Florida Developmental Education Reform: What do the Florida College System institutions plan to do?

Shouping Hu, David Tandberg, Amanda Nix, Rhonda Collins and Dava Hankerson
Developmental Education Reform in Florida: What do Florida College System Institutions Plan to do?

Shouping Hu, David Tandberg, Toby Park, Amanda Nix, Rhonda Collins, & Dava Hankerson

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TABLE OF CONTENTS

Executive Summary 1
Background and Introduction 2
Research-Based Promising Programs and Practices 4
Methods of Analysis 9
Findings 10
Discussion 20
Conclusions 23
Appendix 24
References 26
About the Authors 28

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EXECUTIVE SUMMARY

In 2013, the Florida Legislature passed Senate Bill 1720 (SB 1720) to reform developmental education in the state. In response to this law, Florida College System (FCS) institutions were required to examine and significantly revise developmental education programs and academic pathways and to submit implementation plans to the FCS for review and approval. A content analysis of these 28 institutional plans reveals that by the fall of 2014, the colleges plan to:

- Redesign instructional strategies,
- Implement a more involved advising process, and
- Increase the number of support services available to all students.

The literature suggests that the most promising strategies for developmental education speed up remedial coursework so that students can progress more quickly into college-level work and, ultimately, on to completion of educational credentials. This can be accomplished through modularization, compression, contextualization, and co-requisite course structures. Advising is another critical area to help students succeed in college. Both intrusive advising and extensive training for front-line personnel are shown to be good practices. In addition, support services such as tutoring and success courses are most beneficial when they are concentrated in a central, academic learning center and well advertised to students.

The FCS institutions plan to redesign instructional strategies, ramp up advising, and provide support services. The institutions generally favor modularized and compressed instruction, with all 28 colleges applying these course structures. Co-requisite instruction is brought into the classroom by 17 of the 28 colleges, but with great variation across the colleges. Contextualized instructional methods are the least favored, with only 7 colleges implementing them in a limited manner. While there is significant variation in the amount of information provided by the individual institutions in their implementation plans, we find that most of the plans reflect established good practices and are consistent with the general guidelines for reform set forth in SB 1720. Moving forward, it will be important to follow up with the colleges to see how they implement their plans and to periodically assess the effect of the changes on students, faculty, staff, and administration.
BACKGROUND AND INTRODUCTION

Each year in the past, nearly half of Florida college students tested below college readiness standards and required postsecondary remediation. This trend is not unique to Florida; remedial education has become a major issue across the country with reports estimating as many as 1.7 million students entering college lacking minimum college-level skills in math, reading, and writing (Snyder & Dillow, 2011). In 2013, citing poor completion rates and cost as major factors for reform, the Florida legislature passed a sweeping law, SB 1720, which would eliminate remedial education for many Florida students. SB 1720 identifies two groups of students who are no longer required to take college placement tests or enroll in developmental education courses. Exempt students are defined by the bill as:

- Students who entered 9th grade in a Florida public school in 2003-2004 or thereafter and who earned a standard Florida high school diploma; or
- Students serving as active duty members of the United States Armed Services.

Colleges must use multiple measures to assess students’ college readiness and make recommendations on plans of study; however, ultimately decisions regarding course registration rest with the exempt student. The law requires colleges within the FCS to redesign developmental education and make changes to current advising practices.

Non-exempt students will still be required to take placement tests and developmental education courses as necessary, but they must be provided a variety of education options. Colleges can choose to offer some combination of contextualized, co-requisite, modularized, and compressed instructional strategies in their developmental education courses. The definitions for those instructional strategies are as follows according to SB 1720:

a) Modularized instruction customized and targeted to address specific skills gaps.
b) Compressed course structures that accelerate student progression from developmental instruction to college-level coursework.
c) Contextualized developmental instruction that is related to meta-majors.
d) Co-requisite developmental instruction or tutoring that supplements credit instruction while a student is concurrently enrolled in a credit-bearing course.

The reform further requires FCS institutions to submit implementation plans detailing changes in advising, developmental education course redesign, and support services. Implementation plans were prepared by schools in the fall of 2013 and submitted to the Division of Florida Colleges by March 1, 2014. The deadline for full implementation is fall 2014. The Division of Florida Colleges provided a template to the FCS institutions to develop their implementation plan (Appendix A).
SB 1720 calls for FCS institutions to group academic disciplines that share common foundational skills into what is defined as a “meta-major.” These consist of broad categories that encompass the extent of degree programs available. Research suggests that students who enter their desired program of study earlier have increased likelihood of completing a degree program (Allstadt, et al., 2014). Colleges are encouraged to create academic pathways to more easily guide students to degree attainment (Center, 2012). The goal of meta-majors is to focus students on a particular area of study with courses aligned with their degree because all of the degrees within the same meta-major share the same required courses. Meta-majors could improve student success through structured exploration into broad career groups while staying on track, immediate entry into major-related coursework, and guiding academic requirements on interest and ability rather than arbitrary institutional policies.

Florida is one of many states making efforts to improve completion rates and overall success of developmental education. Some states, such as Indiana and Colorado, are calling on high schools to develop remediation plans that include placement testing, advising, and scheduling changes prior to graduation, and other states focus reform efforts at the college-level. Texas lawmakers require colleges to base developmental education curriculum on research-based practices and the development of a statewide plan of action for remedial students. In 2012, Connecticut passed legislation requiring developmental education to be embedded with college-level, credit bearing coursework and limited stand-alone remediation for students below the minimum basic skills level to one semester (CT S40, 2012).

