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# HOW TO FIX REMEDICATION AT SCALE

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# INTRODUCTION

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Pikes Peak Community College sits in the shadow of the Rocky Mountains. The almost 13,000 students who attend the two-year school, which is on the outskirts of Colorado Springs and down the road from the United States Air Force Academy, are mostly white and almost half receive Pell Grants.<sup>1</sup> Only about one-fifth of these students will graduate in three years.<sup>2</sup>

As at many community colleges, a sizable number of students arrive at Pikes Peak not ready for college-level work. In fact, in 2013, more than half of all students needed some type of remediation, mostly in math.<sup>3</sup> Getting placed into remediation made the already low odds of graduating from the school even more dismal. The three-year graduation rate for students in remediation was under nine percent.<sup>4</sup> A big reason for this poor success rate was that more than a third of students who placed into remedial courses were taking three or more terms to enroll in their first college-level English class. In math, it was even worse. Almost 60 percent of these students took at least three terms to enroll in the college-level math class.<sup>5</sup>

Unhappy with these outcomes, the Colorado Community College System in 2012 decided to redesign remediation. The redesign was extensive but one of its key features was the introduction of co-requisite remediation. Under this new model of remediation, which was popularized by Peter Adams at the Community College of Baltimore County and

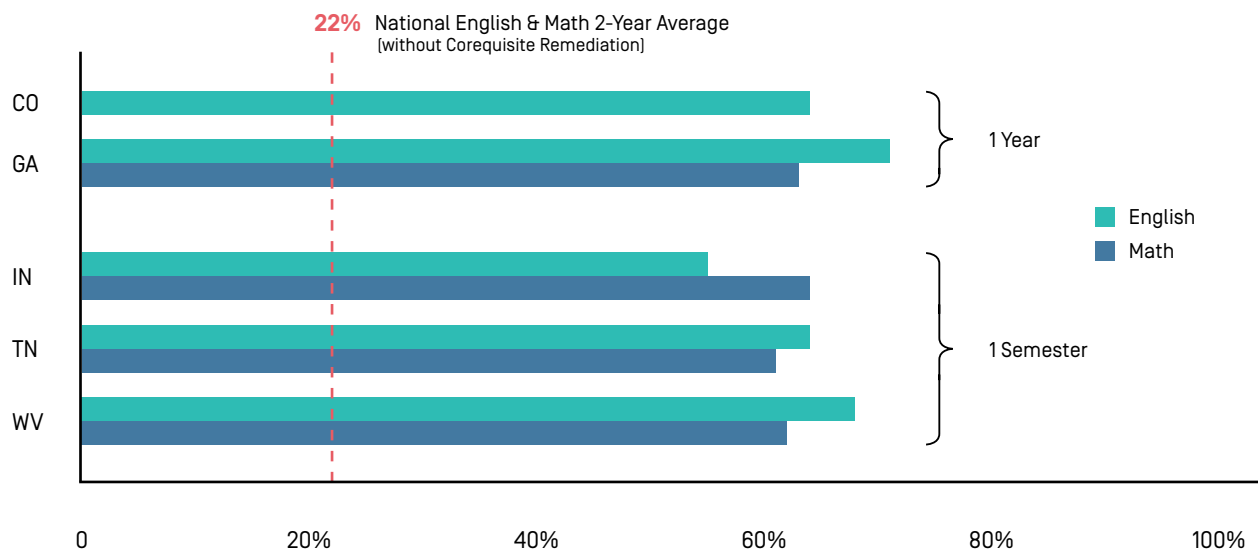
by faculty and staff at Austin Peay State University in Tennessee, students receive learning support at the same time as they take college-level courses. As a result, students who need extra help can get it while speeding up progression to their degree. Instead of being a *prerequisite* to taking college-level courses, the remedial support is now a *co-requisite*.

