Core Principles for Transforming Remedial Education: A JOINT STATEMENT

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Complete College America, Inc.
Education Commission of the States
Jobs for the Future

DECEMBER 2012

Glossary of Terms

- Degrees and certificates of value. Postsecondary credentials that are in demand in the
 workforce and therefore lead to livable wage job opportunities and/or provide a sound foundation for
 further education and training.
- Remedial education. Required instruction and support for students who are assessed by their
 institution of choice as being academically underprepared for postsecondary education. The intent of
 remedial education is to educate students in the skills that are required to successfully complete gateway
 courses, and enter and complete a program of study.
- 3. **Gateway courses.** The first college-level or foundation courses for a program of study. Gateway courses are for college credit and apply to the requirements of a degree.
- 4. **Programs of study.** A set of courses, learning experiences, and learning outcomes required for a postsecondary credential that are defined by academic departments within colleges and universities.
- 5. **Meta-majors.** A set of broad content areas that students choose upon enrollment at a postsecondary institution. A meta-major includes a set of courses that meet academic requirements that are common across several disciplines and specific programs of study. Enrollment and completion of meta-major courses guide students through initial academic requirements and into programs of study.

Background

Higher education has always been a pathway to opportunity. For generations of Americans of all backgrounds, an education beyond high school has led to upward mobility in our society. This role for higher education is more important today than ever before. With evidence suggesting that a ticket to the middle class comes in the form of a postsecondary credential, institutions must take extraordinary measures to ensure that those who seek a postsecondary credential are able to earn it.

To improve their economic futures, postsecondary students need to enter academic programs that result in degrees and certificates of value that prepare them for either further education or entry into the workforce. Across our country, state policymakers, higher education systems, and individual institutions are implementing new ways to improve college completion rates without sacrificing quality or access.

As states and institutions embark on ambitious reforms, it has become increasingly clear that improving the success of students who are currently assessed and then placed into remedial education courses is pivotal to the college completion agenda in states. With half of all students in postsecondary education taking one or more remedial education courses and college completion rates for those students well below state and national goals, it is critical that remedial education reform is an essential component of state and national college completion efforts at both the institutional and state policy level.

Innovations in the field are showing the way

Fortunately, research and practice over the past several years have begun to revolutionize the way faculty, institutions, and state systems deliver remedial education. We have seen groundbreaking research on the causes of remedial education students' failure, the growth of new evidence-based practice, and ambitious college and system-wide strategies to implement effective practices at scale. A central theme of these innovative approaches is to accelerate mastery of college-ready skills, completion of gateway courses, and enrollment into programs of study.

As a result of these impressive efforts, we have drawn the conclusion that remedial education as commonly designed and implemented — that is, sequences of several semester-long courses that students must complete before gaining access to college-level gateway courses — does not work.

Further, student outcomes cannot be improved at scale through incremental changes to existing courses, instructional practices, or policies that keep the current system of remedial education fundamentally unchanged. Lessons from emerging research and from the best innovators in the field point to the need for a new approach, one that enables unprepared students to receive academic and other supports they need to move quickly and effectively into and through a set of gateway courses aligned to programs of study that lead to a valued postsecondary credential.

Our purpose

As a result of new research and promising practice, we have more clarity than ever about how we can fundamentally transform our system of support that results in improved success for all students. To propel the movement forward, this statement offers a set of clear and actionable principles that, although not the final word on remedial education reform, sets a new course that can dramatically improve the postsecondary success of millions of students across the nation.

To be clear: The principles that guide this statement advocate changing current remedial education systems so that all students, no matter their skill levels or background, have a real opportunity to earn a college credential. Some may see this statement as supporting changes that discourage or divert students from their pursuit of a college credential. Nothing is further from the truth. Rather, we believe the systemic changes we propose, all of which can be found in some colleges and state systems around the country, are much more likely than current practice to provide a clear path that all students can follow to achieve their academic and career goals. In the end, the strategies we propose increase overall college completion rates, particularly among students who have traditionally been underserved by our postsecondary institutions.

To get there, we must shift our focus from improving student success in individual remedial education courses, or in a sequence of courses, to improving student progress through gateway courses and into programs of study that lead quickly and efficiently to completion of a credential of value.

This statement is not a comprehensive overview of all research and practice in remedial education. However, it presents recent research that has altered our understanding of the strategies that can have an immediate and profound impact on student success rates. This statement is not the final word on the topic, but it should guide rapid and creative developments in the alignment of high school and college standards, new college readiness assessments, and emerging instructional strategies and technologies that will further improve how we meet the needs of students who are not fully prepared for postsecondary education.