The purpose of this study is to analyze the 28 approved institutional plans related to developmental education reform and to identify the programs and practices the FCS institutions plan to implement on their campuses. After reviewing the existing literature on promising developmental education programs and practices and the legislative language in SB 1720, we used the following two questions to guide our analysis: 1) What do the FCS institutions plan to do when implementing developmental education reform in response to the SB1720? 2) To what extent are the institutional plans, research-based promising programs and practices, and the legislative language in the SB 1720 consistent?

This report begins by reviewing the literature on promising programs and practices related to developmental education. Special attention is paid to instructional strategies, advising, and support services available to students. The report then describes our content analysis of the implementation plans submitted by all 28 of the FCS institutions, and finally, compares these plans to the promising practices and the guidelines in SB 1720.
RESEARCH-BASED PROMISING PROGRAMS AND PRACTICES

INSTRUCTIONAL STRATEGIES

Modularized
Modularized instructional strategies break course material into smaller instructional units (i.e., modules) so that students can focus on the specific set of skills in which they are deficient. These courses begin with a diagnostic assessment that identifies a student’s particular strengths and weaknesses in math, writing, or reading. From these results, an individualized plan is developed for each student. Students work at their own pace through this plan by demonstrating proficiency on each of the modules assigned to them. It is important to note that many modularized courses are technology-based; these courses are typically offered in a computer lab with software (e.g., MyMathLab and ALEKS) as the primary form of instructional delivery. Depending on the level of remediation needed, students can register for a 1, 2, or 3 credit-hour modularized class. Those who finish their coursework quickly are permitted to exit the course early. Those who do not finish in time are given an incomplete grade and provided the opportunity to finish at the beginning of the next semester. Because technology can be used to expand, strengthen, and create efficiencies in the delivery of developmental math practice, modularized course models are most commonly integrated with computer-based instruction (Epper & Baker, 2009). Further, a study of Tennessee’s SMART (Survive, Master, Achieve, Review, Transfer) Math program at a community college which delivered course content through 12 instructional modules, showed that students in the program completed developmental education course sequences at higher rates than students who took conventional remedial education (Bassett & Frost, 2010). Overall, this structure provides students the opportunity to focus on the course content in which they are underprepared and to continue at their own pace until they achieve mastery.

Compressed
Compressed course strategies, also known as accelerated models, “are structured for students to take less time than conventional (often referred to as ‘traditional’) programs to attain university credits, certificates or degrees” (Wlodkowski, 2003, p. 6). Under this model, students typically enroll in a 7-8 week compressed course and, upon successful completion, enroll in the subsequent course, likewise taught in compressed format. Depending on the student’s academic level, classes in the sequence may both be remedial or may be a
combination of remedial and college-level. Either way, students are prepared for college-level coursework at a faster rate than traditional methods. Students may simultaneously enroll in compressed courses for math, reading, and writing. A study of the Accelerated Learning Program in Baltimore tracked students for up to four years and found that students who participated in accelerated course work were more likely to complete first and second college-level English coursework than similar students who enrolled in traditional developmental education courses (Cho et al., 2012). Additionally, a study of the Community College of Denver’s FastStart program, which combines 2 to 4 courses into a single semester so that students can earn up to 12 credits of developmental education in 16 weeks, found that FastStart students complete more developmental math courses, earn more developmental math credits and are more likely to pass college-level math courses than their counterparts (Bragg, 2009).

**Contextualized Model**

Contextual Teaching and Learning (CTL) or Contextualized Instruction, is a concept of teaching and learning that “helps teachers relate subject matter content to real world situations and motivates students to make connections between knowledge and its application to their lives as family members, citizens, and workers and engage in the hard work learning requires” (Ohio State University, 2000). The primary goal of contextualized instruction is to assist students in connecting academic content to real world context in a hands-on, concrete manner. By learning course material in this context, students actively engage with concepts and find meaning in the learning process. Bond (2004) characterizes contextualized instruction by: centralization of pragmatic life/work issues; integration of academics with real life experiences; personalization of instruction; visualization of abstract ideas; and demonstration of utility. One of the most important components of contextualized instruction is the connection of academic skills and occupational context. Washington’s Integrated Basic Education and Skills Training Program (I-BEST) is a contextualized instructional model that pairs an academic content instructor with a career and technical instructor to team-teach basic skills in reading, math, or writing. As students progress through their courses, they learn basic skills in real world situations and earn college-level credit for the occupational coursework. In their quasi-experimental study of I-BEST program outcomes, Zeidenberg, Cho, and Jenkins (2010) found that I-BEST students were 13 percentage points more likely to persist to the next academic year and earned 17.1 more college credits and 16.6 more career and technical education credits than their matched counterparts. Moreover, in a study of a 10-week curricular intervention that emphasized
summarization and writing, students who were given contextualized, science texts outperformed students who were given generic texts in the areas of accuracy and inclusion of main ideas (Perin et al., 2012).

**Co-Requisite Course Model**

In the co-requisite model, developmental education students are expected to do college-level work with the help of a paired remedial class or supplemental instruction (e.g., tutoring, study groups, additional class periods, and study skills workshops). Edgecombe (2011) defines co-requisite models as “mainstreaming with supplemental support [that] involves placing students with developmental education referrals directly into introductory college-level courses and providing additional instruction through mandatory companion classes, lab sessions, or other learning supports” (p. 12). Even though students may be unprepared for college-level work, they can be successful because they build up the skills they lack “just in time.” In Florida, co-requisite classes are most commonly available in the writing and/or reading disciplines and for students who are just below the placement test cut-off point. Sometimes, the co-requisite model is mentioned in the literature as a “paired model” and is considered to be a strategy for acceleration. One of the benefits of this strategy is that students can begin earning college credit immediately, which in theory would reduce the cost of and the time to a degree.