At Pikes Peak, the change made a big difference. After putting the new system into effect, 90 percent of students in English remediation enrolled in the college-level class in the same term that they received learning support.<sup>6</sup> In math, more than 60 percent of students enrolled in the college-level class either at the same time or one term after receiving learning support.<sup>7</sup> No one took more than three terms to enroll in the college-level course. Even with less time in remediation, students who place into remediation at Pikes Peak are passing the college-level courses at the same rate as other students. Before the reform, only 31 percent of students enrolled in remediation at community colleges in Colorado finished the college-level course in two years. Now, 64 percent complete it in one year.<sup>8</sup>

The problems that Pikes Peak and other community colleges in Colorado faced are not isolated to schools in the state. Nationwide, the majority of community college students are required to take at least one remedial course, but less than one quarter of those same students will actually graduate with a credential of any kind within eight years.<sup>9</sup> These



**Figure 1 | Remedial Students Who Complete the Gateway Course** [with Corequisite Remediation]



long odds are increasingly unacceptable to states and colleges, which are looking for alternative approaches.

The results in Colorado, and in four other states that have implemented co-requisite remediation at scale, suggest that this model may be the solution they are looking for. Through interviews with leaders at the Colorado Community College System, the Georgia Board of Regents, Indiana's Ivy Tech Community College, the Tennessee Board of Regents, and the Community and Technical College System of West Virginia, this paper explores how states and systems used a variety of tools to scale and sustain this new model across colleges.<sup>10</sup>

In these interviews, policymakers in these states said they used the following tools to scale this reform:

- **Data analysis.** States used their data capacity to identify and communicate the problems they have been experiencing with remediation and to test interventions including co-requisite reform. And many states are now analyzing data to see how different models of learning support are working.

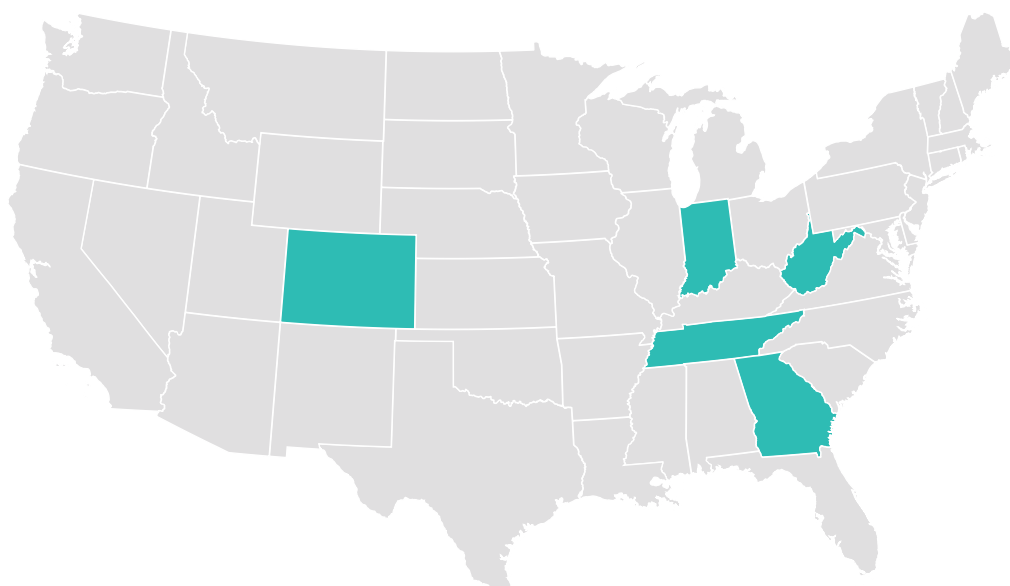
- **Coordination across the system.** The states created task forces to lead both the design and implementation work and created outreach plans to present the reform and get input from key constituency groups.

- **Setting realistic expectations for implementation.** Reforming remediation is hard work. It takes a lot of coordination, attention to detail, and changes in college systems and cultures. States found it was important to have different tracks for math and English remediation, and to give schools enough time to deal with the common challenges that arise.

- **State policy leadership.** Putting this new form of remediation into effect would not have happened at scale if the states had not provided leadership, policy, and funding to support it.