We cannot wait to act on what we know. It is not fair to students — nor is it fair to the faculty who teach them. It makes little sense to ask educators to be held accountable for student results when they must operate within such a flawed system.

What We Have Learned

The current system of remedial education was built on a common sense premise that providing students more time to learn college-ready academic skills through a sequence of ever more demanding math and English courses would provide them the best opportunity to succeed in college. Unfortunately, there is growing evidence that the assumptions and associated practices underlying that approach are flawed. Instead, we have learned that long sequences of fragmented, reductive coursework are not an on-ramp to college for underprepared students, but a dead-end.

Recent research is making clear that if our goal is for students to enter and move through programs of study that lead to completion of a credential, remedial education as it is currently practiced simply cannot get us there. The following conclusions are based on dramatic research findings that reveal the failings of the current system and make the case for fundamental reform.

There is limited evidence of overall effectiveness in remedial education.

The numbers tell a dispiriting story. Half of all undergraduates and 70 percent of community college students take at least one remedial course. Too many of these students never overcome being placed into a remedial course. Only about a quarter of community college students who take a remedial course graduate within eight years. In fact, most students who are referred to remedial education do not even complete the remedial sequence: One study found 46 percent of students completed the sequence in reading and only 33 percent completed it in math.

Remedial education course sequences are a key factor in high student

attrition. The long sequences of remedial education courses create many opportunities for students to drop out. A student may pass one remedial education course but fail to enroll in the next course. Worse yet, many who complete their remedial sequence never enroll in gateway courses. Thus, reforms to courses, while they may result in modest student learning gains, do not address the larger problem of students failing to persist through their remedial sequence or a college gateway course. Data collected by Complete College America found that among its participating states only 22 percent of community college students and 37 percent of students attending a four-year institution who were placed into remedial education math or English courses completed a gateway class in their designated subject area within two years.⁴ Not surprisingly, students placed in a sequence of three or more remedial courses have the hardest time. Students who start three levels below college level rarely complete their full sequence within three years — just 16 percent for math and 22 percent for reading.⁵ It has become increasingly clear that a significant number of students fail to enter a college program of study not because they fail any given remedial course but because they do not enroll in the subsequent remedial or gateway course.

The assessment and placement process is too often an obstacle to college

success. Colleges generally place students into remedial classes based primarily on a single score on a standardized test. Yet the evidence on the predictive validity of these tests is not as strong as many might assume, and research fails to find evidence that the resulting placements into remediation improve student outcomes. Recent research has found that a significant percentage of students who are placed into remedial education courses could succeed in gateway courses. An important new study by the Community College Research Center found that, in one community college system, between 40

and 50 percent of students who were placed in remedial math using a single placement exam could have earned a C or better in a gateway math course without remediation. In English, the study found somewhere between 40 and 65 percent of students who were placed into remedial English could have earned a C or better in a gateway English course without remediation. Despite the high stakes nature of tests that could significantly delay their progress to a degree, students are often unaware of their importance and consequently do not take the time to prepare or apply the necessary focus the exam demands. Further, most colleges do not require any kind of skills brush-up experience for students prior to administering placement tests. It is increasingly clear that the assessment and placement process alone may be denying students access to college-level courses.

The academic focus of remedial education is too narrow and not aligned with what it takes to succeed in programs of study. The tests used to place students in remedial classes focus on a very narrow set of skills in reading, writing, and math that often have little relationship to the content students need for their preferred programs of study. Remedial education courses are generally designed to prepare students for either college-level English composition or college algebra. Yet specific basic skills requirements differ across fields. For example, math needed for nursing is different from math needed for business or pre-engineering. Writing and reading conventions and skills also differ across fields. With its one-size-fits-all curriculum, remedial education does not provide solid academic preparation for the programs of study most students pursue. As a result, remedial education too often serves as a filter — which sorts students out of college — rather than as a funnel — guiding them into a program of study. Although the approach is new, there is growing evidence that contextualizing instruction and focusing on the skills students need to succeed in their program of study is much better than the one size fits all approach currently used in remedial education.