**Other Instructional Models**

According to Rutschow and Schneider (2011), “programs that show the greatest benefits with relatively rigorous documentation either mainstream developmental students into college-level courses with additional supports, provide modularized or compressed courses to allow remedial students to more quickly complete their developmental work, or offer contextualized remedial education within occupational and vocational programs” (p. iii). Although modularized, compressed, and contextualized models are the primary instructional course structures identified in Florida’s SB 1720, developmental education literature also highlights several additional course structures that could be effective. For instance, Computer Assisted Instruction (CAI) provides an alternative means of teaching content in the classroom with increased incorporation of technology. Computer models allow students to learn at their own pace, reinforce an instructor’s efforts, monitor students’ learning progress, and provide diagnostic feedback (Boylan, 2002). Moreover, the flipped classroom model, also referred to as backward teaching, incorporates technology and active learning so
that students receive instruction online, outside of the classroom, and complete homework and assignments during class with instructor assistance and support where needed. Studies have found that the flipped model could increase student accountability in learning, engage students of all learning styles, and make more effective use of class time (Hamdan, McKnight, & Arfstrom, 2013). There is some evidence that a number of colleges are incorporating these instructional strategies, particularly in modularized course models.

**ADVISING**

There are five different types of functions of academic advising identified in the literature, including: integration, referral, information, individuation, and shared responsibility (Smith & Allen, 2006). The goal of integration is to help students understand the link between their classes, co-curricular involvement, and future career goals. Referral involves connecting students with the appropriate campus resources (e.g., tutoring, financial aid, and counseling) so that they can be more successful in their pursuit of postsecondary education. The information function requires advisors to give students information about college-wide policies and procedures, degree programs, and graduation requirements so that students can navigate the complex landscape of higher education. Individuation involves taking students’ unique skills, interests, and abilities into consideration when helping them design a plan for their college experience. Finally, shared responsibility highlights the important role of students in the advising process. In light of the developmental education reform, each of these functions is more important than ever.

To carry out successful advising that accomplishes each of these goals, colleges must rely on research-based, effective advising practices. Intrusive advising is one best practice for at-risk students established in the literature and is described as early and regular intervention in students’ academic experiences to ensure their success (Holmes, 2000). Faculty and advisor training is also critical so that students are given timely and accurate information about course registration, mandatory courses for particular degree programs, and graduation requirements (Heisserer & Parette, 2002). Other good practices include web supports, the maintenance of a comprehensive database, and ongoing data collection.

There are different ways to implement these research-based, promising advising practices. The three most common approaches to advising are the prescriptive, developmental, and integrated (or holistic) models. The prescriptive method is advisor-centered and involves
students following an academic path prescribed to them by an advisor (Crookston, 1972). In contrast, the developmental method is collaborative. Advisors guide students to campus resources as necessary, but ultimately allow the students themselves to be independent, make their own decisions, and solve their own problems (Crookston, 1972). The final approach, integrated advising, attempts to combine the informational function of prescriptive advising with the counseling function of developmental advising to better assist students. While each of the advising methods have different strengths and weakness for specific student populations, research finds the integrated approach to be the most effective for facilitating overall student success (Heisserer & Parette, 2002).

SUPPORT SERVICES
Support services are designed to help students learn academic skills and content outside the context of a traditional classroom. Support services can include tutoring, computer-assisted instruction, English and math skills labs, and specialized learning workshops, among others. At most colleges, available services are housed in a learning center and are provided free of charge to all students. To ensure that tutors are prepared to work with low-performing students, training in appropriate teaching strategies may be required (Perin, 2004).

Because it is difficult to isolate the impact of support services on student success, most studies cannot demonstrate a causal relationship between the two. Additionally, because support services are often optional, selection bias is a large concern (Rutschow & Schneider, 2011). Still, learning assistance centers in general seem to have positive effects on academic preparedness (Perin, 2004). Tutoring, more specifically, is associated with higher final exam mathematics scores (Xu et. al, 2001), increased retention in college English, and higher college GPAs (Perin, 2004). Student success courses, another kind of support service commonly utilized in Florida, are also associated with an increased chance of earning a credential, persisting, or a transfer (Zeidenberg, Jenkins, & Calcagno, 2007). However, Perin (2004) finds that support services tend to remain under-utilized. As schools increase the number of supports they offer, it will be important to make students aware of the available services, either during advising sessions or academic courses. On this note, Rutschow and Schneider (2011) report that, moving forward, advising offices and learning assistance centers should work collaboratively with one another for enhanced effectiveness.
METHODS OF ANALYSIS

Approved implementation plans from all 28 of the FCS institutions were reviewed and analyzed using grounded theory content analysis (Charmaz, 2006). The research team began with a few general research questions about instructional strategies, advising, and support services, but allowed subthemes to emerge on their own. To begin, the research team completed a preliminary analysis of the first 10 approved implementation plans. By examining this subset of plans, we were able to create a coding structure that could be applied to all 28 implementation plans. Using this coding structure, we proceeded to read through all of the plans several times in order to compare and contrast them to published promising practices, to the guidelines in SB 1720, and to one another. Findings are organized into the quantitative tables and qualitative narratives that follow.
FINDINGS

INSTRUCTIONAL STRATEGIES

General Findings

The analysis overwhelmingly identified modularized and compressed instruction as the most favored approach for all colleges, with all 28 colleges applying these course strategies in at least one discipline. Co-requisite instruction is brought into the classroom by 17 of the 28 colleges, but with great variation across the colleges. Contextualized instructional methods are the least favored with only 7 colleges implementing them in a limited manner. The table below graphically represents how each college is offering the four teaching modalities.