At scale, co-requisite remediation has the power to improve students', especially underrepresented students', persistence and completion of college degrees. And only states and systems have the tools at their disposal to support that scale.

**Table 1 | State Placement and Standalone Remediation Policies**



State	Placement into Learning Support	Standalone Remediation
Colorado	Multiple measures. Combination of high school GPA and prior successfully completed coursework; ACT; SAT; ACCUPLACER; COMPASS; and Community College placement exam scores.	Yes, no more than one semester and more in math than in English.
Georgia	A Mathematics Placement Index and an English Placement Index are calculated based on High School Grade Point Average SAT or ACT and, when indicated, COMPASS or ACCUPLACER. COMPASS will be discontinued on November 30, 2016; The state will be transitioning to ACCUPLACER before that date.	Yes but at least 50% must be in co-requisite model.
Indiana	ACT, SAT, PSAT, High School GPA used for college level placement. Custom ACCUPLACER placement/diagnostic used for reading and math. WritePlacer used for English placement. Scores valid for 4 years.	No for most, yes for the college algebra track.
Tennessee	Cut off score of the ACT. COMPASS for students who have been out of high school for at least 3 years.	No
West Virginia	Cut off score of the ACT, SAT, COMPASS, ACCUPLACER, or the West Virginia General Summative Assessment.	No for most.

# DATA, DATA, DATA

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Each state used its systemwide student data to show how the current remediation system had failed and demonstrate that the co-requisite model worked best to improve remedial outcomes. The states also allowed colleges to put the model into effect in different ways and evaluated those approaches to see what worked best.

## **Illustrating the Failures of the Current System**

Many of the states started looking at their student success data for the first time as part of their work with Achieving the Dream, a national reform network focused on improving student outcomes at community colleges, and with Complete College America, a national nonprofit that works with states to improve college graduation. These initiatives helped state policymakers ask questions about student success and push their community college systems to examine the data on where students were falling out. All five states found that most students placed into remediation at their community colleges not only failed to finish a degree, but never took the required college-level class for which they had sought remediation. For example, only 14 percent of community college students in West Virginia who were placed into remedial math took the college-level course within two years of taking the remedial

class.<sup>11</sup> In Georgia, only 21 percent of students entering remediation completed the college-level course in two years.<sup>12</sup> Unhappy with these results, policymakers in these states decided to experiment with new models.

The developmental education faculty were largely unaware of the students' low enrollment and success rates in the college-level classes. These instructors had seen students passing the remedial classes and did not realize that they were never progressing to the college level. Only an analysis of the data illuminated the broken system. Telling lecturers that classes they had been teaching for years weren't actually working triggered defensiveness. The states dealt with this by emphasizing that it is the structure of remediation that is broken and not the teaching. The Tennessee Board of Regents, for instance, found that the students who scored below the ACT score cutoff for placement into remediation and received supplemental instruction performed better in the college-level class than students just above the cutoff. Remedial instruction improved student performance but having students spend multiple semesters in remediation did not. The problem was the structure of delivering remediation, not the remediation itself.

## Piloting Reforms

After examining the data, some of the states, like Colorado and Tennessee, decided to pilot the co-requisite model, while others decided to try out several different approaches concurrently. The state systems tracked the data from the pilots to see whether the new models improved student outcomes. After finding that the co-requisite model improved student success in college-level courses, supporters of this approach used the data to convince skeptics that it worked.

In Indiana, Ivy Tech allowed campuses to test several different approaches for a semester to find out which one was the most promising. Community college officials decided to try out the following approaches:

- The co-requisite model.
- The emporium model, which allows students in remedial classes to move at their own pace in a computer lab with the instructor available to help when they get stuck.
- The Assessment and Learning in Knowledge Spaces, a McGraw-Hill online tutoring and assessment program that students take as a supplement to traditional remedial courses.
- A modular approach, which allows schools to more precisely target a student's deficits with remedial instruction by breaking it up into small pieces.

