in the student evaluation process. (p. 40) By taking a different admissions approach, students can be profiled differently, which can lead to providing the necessary support for each special-admit student. Furthermore, predictors of academic achievement can be identified by a students' experience in leadership positions, high school GPA, and gender (Mattson, 2007).

Future Research

This study could be duplicated at this university as an attempt to reach more students. By having a larger sample size, the results of the study could be validated. Retention and graduate rates influence the administration when decisions need to be made regarding the admission process, support services, and the number of faculty to hire. Data is what will drive their decision-making process, so it is important for program coordinators to prove what services are working well and what areas needs to be enhanced. This is just one of the ways this study could be altered to help provide the data and to tell the story of what is helping the students achieve academic success.

Another future research idea could include conducting a similar study on special-admit students at other similarly sized institutions. Even though special-admit admission profiles would not be the same, students who are categorized as special-admit would have similar academic backgrounds, skills, and characteristics. Conducting more studies on special-admit populations could help administrators provide necessary resources to students they are accepting into their universities, as well as provide additional literature on support services and special-admit populations. By conducting focus groups, a qualitative study could be conducted to compare feedback from special-admit populations between different institutions. Revisions of policies could begin and new academic support initiatives could be implemented.

The future of admitting special-admit students is evolving as our student population is always changing. First-year students are coming in each year with different strengths and weaknesses, and this study provides a glimpse of what students are feeling regarding their academic success, and universities at large can play a greater role in students' lives by providing better assistance and support during this crucial time in their academic career.

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Appendix A

Student Survey

Q1. Enter your ID number.

Q2. In the fall semester, which academic support group were associated with?

 ☐ Provisional Admission Program (PAP)

 ☐ Special Admissions Program (SAP)

Q3. Please select courses you were enrolled in during the summer/fall semesters:

 ☐ Math 2

 ☐ Math 3

 ☐ Writing/English

 ☐ None of the above

Q4. The assistance, support, and motivation I received from the PAP faculty, staff, and tutors OR from the SAP program was...

 ☐ Extremely good

 ☐ Somewhat good

 ☐ Neither good nor bad

 ☐ Somewhat bad

 ☐ Extremely bad

Q5. How satisfied are you with your overall academic performance during the fall semester?

 ☐ Extremely satisfied

 ☐ Somewhat satisfied

 ☐ Neither satisfied nor dissatisfied

 ☐ Somewhat dissatisfied

 ☐ Extremely dissatisfied

Q6. What grade range represents "doing well" in courses?

 ☐ 90-100%

 ☐ 83-89%

 ☐ 80-82%

 ☐ 73-79%

 ☐ 70-72%

Q7. How important was receiving professor feedback on your overall class performance?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Q8. I felt more connected to campus as a result of my interactions with peers, faculty, and staff because of my participation in DP or MP.

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

Q9. With one semester completed, how important would you rank the following activities as it pertained to your academic success.

	Extremely important	Very important	Moderately important	Slightly important	Not at all important
Academic performance	☐	☐	☐	☐	☐
Class attendance	☐	☐	☐	☐	☐
Campus involvement	☐	☐	☐	☐	☐
Setting and meeting academic goals	☐	☐	☐	☐	☐
Visiting professors in office hours	☐	☐	☐	☐	☐
Seeking assistance outside of the classroom	☐	☐	☐	☐	☐
Receiving family support towards your academic goals	☐	☐	☐	☐	☐

Q10. Based on your high school academic performance, how optimistic were you regarding how well you would perform academically in your first semester?

☐ Much better

☐ Somewhat better

☐ About the same

☐ Somewhat worse

☐ Much worse

Q11. How do you define success in college and what factors help contribute to that success?

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Biography

Dr. Courtney A. Lloyd – For the past twelve years, Dr. Lloyd has worked with students at West Chester University. Her background in higher education includes advising exploratory undergraduate students and coordinating tutorial services for the past twelve years. Dr. Lloyd received her Doctoral degree in Public Administration from West Chester University.