Table 1
Use of Instructional Strategies by College and Course Content

<table>
<thead>
<tr>
<th>COLLEGE</th>
<th>MATH</th>
<th>ENGLISH/Writing</th>
<th>READING</th>
</tr>
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<tbody>
<tr>
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<td>Co-Req</td>
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</tr>
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<tr>
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<tr>
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In addition to reviewing implementation plans across the four modalities, analysis was conducted regarding the types of technology designed for the classroom, use of diagnostic exams, method of instruction, meta-major inclusion, course hour credits, and weeks of teaching across the modalities and colleges. A further description of these findings is provided along with a few unique features that were discovered through the analysis.

**Modularized**

A modularized course divides material into smaller instructional units, or modules, allowing students to focus a pre-diagnosed set of specific skill deficiencies in math, writing, and reading. Advisors and faculty develop an individualized learning plan based on the results of the diagnostic test. This plan is self-paced and allows students to build on their identified deficiencies. Daytona State College has designed modularized classes for students who are “significantly weak” in a subject area. Eastern Florida College develops individualized learning plans after students complete a diagnostic test and a brief written essay during their first week of class. Students must demonstrate a pre-established proficiency or mastery of the course objectives. Students determined to need remediation in several subject areas at Miami Dade College are advised to take modularized courses. Chipola College requires students to earn at least a 70% on each module to demonstrate mastery, whereas Polk State College requires 80% on each module and 70% on the post-test. If students are not successful in demonstrating mastery of the skills, they are often allowed to re-enroll.

In terms of technology, many colleges rely on MyMathLab, MyWritingLab, MyReadingLab, ALEKS, adaptive learning software, and other computer-based programs to supplement online, face-to-face, blended, and hybrid instruction. Meta-major selection is often used when establishing math pathways for students. For example, Edison State College offers a two-course sequence of math courses depending on whether a student is STEM or non-STEM. Modularized courses are designed for students to work at their own pace and to complete course requirements early to advance on to the next course in the prescribed sequence. Modularized courses emphasize the importance and value of developing skills to prepare students for college-level coursework.

**Compressed**

Compressed courses are commonly referred to as accelerated courses because they are intended to provide students with “just-in-time” skill building in order for students to quickly progress through required material. Colleges often offer courses in 8-week sessions
or combine two courses into one during a traditional 16-week semester. Students earn, on average, 3-4 credit hours for these compressed courses and allow students to quickly progress through courses while strengthening their basic skill level in the subject matter. This particular instructional strategy is recommended to specific subpopulations of students at several of the colleges, depending on PERT scores. Interestingly, while Northwest Florida State College targets students with the largest deficits for compressed courses, Hillsborough Community College compressed courses are designed to target low-medium risk students. Colleges regularly offer compressed courses in math, writing and reading in face-to-face, online, hybrid, instructor-led, and in collaborative learning environments. Software such as MyMathLab, MyWritingLab, MyReadingLab, and CONNECT are used to present or supplement instruction. By utilizing the standard face-to-face structure combined with collaborative learning techniques at Polk State College, students are provided an instructor-guided opportunity to complete a lower and upper-level course in one semester. Lake Sumter Community College offers compressed courses in a blended format where students take two courses in a 16-week period with one instructor, and in the same classroom.

Co-Requisite
Co-requisite courses offer students the opportunity to take gateway courses with supplemental instruction. Although the co-requisite modality is not the preferred instructional strategy, it is an option for students at 17 of the 28 colleges. Most of these 17 colleges offer co-requisite courses in math, writing and reading, although some only offer for one or two subject areas. Some co-requisite courses are paired with a 1-2 credit hour companion lab for students to hone their skills, like the one offered by Pasco Hernando State College. This 2-credit companion course is individualized, technology-based, and self-paced. A few colleges have built learning communities or collaborative learning environments for students to work together on skill building techniques, such as Santa Fe College. Some co-requisite courses are offered using technology-based instructional methods and software. Colleges tend to place students in co-requisite courses when PERT scores are just below the acceptable limit; therefore, additional diagnostic testing is not needed and students may progress through courses quickly to obtain the needed skills to advance to college-level coursework that is not paired with remedial coursework. Miami Dade only offers co-requisite courses in Math for students in specific, non-STEM meta-majors. South Florida State College views co-requisite courses as an opportunity to provide students with needed support and provides companion courses in writing and reading. North Florida Community College prepares students with reading, writing and research skills in co-requisite courses.
Contextualized courses are offered through only 6 of the 28 colleges, making it the least preferred method of instruction. This instructional style is intended to assist students with making connections between course material and real world content by actively engaging students. Designation of contextualized courses is dependent on meta-major selection for some colleges while others target students that are low to medium risk and may not have declared a meta-major. Indian River State College and Broward College address specific career clusters based on meta-major selection by students. Contextualized courses are most common in the math and reading subject areas, usually corresponding with the non-STEM major selection by students. For example, Edison College chooses to provide contextualized instruction to students who declare a meta-major in health science and business. In contrast, Lake Sumter State College offers a contextualized math course directed towards liberal arts meta-majors that serves as a foundation for college-level liberal arts math courses and assist in developing mathematical literacy through the use of real world problems. Tallahassee Community College’s contextualized reading courses are generally the same for all students, regardless of their meta-major, because the college believes that the pathway for reading and writing is the same for all majors. Instead, these classes encourage students to engage with meta-majors by requiring readings that expose them to the various disciplines that are available. Tallahassee Community College’s contextualized math courses are divided by meta-major (i.e, liberal arts or STEM) and offer a problem-based learning environment to the lowest preforming math students.
ADVISING