The schools found that the co-requisite model had a significant impact on student remedial success. At the co-requisite model pilot sites, three-quarters of the students placed into remediation passed the college-level class. In comparison, only 37 percent of remedial students under the traditional model had passed the college-level English course in three years. Based on these results, the community colleges continued to test the co-requisite approach for another semester, along with the emporium model. Although the emporium model hadn't

improved student success rates, the campuses wanted to continue experimenting with it to see if it would work better if they improved implementation. It didn't. The co-requisite model, on the other hand, continued to show impressive results.

A similar story played out in West Virginia, where colleges were allowed to choose from the following options:

- The co-requisite model.
- The modular approach.
- Boot camps: free, noncredit courses meant to help students pass the placement test that the schools use to determine whether students require remediation.
- Stretch courses: remedial courses that would take two semesters to complete, giving students longer to master the concepts.
- Fast-track courses that offered remediation for eight weeks and the college-level course for eight weeks.

But once again the co-requisite model was the only one that seemed to significantly improve student outcomes.

The Board of Regents in Tennessee, however, had already scaled the emporium model across the system. And while they did see progress, it was modest compared the results from co-requisite redesign. So instead of piloting many interventions, the Board went directly to a large-scale pilot of the co-requisite model.<sup>13</sup> For two semesters, nine campuses across the state randomly placed 1,019 students who had been identified as needing remediation in math into the college-level class and provided supplementary instruction. At the same time, seven other colleges placed 957 students identified as needing remediation in writing into the college-level writing class while giving them extra learning support. The results were remarkable. Sixty-three percent of the remedial students passed



the college-level math class, more than four times as many as had done so the previous year. In writing, 67 percent of students passed the college-level class, more than double the share that had previously done so. This pattern held true for low-income students. And the results were particularly impressive for adult and minority students. Adult and minority students experienced a fivefold increase in their math success rates. While adults saw their success in writing double and minorities saw their writing success increase from 19 percent to 53 percent.

The pilot put to rest one of the main concerns that many faculty members express about the co-requisite model: that students below a certain level cannot handle college-level work with or without support. Tennessee Board of Regents officials found that students who had ACT scores well below the cutoff that placed students into remediation passed the course at much higher rates than their predecessors. The pilot's success convinced many skeptics that the co-requisite model would improve the performance of students in remediation and paved the way for full implementation. Full implementation of the co-requisite model began in the fall of 2015 and has shown similar success to the pilot across the state.

## Continuous Improvement

The states that have adopted the co-requisite model have implemented it in different ways. For example, in Colorado and Georgia, there is still stand-alone remediation for students who perform particularly poorly on placement tests in either English or math. Tennessee and Indiana meanwhile, plan to completely phase out all stand-alone remedial classes.

In Colorado, students that perform on the high or medium end of the placement assessment in English but still don't demonstrate college readiness

receive co-requisite support, while those who have lower scores are still required to take no more than one semester of stand-alone remediation. In math, only students who score just below the cutoff for remediation receive co-requisite support, while students in the medium and low bands still have to take the one semester of stand-alone remediation. Meanwhile, Georgia requires that at least half of the students who place into remediation are allowed to take the co-requisite model. The rest will take a year-long sequence that begins with a one-semester, stand-alone remedial course, then progresses to a collegiate course with co-requisite support in the second semester. These states plan to continue to look at the outcomes data for students and tweak these policies as warranted.

There are many different ways to structure the co-requisite classes and very little data on what works best. Community college officials still need to answer the following questions:

- Should the same instructor teach the college-level class and the support class? Are there complications when different people teach these classes?
- Should the learning-support part of the co-requisite model be pass/fail or graded?
- What mix of remedial and non-remedial students should be in each college-level class? Should it be 50/50, or should all the students in those classes be in need of learning support?
- Should learning-support students move as a cohort or be scattered across college-level classes?

Institutions will need to continue experimenting to see what works best. Eventually, they'll have enough data to make the co-requisite model even more effective.

# COORDINATE AND ENGAGE

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To do this work well, states must convene task forces to look for ways to improve remedial success and develop strategies for scaling successful models. States also need to engage key audiences to ensure that the reform is implemented successfully on campuses.