A Review of the Inaugural Issue of The Journal of Access, Retention, and Inclusion in Higher Education

Calley Stevens Taylor, *Cedar Crest College*
Jacqueline S. Hodes, *West Chester University*

The launch of the Journal of Access, Retention, and Inclusion in Higher Education (formerly the ACT 101 Journal) comes at a key moment in higher education. With its emphasis on highlighting not only student success, but also access and inclusion in higher education, it stands ready to inform scholars, practitioners, and higher education leaders about the important work being done in these areas. The Journal of Access, Retention, and Inclusion in Higher Education (JARIHE) has a unique opportunity to bring policy, practice, and research together to improve student success, as evidenced by its inaugural volume.

Volume 1 provides readers with a foundational overview of developmental education, strengths-based perspectives, retention and student success, Act 101, and access and inclusion. Articles ranging from *The History of Developmental Education* by Dr. Marie Brunner to *A Comprehensive Engagement Theory* by Dr. Craig Smith provide a foundation for readers unfamiliar with these topics, while articles such as *Mind the Gap: Decolonizing the Developmental Writing Classroom Through a Theory of Cultural Rhetorics* by K. Jamie Woodlief provide more in-depth coverage that should interest even the most experienced readers.

As editor John Craig explains in his note, JARIHE is unique in its emphasis on changing the perspectives on developmental education. Instead of the deficit perspective often associated with students who enroll in developmental courses, JARIHE emphasizes the importance of viewing all students from a strengths-based perspective. This approach has the potential to set JARIHE apart from other higher education journals which focus on access, retention and success, though it will require that the editorial board remain committed to only publishing articles that speak to this vision.

Recommendations

As a relatively new journal, JARIHE needs to establish its voice and identity among the other journals that publish on higher education and student success. In order to do so, we suggest that the editorial board consider four recommendations.

First, to ensure that JARIHE can evolve to broadly inform discourse and practice in these areas, we recommend that the editors consider adopting a standardized organizational structure for the journal. Using the content of Volume 1 (Fall 2018) as a guide, we suggest that future volumes be organized as follows. First, historical, conceptual, or theoretical articles that frame or discuss issues of access, retention, or inclusion, and inspire the reader to think critically about these topics. Next, articles that highlight best practices and the innovative work being done to promote student retention through access and inclusion. Research articles that report on scholarly investigation into these topics might come next. Finally, we suggest that the editors consider concluding each volume with a section that reviews books, reports, or other published works on the topics of access, retention, and inclusion.

A unique way that JARIHE can contribute to the field might be to raise the voices of higher education practitioners and scholars who themselves were participants from access and inclusion programs. By inviting submissions that draw directly from writers' lived experiences, JARIHE will be able to cement its place among higher education as the place to find important published works on special admissions, developmental education, or other access and inclusion programs.

We also encourage the editors to expand the perspectives present in JARIHE by broadening the editorial board or journal staff to include representatives from a wider variety of institutions, institution types, and geographic regions. We also recommend that the journal expand its author base. This growth might be achieved by intentionally identifying potential contributors based on conference presentations, masters' theses, or doctoral dissertations. The increasing public attention on issues of access, retention, and inclusion has resulted in a number of government- and organization-sponsored reports highlighting people and institutions doing innovative work in these areas; JARIHE might also consider using these as opportunities to invite new authors to the journal.

Finally, we recommend that JARIHE establish standards for formatting and organization across articles published in the journal. Doing so will help establish a visual presence for the journal that readers can recognize and identify with while simultaneously providing a framework that might encourage submissions from a new and diverse author pool. A long-term option for the journal may be to follow the models established by other higher education publications and become two publications, one focused on research and the other focused on theory and practice.

In Conclusion

Building on the foundation of the ACT 101 journal, a publication initiated in the early 1990's and concluding with a commemorative issue in 2007, JARIHE's emphasis on research and best practices in developmental education and special admission programs should not be underestimated. A journal focused on access, retention, and inclusion could cover a wide range of topics and lose the focus that made the ACT 101 Journal such a unique contribution to the field. In its expanded form, we encourage the editorial board to nurture JARIHE in an intentional and careful way. In doing so, it will not only establish its role in higher education literature but also ensure that access and inclusion programs remain front-and-center.