General Findings
All 28 implementation plans describe the advising process in fairly consistent ways (Figure 1). The process typically begins with determining a student’s exemption status based on high school transcripts and/or military documents. Once a decision is reached, colleges communicate with students about their status via an acceptance letter, welcome packet, or email. Prior to the start of school, students are required to become acquainted with their respective colleges and available course offerings through orientation. At this point in the advising process, the timing, sequencing, and method of delivery varies; depending on the college, students are offered the opportunity to complete online modules (e.g., Santa Fe College), watch orientation videos (e.g., Tallahassee Community College), browse websites with updated information on SB 1720 (e.g., Florida Gateway College), or meet with college faculty and staff in person (e.g., Miami Dade College). Upon completing orientation, students meet individually or in small groups with academic advisors for 20 to 30 minutes in order to discuss course options, both developmental and college-level, and establish an individualized academic plan. At Indian River State College, this roadmap is called a “Student Success Plan.” To ensure that students participate in all of these required activities, schools place registration holds on student’s accounts that can only be lifted by the academic advisors. Once these requirements are satisfied, students are allowed to register for their first semester of classes.

As long as students declare a meta-major, most will not be required to meet with their advisor again until they have completed 30 credit hours and need to make plans to transfer to a four-year institution. Besides this “30 hour contact” rule, most colleges do not elaborate on the advising process after the first semester. A few make mention of follow-up appointments, but these appointments are not described in much detail. One exception is the College of Central Florida. This particular college provides detail in their implementation plan about “meta-major advising,” which occurs once students reach 15 credit hours. State College of Florida Manatee-Sarasota is another exception, requiring students to schedule a second advisement appointment one month into the semester.

In cases where students struggle between the required advising appointments, some colleges engage in ongoing, “intrusive advising.” The ALERT program at Northwest Florida State College, for instance, calls attention to at-risk students through faculty referrals. Professors
Figure 1. General Advising Process

note the nature of a student’s challenges in the electronic system so that an advisor can reach out and offer appropriate solutions and tips for future success. Palm Beach State College and Daytona State College maintain similar systems called the Student COntactREquest program (SCORE) and “TRACS,” respectively. At Chipola College, faculty may initiate an “Excessive Absence Report form” that alerts the financial aid office and Vice President of Student Affairs about students who may be at-risk for non-completion.

Standardization

With so many pathways and course options now available to students, colleges are struggling to find ways to streamline the advising process. Many colleges manage this diversity by detailing two separate advising processes in their implementation plans, one for exempt students and one for non-exempt students. To set these two paths apart, the College of Central Florida chooses to give them different names; exempt students follow the elective pathway while non-exempt students follow the prescribed pathway. Colleges also rely heavily on standardized workflows to ensure that students are treated equitably and are informed of all developmental education options. Northwest Florida State College, for example, has a “Student Guide to Placement” and Santa Fe College has a document called the “Exploratory Advisor Checklist.” At State College of Florida Manatee-Sarasota, advising is standardized with data sheets for all students, Exempt/Non-Exempt Student Course Selection Forms, and a “Students Come First” talking points worksheet. In each student meeting, advisors simply work their way through these documents, checking each important item off the list as it is addressed. Additionally, at the conclusion of the advising appointments, almost all colleges ask that students sign a waiver, indicating that they understand the course options available to them and the advice provided by their advisors.
Meta-Major Academic Pathways and Career Planning

Course selection depends greatly on a student’s chosen meta-major. It is for this reason that choosing a meta-major is one of the first things students do, either in their application, at orientation, or in an advising meeting. Those who do not have a meta-major selected prior to the start of school are encouraged to complete a personal exploration. For those struggling with the decision at Daytona State College, advisors recommend individual research, a student success class, and/or web-based, self-exploration activities. Advisors at Northwest Florida State College recommend that students take personality tests like Myers-Briggs to highlight personal strengths and weaknesses.

Many of the other colleges choose to engage students with meta-majors through an emphasis on career planning. Valencia College, for instance, introduces students to career pathways through a 2-3 minute online video that precedes the application process. They also request that all students take the “Learning and Study Skills Inventory” (LASSI) prior to or during orientation. At Edison College all new students complete the Focus 2 Career Inventory, and at Tallahassee Community College students complete the “Fast Start” career interest assessment. St. Johns River State College explicitly states that the goal of advising is to “provide quality and meaningful advising focused on career planning.” In each of these cases, and at many other colleges, faculty and advising staff assist students in matching academic interests to degree programs offered by the college so that students can find success, both during and after college.

Technology

In order to handle the increased advising load and the growing number of distance learners, the colleges plan to rely heavily on technology to supplement face-to-face advisement. Broward College’s admissions website, for example, has new videos and written content to explain developmental education and gateway course options. At St. Petersburg College, “cyber advisors” monitor an email where students are able to ask questions about their exempt/non-exempt status. Similarly, Gulf Coast State College has e-learning advisors who work exclusively with online students who are unable to make an in-person visit to campus. Technology is also employed in the early alert systems used for intrusive advising. Indian River State College uses “RiverSupport” to help advisors, faculty, and academic support services to proactively guide struggling students as a team through the academic and non-academic roadblocks they may be facing.
SUPPORT SERVICES

General Findings
In terms of increased support services, colleges plan to offer students a variety of skill-building workshops, tutoring, summer bridge programs, boot camps, success coaching, career services events, and peer-to-peer mentorship. Some of the more unique support services also include a Student Assistant Program (SAP) for mental health counseling (Pasco Hernando State College) and “Major Area of Interest” (MAI) Learning Communities (Eastern Florida State College). Of all these available options, the colleges devote the most time and space to describing workshops, tutoring, and course-based services in their plans.