## Task Forces

All five states created task forces. Some used them to come up with possible solutions for the lack of student success in remediation, while others used them to help implement the co-requisite model. A few used them for both purposes. The states also brought in national experts such as Peter Adams from the Community College of Baltimore County and staff from the Charles A. Dana Center at The University of Texas at Austin to inform these task forces.

In West Virginia, system officials created a statewide Developmental Education Task Force made up of faculty members. The task force researched how community colleges across the country were addressing remediation and decided which interventions to pilot. In Indiana, Ivy Tech Community College created steering teams for math and reading with the smaller campuses in the leadership positions to ensure their buy-in. Under these steering teams were multidisciplinary groups that focused on each redesign: one in reading, one

in writing, and three to redesign the three math pathways aligned to majors. The steering teams and the multidisciplinary groups included faculty from every campus and it was their job to keep their campus apprised of how the redesign was progressing. Many of the other states used similar models to design and implement reforms. These structures helped ensure that faculty helped inform and drive the overhaul.

## Engagement

Task forces must be made up of the right mix of faculty members from across the system, but other types of people such as presidents, registrars, and advisers also need to be engaged. In most states, the task forces consisted of faculty focused on the disciplines of math and English and remedial instructors. But even if faculty on the task forces are asked to keep colleagues up to date, states should have a more proactive plan to talk with instructors, professors, and administrators on every campus. There are two main reasons to do this: These conversations can help states address technical problems that could derail the reform; and they can be used to explain the reform and present the data to those who will have to implement the change.

Many of the system staff who were in charge of implementation held events at every campus in

their community college systems to share the data, explain the reform, and take questions. At a forum in Tennessee, for example, Board of Regents officials discovered that some of the certificate programs in the system did not require a college-level math course. That knowledge led the Tennessee Board of Regents to give remedial students in those programs a special exception, allowing them to take only the learning-support piece of the course.

States also need to target outreach to the following groups of college administrators:

- **Presidents.** In Colorado, the system provost created a professional development track for institutional presidents that focused on strategies for change management and implementing reforms. Presidents also need to be aware of the budget implications this reform. It requires hiring more faculty and enrolling fewer students paying full tuition for remedial classes. Schools, long term, can benefit financially from retention gains but there can be a cash squeeze on the front end.
- **Registrars.** Registrars have a lot of power over the structure of classes. And they often worry that moving to co-requisite remediation could

be hard to include in student information systems and might mess up the room schedule. Successful efforts like those in Indiana and Georgia included registrars in the design process from the beginning.

- **Advisers.** Advisers may object to placing students into the redesigned classes because they worry that college-level classes will be too challenging and the math load too heavy. System staff can address this by sharing improved student success data with advisers.
- **Student financial aid administrators.** Aid administrators need to know how to charge tuition and award credit for the learning-support part of the co-requisite model.

Sometimes these types of administrators meet across the state regularly. For instance in Tennessee, the Board of Regents representatives working on implementation did presentations at the President's Council, the regular academic and student affairs meetings, and the developmental education committee meetings. If these college administrators do not meet regularly on their own, the state should convene them.

# SUPPORT REALISTIC IMPLEMENTATION

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Implementing co-requisite remedial reform is complicated and takes time to do well. States should separate the redesign of math and English and provide reasonable timelines for campuses to fully implement the change.

## Separating Math and English

Math and English remedial redesign should be carried out separately because they require different considerations. Many of the states changed the structure of remedial classes in the different disciplines. For example, Colorado combined writing and reading into a single set of remedial and co-requisite classes. Indiana had two separate implementation teams working on math and English to address the different needs of each. Separating the disciplines allows faculty to get into the necessary details of reform implementation. Indiana introduced three remedial tracks for math depending on the students' desired major. The main track, Quantitative Reasoning for non-STEM majors, was created as a brand-new co-requisite class. The other two were College Algebra, the traditional math pathway, and Applied Technical Math, in which the remedial support is provided during a technical skills class in the first semester and students must take the stand-alone math class

in the second semester. College Algebra does not have a co-requisite model, but few students are now taking this sequence. Similarly, the Tennessee Board of Regents also redesigned their math pathways to ensure students are required to take a more appropriate math classes for their majors.