Remedial education does not adequately provide the non-academic supports many students need. Many students enter higher education without clear goals for college and careers. Many also lack college success skills such as note-taking, test-taking, paper writing, time management and career readiness skills that would enable them to choose a program wisely. Research indicates that students, particularly those who are unprepared for college, benefit from "non-academic" supports that help them explore and clarify goals for college and careers, develop college success skills, engage with campus culture, and address the conflicting demands of work, family, and college.8 Most remedial education, as it is typically designed, does not do any of these things. In fact, the stigma and frustration of having to revisit high school material, often taught in the same manner as in high school, frequently leads students to become discouraged and drop out.9

The longer it takes for students to select and begin a program of study, the less likely they are to complete a credential. The sequential structure of typical remedial education programs has another significant cost to students. Recent state-level research concluded that the sooner students enter an academic concentration, which is defined as three courses within an academic program, the more likely they are to succeed. More than half of students who entered a concentration in their first year earned a community college credential or transferred to a four-year college within five years. Of students who entered a concentration in their second year, only about a third completed a credential or transferred; for those who did not enter a program until their third year, the success rate was only around 20 percent. If students who have a good chance of success in a gateway course cannot quickly begin coursework within their chosen program or major, their odds

of success plummet. Unfortunately, this is the case for too many students, with research from one state indicating that only about 50 percent of community college students (and only 30 percent of low-income students) ever became program "concentrators" by passing at least three college-level courses in a single field — an important milestone on the way to completion.¹¹

The research is clear: Remedial education as it is commonly designed and delivered is not the aid to student success that we all hoped. It is time for policymakers and institutional leaders to take their cue from new research and emerging evidence-based practices that are leading the way toward a fundamentally new model of instruction and support for students who enter college not optimally prepared for college-level work.

Core Principles for a New Approach

We provide the following principles for creating a fundamentally new approach for ensuring that all students are ready for and can successfully complete college-level work that leads to a postsecondary credential of value. These principles provide a clear direction on how institutions and states should proceed in light of groundbreaking research, the heroic efforts of state and campus innovators, and the collective experience of our organizations.

Principle 1. Completion of a set of gateway courses for a program of study is a critical measure of success toward college completion.

Principle 2. The content in required gateway courses should align with a student's academic program of study — particularly in math.

Principle 3. Enrollment in a gateway college-level course should be the default placement for many more students.

Principle 4. Additional academic support should be integrated with gateway college-level course content — as a co-requisite, not a pre-requisite.

Principle 5. Students who are significantly underprepared for college-level academic work need accelerated routes into programs of study.

Principle 6. Multiple measures should be used to provide guidance in the placement of students in gateway courses and programs of study.

Principle 7. Students should enter a meta-major when they enroll in college and start a program of study in their first year, in order to maximize their prospects of earning a college degree.

Seven Core Principles

Principle 1. Completion of a set of gateway courses for a program of study is a critical measure of success toward college completion.

The goal of remedial education — helping students take and pass college-level math and English — is only the first step toward college success. The ultimate goal is for students to enter a program of study and complete a credential or degree of value. Remedial education as a stand-alone sequence does not generate momentum toward that ultimate goal. Institutions need to chart a trajectory for students that is focused on them completing gateway courses that lead into a program of study and ultimately to a credential.

Principle 2. The content of required gateway courses should align with a student's academic program of study — particularly in math.

Gateway courses provide a foundation for a program of study, and students should expect that the skills they develop in gateway courses are relevant to their chosen program. On many campuses, remedial education is constructed as single curricular pathways into gateway math or English courses. The curricular pathways often include content that is not essential for students to be successful in their chosen program of study. Consequently, many students are tripped up in their pursuit of a credential while studying content that they do not need. Institutions need to focus on getting students into the *right* math and the *right* English.

This issue is of particular concern in mathematics, which is generally considered the most significant barrier to college success for remedial education students. At many campuses, remedial math is geared toward student preparation for college algebra. However for many programs of study, college algebra should not be a required gateway course when a course in statistics or quantitative literacy would be more appropriate.

We also must remember that courses such as Anatomy and Physiology, Accounting 101, and Basic Drafting — not just college-level math and English — act as gateway courses for their respective programs. As a result, institutions should consider developing courses that teach remedial skills as a component of these courses. Resources should be devoted to mapping the content within programs of study to gateway courses and college-ready competencies so that students can build these skills within the context of their chosen field.

Principle 3. Enrollment in a gateway college-level course should be the default placement for many more students.

Recent research has concluded that there are many more students who could be successful in collegelevel gateway courses than are currently placed into them. When there is some question whether a student is prepared for college-level work, institutions typically "play it safe" by placing them into a remedial course. Unfortunately, this approach backfires when students who thought they were college ready become discouraged and ultimately never find their way back to the gateway course. Institutions should change the question they ask during the placement process from why should a student be placed in a gateway course to why shouldn't they? By changing our approach, institutions can shift from screening students *out* of gateway courses to making sure they are enrolled *in* the right courses that will facilitate their success. Institutions can then expand instructional support to students who are enrolled in gateway courses, which in turn can improve student success in gateway courses for all students — including those placed directly into the courses.

