Effective Student Assessment and Placement: Challenges and Recommendations

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Whether or not these instruments predict how students will perform once they enter their prescribed courses is a moot point.

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Edward A. Morante, Emeritus Faculty College of the Desert 43-500 Monterey Avenue Palm Desert, CA 92260 ABSTRACT: Recent research on entering college student assessment instruments and placement practices has been critical. Critics suggest that commonly used assessment instruments are inaccurate, misused, and lack predictive validity. This article describes valid criticisms and appropriate uses of assessment instruments. It also lists challenges and provides recommendations to improve several common inadequacies in college assessment and placement processes. Finally, we discuss the role of assessment and placement as it is impacted by efforts to eliminate or redesign developmental education.

National Center for Education Statistics researchers reported that about 42% of all entering community college students are underprepared for college academic work (Parsad, Lewis, & Greene, 2003). Individual colleges report much higher numbers. For example one study reported 80% participation in developmental education (Smith Jaggars & Hodara, 2013). And certain student groups are overrepresented in developmental education. Complete College America (CCA; 2013) reported that in Texas 72% of African-American and 57% of Hispanic students at two-year colleges need developmental courses. Placement of these students directly into college-level courses, knowing that they lack the academic skills to succeed in them is controversial at best. Morante (1989) argued that allowing students such placement or the "right to fail" is likely destructive to their potential to succeed given the multitude of variables (academic, affective, personal, and institutional) that must favorably align in support of that success. A quality and mandatory student assessment, placement, and advising system that effectively places students into appropriate levels of developmental courses and/or academic and personal support services as needed at the beginning of their college careers is important to student success. This system, when structured and aligned properly with courses and services, will ensure appropriate placement and tailored academic and affective support commensurate with student skills and abilities.

Recently, there has been increased criticism of assessment and placement practices that commonly take place in community colleges. Critics contend that common assessment tests are inaccurate,

misused, and lack sufficient predictive validity to project how students will perform in the courses into which they are placed (Scott-Clayton, 2012). Test makers and scholars agree that there are commonly identified and reported limitations of skills assessment tests. Critics also point to many inadequacies in the placement process. Additionally, there is general consensus that the results from a single skills assessment test should not be the sole measure used to determine placement (Scott-Clayton, 2012). As will be discussed, whether or not these instruments predict how students will perform once they enter their prescribed courses is a moot point. This report will (a) address the common challenges and criticisms of the assessment and placement process, (b) describe why these tests are not (and should not) be predictors of student success, and (c) offer recommendations for more effective assessment and placement practice.

Support for Mandatory Assessment and Placement

Assessment testing of entering college students and mandatory student placement into appropriate beginning courses has been widely supported in the research literature over the past few decades. Morante (1989) noted the need for such a process from the perspective of both assisting in student success as well as upholding the academic standards of the institution. Open enrollment into collegelevel courses is likely to lead to lower standards as teachers are forced to alter their instructional methods and course content in order to deal with a wide range of student skills. This may mean having to teach content below the level of the course, eliminating content especially near the end of the course, and reducing the rigor of performance standards. Over time these processes tend to lead to grade norming, or evaluation based on relative student performance rather than grading based on college and instructor-set standards.

Boylan (2002) stresses the importance of establishing evidence of quality developmental courses and instruction as a rule (and describes how to do that) prior to utilizing the assessment and placement process to potentially enroll students in what may otherwise be low quality developmental programs. However, given that quality courses and

instruction are in place, Boylan (2002) advocates strongly for mandatory placement. Allowing students a choice about placement or letting them slip through the cracks of a mandatory placement system undermines its integrity and purpose and is a disservice to students who need assistance and support. The results from a study conducted in a state that had no such policy actually supports mandatory placement.

In a study of public college students who were marginal in their assessed need for developmental education, Bettinger and Long (2005) found that those completing developmental mathematics and developmental writing were significantly more likely to persist in college than those who opted out. Boylan, Bliss, and Bonham (1997) identified mandatory assessment and placement as key components in the most effective developmental programs. In a national study, they found that mandatory placement contributed to student success in developmental math and English courses. Boylan and Saxon (2006) found strong components of assessment and placement in high performing developmental programs in community colleges in Texas. Although assessment testing was mandated by the state, it was found that these higher performing institutions typically used several assessment measures (cognitive and affective) to supplement and validate placement decisions. They also had methods to ensure that mandatory placement policies were enforced systematically and tied to the college's prerequisite system.