In many cases, colleges state that they already offer these services, but that they are often underutilized. Moving forward, support services will be intentionally advertised in a variety of formats to increase influence and impact. Broward College, for example, has contracted with an outside company to call, text, and send emails to students throughout the semester informing them of resources and upcoming deadlines. Other colleges will also advertise them in admissions videos, at orientation, and in one-on-one advising sessions.

To measure the effectiveness of these support services, colleges will collect data to determine whether students who make use of additional services are, in fact, more successful than their peers. Eastern Florida State College will require students making use of online tutoring, for example, to log in with their student identification number so that they may compare how long students spend on each tutoring session to how well they perform in their classes. Data collection will also allow colleges like Tallahassee Community College to document the number of students taking advantage of these services to determine the appropriate staffing levels, facilities, materials, and supplies necessary for future academic years.

Workshops
As previously noted, one of the major support services to be offered by the colleges will be free workshops. Chipola College, Hillsborough Community College, Indian River State College, North Florida Community College, and Palm Beach State College are just a few of the institutions who describe these services in their implementation plans. Starting in the fall of 2014, students will be able to participate in a combination of student success seminars (e.g., time management, study skills, campus resources, and connecting with instructors) and
subject-specific sessions (e.g., grammar, calculator use, writing, research skills, and test preparation). In addition, Santa Fe Community College will also offer career path workshops designed to help students find the appropriate meta-major.

**Tutoring**

Tutoring is another service that most of the colleges plan to offer students, free of charge, in student learning or academic support centers. Tutoring options will include one-on-one appointments, group study sessions, and online tutoring. Under the same umbrella as tutoring are labs and centers that provide focused assistance in math, reading and writing, offered at schools like Daytona State College, South Florida State College, and the State College of Florida. In some cases (e.g., Chipola College and St. Johns River State College), students will tutor other students. To ensure that the services are of high quality, peer tutors will be trained and certified. In other cases (e.g., Eastern Florida State College) adjunct faculty members will serve as tutors. Regardless, many of the colleges note that they will need to hire more tutors and extend the hours of available services to accommodate students who commute long distances and/or take night classes. For those who still have conflicts, schools will also refer students to private tutoring options that they pay for themselves.

Outside the classroom, students will be able to access online tutoring through a variety of means (e.g., Khan Academy, StartSmart, Smarthinking, web resources, and online learning communities). Of these options, Smarthinking is the most commonly referenced in the implementation plans. Through this program, students can connect 24/7 in real-time with online tutors via virtual, whiteboard technology. In order to bridge the digital divide, colleges will offer students access to computer labs, often housed in student learning or academic support centers, for participating in these programs. Online tutoring at Pensacola State College is also accomplished through Skype and Facebook private messaging.

**Course-Based Services**

In terms of support services offered in the context of a more structured course, many of the colleges offer summer bridge programs, basic skills ‘boot camp’ style courses, Massive Open Online Courses (MOOCs), and student success courses, which are all designed to help students to be more successful in their pursuit of postsecondary education. These courses are recommended, sometimes required, for non-exempt students and also available to other students. Some have minimal fees while others are completely free. One example is the “Student Life Skills” class now offered to new students at Broward College. This class
provides students with a semester-long introduction to the skills and strategies necessary to succeed in college, such as time management, study skills, note-taking, financial planning, and learning styles. Another example is the Early Start/Bridge Program available to students at Florida State College at Jacksonville. This program targets the essential skills that students need for success in gateway writing and math courses. Similarly, the College of Central Florida will host a four-week summer bridge program called “Project Eagle.”
As indicated above, SB 1720 dramatically altered the landscape of developmental education in Florida. While it is too early to know what the long term effects will be, the implementation plans provide initial clues as to the institutions’ responses. Likewise, a growing body of literature has been developing around promising practices in regard to the delivery of developmental education and academic support services. In this section we compare what we have learned from the literature, to what is specified in the SB 1720 and to what the institutions describe in their implementation plans.

**INSTRUCTIONAL STRATEGIES**

Modularized instruction, according to promising practices, offers students an opportunity to improve upon their identified deficiencies through self-paced, individualized educational plans. These courses are typically technology-based and offer students an early exit option if they have mastered the content. FCS institutions are clearly following these good practice guidelines in their implementation of modularized courses by identifying deficiencies, developing individualized plans, and allowing students to work at their own pace to complete the courses. Several implementation plans indicate that students may exit the course early upon completion and mastery of the material. If, however, students do not complete the course, several colleges also indicate that students may re-enroll the following semester to complete the course requirements. Additionally, the literature states that modularized courses are commonly integrated with computer-based instruction. This seems to be the case for Florida colleges, especially within math courses.

Compressed courses offered by the colleges also follow the good practice guidelines by offering courses in accelerated formats to allow students to advance to the next level course, which is often another compressed course. The courses focus on the identified skills deficiencies and are offered in math, writing and reading at most colleges. These courses are taught in a variety of ways; some are supported by technology and others are based around lectures and face-to-face interaction.