Principle 4. Additional academic support should be integrated with gateway college-level course content — as a co-requisite, not a prerequisite.

If we broaden the range of students who are placed into gateway courses to include a substantial percentage who are currently assessed below college ready, then we must ramp up efforts to provide needed academic support to students alongside those courses. In truth, given high attrition rates in many gateway courses, effective academic support could benefit many students who are placed directly into gateway courses as well. The delivery of remedial content as a single semester co-requisite alongside college-level content, a one-year course pathway, or embedded remediation can take many forms. In all cases, the remedial instruction must be aligned and coordinated with the college-level course. Research at some institutions that have adopted this approach has found students succeeding in gateway courses at almost three times the rate of those who began in traditional remediation sequences.¹²

Approaches that show great promise include:

Single Semester Co-Requisite. In this approach, students receive remedial instruction while enrolled in a traditional single-semester gateway course. Remedial support is delivered through an aligned, remedial course or through non-course based options such as required participation in self-paced instruction in a computer lab or mandatory tutoring. The simplest strategy is extending instructional time after class (45 minutes) or adding additional hours to courses (five hours a week instead of three). These strategies are producing results that are two and three times better than traditional remedial sequences.¹³

One-Year Course Pathway. Students with more significant remedial needs would benefit from more robust instruction and enhanced learning supports in the form of a one-year, two-semester course sequence in which students pass the gateway course in one year. Course pathways are not shorter versions of traditional remedial courses, rather they are enhanced college-level courses aligned to a program of study with remedial instruction delivered in a just-in-time manner over the course of a year. Students in year-long statistics and quantitative literacy math pathways have completed gateway courses at rates two and four times higher than students referred one or two levels below college level and who participate in traditional remedial education sequences.

Embedded or Parallel Remediation in Career Technical Programs. For students enrolled in a certificate or applied degree program, embedding or providing parallel remediation within the courses or technical program offerings ensures that students are able to immerse themselves in the program of study that propelled their enrollment in postsecondary education in the first place. What is most promising about this approach is that it has proven to work with students who have

more significant remedial education needs, including those who are eligible for adult basic education

instruction.14

Principle 5. Students who are significantly underprepared for college-level academic work need accelerated routes into programs of study.

There are few proven postsecondary success strategies for students whose academic skills are below 9th grade level.

Yet this population cannot simply be cast aside or left on the margins. Promising programmatic and delivery alternatives must be developed, tested, and implemented.

While there are no easy answers for serving this population well, the research is clear, maintaining long remedial sequences and denying access to postsecondary education for these students are not viable options. We need a national commitment from state and federal policymakers, postsecondary systems and institutions, as well as the philanthropic community to develop and implement accelerated options that minimize the time that students spend in stand-alone remediation and ensure that they have realistic academic and career pathways available to them.

Some promising strategies emerging from the field demonstrate that an accelerated, single semester model or embedded remediation in career programs can work for a significant percentage of these students. We encourage the pursuit of instructional models that focus on more contextualized learning; making remediation contemporaneous with placement in shorter, but economically valuable technical certificate or appropriate degree programs; ensuring non-academic as well as academic readiness; and accelerating student progress so that they can move quickly to credentials that matter.

We encourage continued innovation and rigorous evaluation of these strategies to identify those that show the most promise and provide more access to the full range of postsecondary credentials and programs for these students.

While evidence of effective routes to success for these students is elusive, we encourage all those invested in increased college completion rates from policymakers to practitioners to venture forward in pursuit of evidence-based innovations.

Principle 6. Multiple measures should be used to provide guidance in the placement of students in gateway courses and programs of study.

The time has come to move past the practice of using a single placement exam, taken at one point in time, to determine student placement. Multiple measures that assess academic skills, student academic goals, and non-cognitive factors such as student motivation, effort, and efficacy are steps in the right direction. Simply incorporating high school grade point average into placement decisions is an efficient way to assess student capacity to pursue college-level work.¹⁶

The placement process, no matter how well designed, has limited ability to correctly predict future success. It should not be used to screen so many students out of gateway courses, as currently is the case. Its best use is to determine the academic and non-academic support that would best equip students to succeed in gateway courses.

Colleges should provide students with assessment guides, practice tests, and required prep sessions before they take placement exams. Students should know the implications of the assessment process and its potential impact on the pursuit of a credential.