## Reasonable Timeline

Most of the states gave their campuses about a year to implement the co-requisite remedial reforms, with a hard deadline for full implementation. They did this for several reasons.

First, a reasonable timeline allows colleges to adjust to unexpected barriers involving space, tuition, and a new curriculum. It also allows time to answer faculty questions. When the developmental sequence has been redesigned, faculty have to change how they teach and that can cause anxiety. For instance, when Colorado combined writing and reading, some faculty members were concerned that they did not know how to teach both disciplines. There are also questions about how a high-quality learning-support class should be designed and taught. Both of these concerns can be addressed through effective faculty professional development. In Indiana, Ivy Tech started out by bringing in

experts from outside the state to answer faculty questions and provide training. But, as the redesign progressed, faculty from Indiana took over the workshops and now provide all of the training and technical assistance. Of course, doing this well took time.

**Providing a reasonable amount of time for colleges to carry out the reforms is crucial, but it does not mean letting implementation go on forever.**

Giving colleges' time to implement also allows them to shift their workforce to support the change. The shift from stand-alone remedial classes to providing learning support to students in college-level courses may mean that colleges do not need as many remedial instructors and instead need more faculty to teach the gateway courses. But many of the schools were employing remedial education instructors who did not have the credentials, as

dictated by accreditation standards, to teach a college-level course. The result was a shortage of faculty qualified to teach college-level courses and too many lecturers. In Indiana and West Virginia, some adjunct lecturers' contracts were not renewed. The transition was difficult in every other state except Colorado, which already required the same credentials for remedial and college-level faculty. Indiana created a partnership between the community colleges and Ball State University to get the lecturers the correct credentials to teach college-level classes.

Providing a reasonable amount of time for colleges to carry out the reforms is crucial, but it does not mean letting implementation go on forever. Each of the states set deadlines for the schools to make significant progress toward full implementation. In Indiana, Ivy Tech actually dictated how many students should be enrolled in co-requisite courses by a certain point in the implementation process. Colorado had its campuses create implementation plans.

# STATE POLICY LEADERSHIP

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State and system policy leadership is vital to both scaling and sustaining co-requisite reform. States need to provide a leader to drive the process of implementation across their higher education system, define the standards for what co-requisite remediation means in the state, codify the changes in official policy, and allocate strategic resources to the work.

## Official Recognition of the Policy

Most of the states officially codified the co-requisite model as the preferred way of offering remedial education. Official recognition was important in driving and sustaining the change on campuses. In Indiana, the Board of Regents [recognized](#) the co-requisite model as a best practice.<sup>14</sup> Both [West Virginia](#) and [Georgia](#) changed their systemwide placement policies to require the co-requisite model.<sup>15</sup> In Colorado, the State Board for Community Colleges and Occupational Education [adopted](#) the Developmental Education Task Force's recommendations as a whole.<sup>16</sup> Similarly in Georgia, the Policy and Procedures Committee translated its Ad Hoc Committee recommendations into policy that it spelled out in the academic handbook. The Tennessee Board of Regents plans to update its policies and guidelines in the spring of 2016.

## Create a Set of Principles for Implementation

Implementing co-requisite remediation is complex and can be done in a variety of ways. As a result, it can be helpful to have a statewide document that lays out a set of criteria defining what the system means by co-requisite remediation and providing guidance on how it should be implemented on campuses. Both the Tennessee Board of Regents and Indiana's Ivy Tech created these guides for implementation. In Tennessee, the [Fundamental Features of Co-requisite Remediation](#) identifies the ACT scores below which students will be enrolled in the college-level course with learning support. It also makes clear that the college-level course remedial students enroll in will be the same one offered to all students who haven't placed into remediation and that it will be a semester long. Indiana's Guiding Principles document provides helpful tips on everything from how to set up linked remedial and gateway courses in the student information system Banner, to how many students should be enrolled in the remedial section, to implementation targets for campuses. These documents serve as a convenient reference on the shared understanding of what implementation should look like across the system. Indiana's Guiding Principles document also provides answers to some of the most pressing implementation questions.