Although co-requisite course structures are not favored by many of the FCS institutions, those who do offer this type of course appear to meet the standards set forth by good practices. Those standards include college-level work paired with companion classes or supplemental instruction to address a student’s deficiencies “just-in-time.” Implementation plans from various colleges cite that these courses are targeted towards students with minimal deficiencies (i.e., those who fall just below the cut-off on placement tests) or for...
students in specific non-STEM majors. A few colleges indicate that these courses are individualized, technology-based, and self-paced.

Contextualized courses are the least utilized format by the FCS colleges with only 7 of the 28 colleges making this course structure an option for students. This limited number of contextualized courses is offered exclusively in math or reading, with the exception of two colleges (Indian River State College and Tallahassee Community College) that will offer contextualized writing courses. According to Bond (2004), there are five characteristics for contextualized learning: centralization of ideas, integrated curriculum, personalized instruction, visualization of ideas and a demonstrated utility. The colleges that are employing this course structure will relate math and reading course content to students’ declared meta-majors. However, almost no details are provided in the implementations plans about how the courses will go about addressing real world contexts in the five ways described above. Therefore, we cannot evaluate the extent to which contextualized classes are being carried out in accordance with published good practices.

**ADVISING**

In terms of advising, most of the implementation plans set forth by the FCS institutions are directly in line with the promising practices documented in the literature. Many of the colleges do, for example, plan to engage in intrusive advising. As noted, these systems commonly involve faculty electronically reporting on students’ absences and academic progress. Once a student has been flagged in the system, advisors can reach out and help connect that student with the appropriate support services for his or her situation. Because of the population served by the college, this referral may be for tutoring, increased financial aid, childcare, transportation, and a host of other services. To ensure that faculty and advisors are prepared for this increased responsibility, many will require online and/or face-to-face training, just as the literature recommends.

Moreover, in light of SB 1720, the FCS institutions have also begun to pay special attention to the five functions of advising described by Smith and Allen (2006): integration, referral, information, individuation, and shared responsibility. The general advising process described by most of the 28 schools now includes several components that allow for all five functions to be accomplished prior to the start of school. Orientation, for instance, provides an appropriate venue for the referral and information functions of advising. Regardless of whether they participate in orientation in person or virtually, new students are referred
during orientation to campus resources (e.g., tutoring, financial aid, and counseling) and the staff members in charge of providing them. Orientation is also the time when students are exposed to crucial information about college-wide policies and procedures, degree programs, and graduation requirements. To ensure that students do not lose or forget the material, advising offices also post this information online or print and distribute guidebooks or manuals. One-on-one and small group advising allows for two other functions—individuation and shared responsibility—to take place. As advisors make recommendations about developmental and gateway courses, they engage in individuation by considering each student’s unique skills, interests, abilities, and documented student achievement. Individuation is especially apparent when advisors recommend one kind of developmental education class over another, based on a student’s ability to work at his or her own pace and interact with technology. A fourth function, shared responsibility, arises as exempt students are given the option through SB 1720 to make their own decisions regarding course registration. Advisors give their opinions during advising sessions, but students get to make the ultimate decision regarding which classes they will take in the upcoming semesters. Finally, the statewide emphasis on meta-majors facilitates integration of academic expectations and career goals from the very first step of the application process onwards.

SUPPORT SERVICES

Just as the literature describes, most of the FCS institutions plan to offer tutoring, student workshops, and student success courses through an academic learning center. Although these centers are referred to by many different names, including “Learning Commons,” “Student Learning Center,” and “Student Success Center,” they all perform similar functions. Additionally, per the recommendations of Perin (2004), Chipola College and St. Johns River State College will both require student tutors to complete training prior to working with other students. To keep these support services from being underutilized, institutions like Broward College will be intentional in their advertising.

One limitation of our analysis is that we can only draw conclusions about the support services about which the colleges report. Although Gulf Coast State College and Valencia College do not, for example, provide any details about student support services in their respective implementation plans, this is not to say they do not, or will not, offer such services. Site visits to some of the colleges will provide an opportunity to follow up on this content analysis and may shed new light on the support services available to students.
CONCLUSIONS

This report includes information on SB 1720, research-based promising programs and practices for developmental education, and content analysis of 28 implementation plans submitted by the FCS institutions in spring 2014. Although the colleges propose unique plans for redesigning instruction, revising the advising process, and increasing support services for students, there are many commonalities between the plans. We conclude that, in most cases, the FCS institutions plan to implement changes to instructional strategies, advising, and support services that are in line with both SB 1720 and research-based promising programs and practices. It will be important to continue to examine the extent to which the FCS institutions implement the developmental education reform plans they provided to the Division of Florida Colleges, and to understand how different constituents experience and react to the implementations of those plans. Together, the multiple threads of information could help develop a deeper understanding on how sweeping education reforms, such as the developmental education law in Florida, are played out in reality and help generate insights for effective educational policies and programs to promote student success in college.
APPENDIX A
The Florida Department of Education Implementation Plan Template

Florida College System
Developmental Education Implementation Plan Template

Section (s.) 1008.30, Florida Statutes (F.S.), excerpt:
(6)(a) Each Florida College System institution board of trustees shall develop a plan to implement the developmental education strategies defined in s. 1008.02 and rules established by the State Board of Education. The plan must be submitted to the Chancellor of the Florida College System for approval no later than March 1, 2014, for implementation no later than the fall semester 2014. Each plan must include, at a minimum, local policies that outline:

1. Documented student achievements such as grade point averages, work history, military experience, participation in juried competitions, career interests, degree major declaration, or any combination of such achievements that the institution may consider, in addition to common placement test scores, for advising students regarding enrollment options.
2. Developmental education strategies available to students.
3. A description of student costs and financial aid opportunities associated with each option.
5. A comprehensive plan for advising students into appropriate developmental education strategies based on student success data.