Assessment results can be a useful component of an improved career and college guidance system that helps a student choose an appropriate program. An assessment system that uses multiple measures can help communicate to students their areas of strength and weakness, which options provide the greatest opportunities for success, and the requirements they must meet to succeed in their program of choice.

In the end, the placement process — which functions now as a way to decide who is placed in and out of remedial coursework — needs to play a role in helping students make an informed choice of a program of study.

Principle 7. Students should enter a meta-major when they enroll in college and start a program of study in their first year in order to maximize their prospects of earning a college credential.

With evidence suggesting that prospects for earning a college credential increase significantly for students who enter a program of study in their first year, institutions should design remediation and academic pathways accordingly. Colleges should develop academic pathways and degree maps that make it easier for students to proceed to a credential. Upon enrollment, students should be required to choose a meta-major (such as social sciences and human services, STEM, health careers and life sciences, or arts, humanities, and design) that would start students along a pathway to a credential of their choosing. Once started on the pathway, students should ultimately enter a more specific program of study by the end of the first year. Remediation should be integrated into and aligned with students' academic pathway, enabling students to take only the remedial content they need to succeed in and quickly enter their chosen program.

The academic pathway, leading into a student's chosen program, would be a default pathway to a credential, providing clarity to the otherwise confusing and unstructured registration process. Students wishing to opt out of the courses offered would need to consult with academic advisors before doing so to ensure that students stay on track for on-time graduation.

Moving Forward with Urgency

With the adoption of these seven principles, we envision students walking onto postsecondary campuses to an experience where their way into an academic pathway and through a specific program of study is clear of hurdles created by inefficiencies of the existing system. On that first day of class, most students will walk into (or log on to) college-level courses that are integral to their academic pathway. If they have difficulty mastering the content, they will receive the academic and non-academic supports they need in a just-in-time manner. If they are not prepared to succeed academically in gateway courses, alternatives to a long multi-semester sequence of remedial courses will be delivered. Institutions will measure student outcomes and the results will drive continuous improvement to maximize student success. After one year, students will have completed at least three courses in a chosen program of study and will have a clear roadmap to a college credential. In the end, students' experiences will match the optimism they felt when they decided to take the next step in their education, their career, and their life.

States, systems of higher education, and colleges need to match the aspirations of these students with actions that dramatically improve rates of degree and credential completion. The seven core principles should lead to a more coherent, contextualized, and completion-focused approach for all students. It can be done.

Institutions should not delay in implementing new and innovative practices based on these principles. At the state level, higher education officials and policymakers can implement new system and state policies that promote and support continuous improvement, successful innovation, and a commitment to scale. Institutions should develop fundamentally new systems for moving students into and through academic programs that lead to a credential. In addition, institutions should encourage and support faculty who employ innovative instructional and pedagogical strategies that take advantage of new technologies and research-based instructional practices.

One final note: Postsecondary leaders must work closely with K–12, adult basic education, and other training systems to reduce the need for remediation before students enroll in their institutions. Postsecondary institutions should leverage the Common Core State Standards by working with K–12 schools to improve the skills of their students *before* they graduate from high school. Early assessment of students in high school, using existing placement exams and eventually the Common Core college and career readiness assessments, which lead to customized academic skill development during the senior year, should be a priority for states. Similar strategies should be employed in adult basic education and English as a second language programs.

This is no time for merely testing the waters or for treading water. We can do better and both research and practice point the way forward. The task that lies ahead is to put this knowledge together with an urgency to drive large-scale change — for the sake of millions of students and families who are counting on postsecondary education as the first step to a better future.

Endnotes

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Charles A. Dana Center

The Charles A. Dana Center is an organized research unit in the College of Natural Sciences at The University of Texas at Austin. The Dana Center collaborates with local and national entities to improve education systems so that they foster opportunity for all students, particularly in mathematics and science. We are dedicated to nurturing students' intellectual passions and ensuring that every student leaves school prepared for success in postsecondary education and the contemporary workplace—and for active participation in our modern democracy.



Complete College America

Established in 2009, Complete College America is a national nonprofit with a single mission: to work with states to significantly increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations.



Education Commission of the States

The Education Commission of the States (ECS) is an interstate compact created in 1965 to improve public education by facilitating the exchange of information, ideas and experiences among state policymakers and education leaders. As a nonprofit, nonpartisan organization involving key leaders from all levels of the education system, ECS creates unique opportunities to build partnerships, share information and promote the development of policy based on available research and strategies.



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