## Money

In almost every case, grants from Complete College America, funded by the Gates Foundation, spurred work on redesigning remediation at the school and system level. West Virginia and Colorado also received federal grants to support the work. Having flexible funds to buy faculty time for planning and implementation, support travel and meetings, and provide stipends and professional development is critical to creating a successful scaled redesign effort.

It is also important to have enough staff at the system level to enable this work to be someone's sole job. Recognizing and rewarding the champions who go above and beyond to support the effort is also vital. In Indiana, Ivy Tech used its grant money to buy all of the time of two faculty members who ran the efforts in English and math and to reward these champions with trips to conferences and statewide recognition. While having flexible resources to support this effort is key to success, it does not have to be a lot of money: A few thousand dollars can secure the time of teams of faculty, employed elsewhere in the system, to redesign remediation and a few thousand more can support necessary convenings and professional development.

## Redesign Must Be Someone's Job

At the system level, implementing this reform needs to be someone's full-time job. If this is a side project on an already full plate, the effort might very well fail. States must hire enough people at the central office to support the effort. Leaders need to be well versed not only in remedial reform but also in managing change. While these individuals must be able to lay out clear expectations for what needs to be done and by when, they also have to get buy-in from across the system and provide the time and resources for key faculty to work on the reform. This can be a difficult balance to strike. The leader also needs to have the standing to get the attention of his or her superiors, find a budget for the work, and have the relationships needed to deal with implementation challenges at campuses. In both Colorado and Tennessee, the systems' Chief Academic Officer led the effort. At Ivy Tech, the Provost took the lead. These are the high level administrators with the power to get the reform implemented.

# CONCLUSION

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Pikes Peak Community College and other colleges across these five states are undergoing a profound change in the way they offer remedial education. That change is in turn transforming how students progress towards a degree. States and systems can play a role in scaling that success by providing data, engaging campuses, being realistic about implementation, and providing strong policy leadership. In fact, co-requisite reform has gathered endorsements from across the state and policy community. In November 2015, the American Association of Community Colleges, Education Commission of the States, Complete College

America, the Dana Center at the University of Texas at Austin, and Jobs for the Future produced a set of core principles for transforming remediation.<sup>17</sup> Principle three endorsed the co-requisite model. Now, Complete College America's [Scaling Co-requisite Initiative](#) has secured the commitment of 13 more states to scale the model. The current remedial system is broken and it is time for states to take charge of fixing it. More and more states are realizing that one promising way to improve the system is by implementing co-requisite remediation at scale.

## Notes

<sup>1</sup> See US Department of Education College Scorecard. Pikes Peak Community College Profile. <https://collegescorecard.ed.gov/school/?127820-Pikes-Peak-Community-College>

<sup>2</sup> Ibid

<sup>3</sup> See Colorado Department of Higher Education. 2014 Legislative Report on Remedial Education Pg. 8. [https://higherred.colorado.gov/Publications/Reports/Remedial/FY2014/2014\\_Remedial\\_relJune03.pdf](https://higherred.colorado.gov/Publications/Reports/Remedial/FY2014/2014_Remedial_relJune03.pdf)

<sup>4</sup> See Success of Remedial Math Students in the Colorado Community College System: A Longitudinal Study. Colorado Community College System. <https://www.cccs.edu/wp-content/uploads/2013/09/Success-of-Remedial-Math-Students.pdf>

<sup>5</sup> See Khudodod Khudododv, Heather McKay, Suzanne Michael. *The Transformation of Colorado's Developmental Education Reform: Student Outcomes*. Rutgers Education and Employment Research Center. January 2016. <https://www.cccs.edu/wp-content/uploads/2013/10/Dev-Ed-Quantitative-Report-TAACCT-Rd-11.pdf>

<sup>6</sup> Ibid

<sup>7</sup> Ibid

<sup>8</sup> See *Corequisite Remediation: Spanning the Completion Divide*. Complete College America. <http://completecollege.org/spanningthedivide/#the-bridge-builders>