Please enter the following information and submit to the Division of Florida Colleges no later than March 1, 2014. Florida College System institutions are recommended to submit plans by January 15, 2014, to Ms. Julie Alexander for approval by the chancellor no later than March 1, 2014.

COLLEGE:
SUBMITTED BY:
TITLE:
BOARD OF TRUSTEES APPROVAL DATE*:
* The board of trustees may appoint the president as designee.

Comprehensive Advising Plan
Enter a description of your comprehensive plan for advising students into appropriate developmental education strategies based on student success data. Also, include a description of policies that notify students about developmental education options and include details about the availability of opportunities for tutoring, extended time in gateway courses, free online courses, adult basic education, adult secondary education or private provider instruction (s. 1007.263, F.S.). Students who are not college ready based on common placement test scores must be informed of all the developmental education options and shall be allowed to choose a developmental education option (s. 1008.30(4)(b), F.S.).

Documented Student Achievements
Enter local policies that utilize documented student achievements in addition to common placement test scores (i.e., PERT, SAT, ACT, ACCUPLACER, FCAT 2.0 Reading) for advising students regarding enrollment options. Please check the boxes for student achievements that apply and add additional achievements in the space provided.

- High School Grade Point Average, Cumulative
- High School Grade Point Average, Subject Area
- Work History
- Military Experience
- Participation in Juried Competitions
- Career Interests
- Degree Major Declaration
- Meta-Major/Program of Study Declaration
- Achievement on an assessment other than a common placement test

Other Student Achievements:
Developmental Education Strategies
Enter local policies specifying developmental education strategies to be implemented. s. 1008.02, F.S., defines developmental education strategies in terms of modularized instruction, compressed course structures, contextualized developmental instruction and co-requisite developmental instruction. Please check the boxes for developmental education strategies that apply and add information in the space provided.

- Modularized instruction
- Compressed course structures
- Contextualized developmental instruction
- Co-requisite developmental instruction

Please provide specific details about the use of each strategy identified above. For example, if you selected modular instruction, please enter details about the modularization implementation, including specifics regarding course placement advising and registration, course numbers, targeting specific skill gaps, opportunities to quickly transition to gateway courses, etc.

Description of Student Costs and Financial Aid Opportunities
Enter local policies related to student costs associated with enrollment options. Also include financial aid opportunities that may be available for each enrollment option. Examples of student costs are: tuition and fees disaggregated by developmental education strategy; laboratory fees; costs associated with online options and/or tutoring; textbook costs; local scholarships/grants for students who demonstrate a financial need; and emergency, time-limited financial assistance.

Student Success Data Collection
Enter details about your plan for collecting data related to student success based on your plan. s. 1008.30(6)(b), F.S., requires Florida College System institutions to submit an annual accountability report beginning October 31, 2015, that will include student success data associated with each developmental education strategy implemented by the institution. The Division of Florida Colleges will work with Florida College System institutions to determine an appropriate format that will facilitate analysis and identification of successful strategies.

Examples of student success data are: course enrollment disaggregated by exempt or non-exempt status; course enrollment disaggregated by developmental education strategy or option; percentage of successful course completions (grade of C or better) disaggregated by developmental education strategy and gateway course; average time to successful completion of developmental education disaggregated by strategy or option; for those who successfully complete developmental education, average time to completion of gateway course; and average time to degree completion disaggregated by exempt and non-exempt status.

Additional Components
Please enter any additional related policies or procedures.
REFERENCES


Center, C. A. D. (2012). Core principles for transforming remedial education. Austin, TX: Charles A. Dana Center


ABOUT THE AUTHORS

**Dr. Shouping Hu** is the Louis W. and Elizabeth N. Bender Endowed Professor in Education and the founding director of the Center for Postsecondary Success at Florida State University. His research interests examine issues related to college access and success, student engagement and learning, and higher education policy. Dr. Hu is the Principal Investigator of the project on developmental education reform in the State of Florida, funded by the Bill & Melinda Gates Foundation.

**Dr. David Tandberg** is an Assistant Professor of Higher Education and a Senior Research Associate of the Center for Postsecondary Success at Florida State University. His research focuses on state higher education policy and politics. Dr. Tandberg is a Co-Principal Investigator of the project on developmental education reform in the State of Florida.

**Dr. Toby Park** is an Assistant Professor of Economics of Education and Education Policy, and a Senior Research Associate of the Center for Postsecondary Success at Florida State University. His primary research investigates student outcomes in postsecondary education, with a particular focus on traditionally underrepresented, economically disadvantaged, and academically underprepared student populations as well as students attending community colleges and minority serving institutions. Dr. Park is a Co-PI of the project on developmental education reform in the State of Florida.

**Amanda Nix** is a Ph.D. student in the Sociology Department at Florida State University. Her research interests focus on contemporary issues facing higher education, including student loans, developmental education reform, and the reverse gender gap. Amanda is a research assistant for the project on developmental education in the State of Florida.

**Rhonda Collins** is an Ed.D. student in Educational Leadership and Administration at Florida State University. Her research interests involve program evaluation, Human Performance Technology, and qualitative research. Rhonda is a research assistant for the project on developmental education in the State of Florida.

**Dava Hankerson** is a Ph.D. student in Education Policy and Evaluation at Florida State University. Her research interests include K-12 school accountability, racial politics of public education, and educational equity and access to higher education. Dava is a research assistant on the developmental education reform project.
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