<sup>9</sup> See *Issue Brief: Developmental Education in Community Colleges*. Thomas Bailey and Sung-Woo Cho, Community College Research Center at <http://ccrc.tc.columbia.edu/media/k2/attachments/developmental-education-community-colleges.pdf> and *Do High-Stakes Placement Exams Predict College Success?* Judith Scott-Clayton at <http://ccrc.tc.columbia.edu/media/k2/attachments/high-stakes-predict-success.pdf>

<sup>10</sup> Interviews by the author: Sarah Tucker, Chancellor of the West Virginia Community and Technical College System December 15, 2015; Geri Anderson, Special Assistant to the President, External Affairs, Aims Community College and Casey Sacks, Project Manager, Colorado Community College System, December 18, 2015; Barbara Brown, Assistant Vice Chancellor for Transitional

and General Education at the University System of Georgia and Rob Anderson, Vice Chancellor for Academic Affairs & Policy at the University System of Georgia, December 18, 2015; Tristan Denley, Vice Chancellor for Academic Affairs, Tennessee Board of Regents, January 7, 2016; Mary Ostrye, Provost and Chief Academic Officer, Zenith Education Group, January 8, 2016. Sandra Kay King, Assistant Vice President of Remediation and Innovation, Ivy Tech Community College, January 13, 2016.

<sup>11</sup> See Agenda, August 20, 2015, West Virginia Council for Community and Technical College Education. *Revisions to Series 21, Freshman Assessment and Placement Standards*. Pg. 24. [http://wvctcs.org/images/Council\\_Agenda\\_8.20.15.pdf](http://wvctcs.org/images/Council_Agenda_8.20.15.pdf)

<sup>12</sup> See University System of Georgia Transforming Remediation Scaling Corequisite Remediation. [http://www.sheeo.org/sites/default/files/Rob%20Anderson\\_Remedial%20Reform\\_SHEEO%20Policy%20Conf\\_Aug%204%202015\\_Newport%20Beach%20CA\\_PDF.pdf](http://www.sheeo.org/sites/default/files/Rob%20Anderson_Remedial%20Reform_SHEEO%20Policy%20Conf_Aug%204%202015_Newport%20Beach%20CA_PDF.pdf)

<sup>13</sup> See *Co-requisite Remediation Pilot Study—Fall 2014 and Spring 2015*. Tennessee Board of Regents. [http://www.ticua.org/meetings\\_resources/sm\\_files/TBR%20CoRequisite%20Remediation.pdf](http://www.ticua.org/meetings_resources/sm_files/TBR%20CoRequisite%20Remediation.pdf)

<sup>14</sup> See Working Session Agenda, June 13, 2013. Indiana Commission for Higher Education. *Resolution to Redesign Remediation in Indiana*. Pg. 8.

<sup>15</sup> See Agenda, August 20, 2015, West Virginia Council for Community and Technical College Education. *Revisions to Series 21, Freshman Assessment and Placement Standards*. Pg. 20. [http://wvctcs.org/images/Council\\_Agenda\\_8.20.15.pdf](http://wvctcs.org/images/Council_Agenda_8.20.15.pdf) and Remediation Procedural Revision – Academic and Student Affairs Handbook. *Rules regarding Learning Support Program Operation*. Pg. 17. [http://www.usg.edu/educational\\_access/documents/transforming\\_remediation/ASAHRevisions072514.pdf](http://www.usg.edu/educational_access/documents/transforming_remediation/ASAHRevisions072514.pdf)

<sup>16</sup> See Colorado Part E Statewide Remedial Education Policy, Pg. 6. <http://higherred.colorado.gov/Publications/Policies/Current/i-parte.pdf>

<sup>17</sup> See Core Principles for Transforming Remediation within a Comprehensive Student Success Strategy: A Joint Statement [http://www.core-principles.org/uploads/2/6/4/5/26458024/core\\_principles\\_nov4.pdf](http://www.core-principles.org/uploads/2/6/4/5/26458024/core_principles_nov4.pdf)



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