Other well-known scholars have also written about the need for mandatory assessment and placement (Casazza & Silverman, 1996; Maxwell, 1997; McCabe, 2000; Neuburger, 1999; Roueche & Roueche, 1999). Their research has either suggested or shown that it contributes to helping more students to succeed by placing them into the most appropriate beginning courses and supporting college academic standards. A number of states and college systems seem to be in agreement with these scholars as well. Fulton (2012) reported that 13 states and 17 college systems had some form of mandate requiring assessment and placement practice. Many other colleges across the country, without a mandate from their state, also have policies requiring mandatory assessment and placement (Gerlaugh, Thompson, Boylan, & Davis, 2007).

Challenges and Criticisms of Assessment and Placement

Several challenges and shortcomings exist within institutional assessment and placement systems. These can be attributed to a lack of student support mechanisms, lack of understanding of assessment instruments and their appropriate use, and failure to enforce policies and adhere to systematic procedures.

Lack of Prior Information and Preparation for Assessment

It seems that common oversights in the assessment and placement process include informing students about the assessment test and preparing them to take it. Venezia, Bracco, and Nodine (2010) conducted focus groups with California community college students and described these issues as they may be associated with lower performance on entering assessment exams. Specifically, students did not understand the importance of preparing for skills assessment tests and, in some cases, were not made aware of assessment testing until after their admission to college. Furthermore, few colleges provided practice exams for students, and those that did lacked adequate promotion of practice exam availability. With regard to the test instruments, students reported that the content therein lacked connection with content they learned in high school. Students also acknowledged that the skills needed to excel on the assessment exam had

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likely atrophied since high school. Ultimately, most students were unaware of the primary purpose of the test: to assist in determining their entering placement into appropriate courses (Venezia, Bracco, & Nodine, 2010).

Inappropriate Uses of Test Scores

Gerlaugh, Thompson, Boylan, and Davis (2007) reported that 97% of two-year colleges used either the COMPASS™ or ACCUPLACER® for assessment. These instruments offer simple numeric scores for each skill area assessed to be interpreted by counselors, advisors, faculty, or administrators. Belfield and Crosta (2012) have reported these placement test scores are commonly used in a binary capacity; that is, as a student achieves a particular cut score, they are deemed ready for college courses. This practice is problematic and unjustifiable in that it fails to take into account certain variances that exist. An important variance is caused by statistical error that regularly exists in all testing. In other words, no test gives an absolutely exact measure of skills or any other variable. One measure of the amount of error in a test is called the standard error of measurement (SEM; typically reported by the test producer). For example, if the test has an SEM of + or - 5 points, then essentially the "true" test score will fall within a range of 10 points around any given score 66% of the time. Within this range, scores may technically be considered

equal. It is for this reason that Morante (1989), Scott-Clayton (2012), and others have strongly advised that practitioners use multiple variables in addition to test scores and not use binary-style cut scores for making placement decisions.

Failure to Include Other Measures in Student Assessment

There is also variance involved in testing and aligning tests to curricula. Test scores are but one "snapshot" of student skills at a single point in time. Measures including prior academic performance and noncognitive factors impact student performance and are needed to assist with and validate placement decisions. College officials and advisors making placement decisions on the basis of a single assessment test cut score are failing to take these normal and expected variances into account. Too often, college personnel fail to utilize other information, including past academic performance data (e.g., high school rank or GPA) and other noncognitive background information to create a comprehensive portrayal of student ability. Research has shown (Gerlaugh, Thompson, Boylan, & Davis, 2007) that only about 7% of two-year colleges nationally conduct any form of noncognitive student assessment.

It is well known that lifestyle, demographic, and affective variables impact college student success. Failure to consider student information such as the number of years since their high school attendance, the jobs they hold or have held, their financial situation, their potential for campus engagement, and their other performance and personal attributes neglects the opportunity to understand how their life and college may intersect. Zientek, Ozel, Fong, and Griffin (2013) have examined several of these types of variables and their relationship to student success in developmental mathematics. They have found that about 41% of grade variance is predicted by affective variables such as student motivation, self-regulation, and assertiveness. The researchers have concluded that there is a necessity to address affective variables in assessment and teaching.

Sedlacek (2004) studied the impact of affective variables on nontraditional students and advised of the great impact they have on student academic success. He demonstrated how the variables contribute to or detract from student institutional acclimation and students' ability to deal with college systems and the challenges posed therein. Sedlacek labeled these variables as student self-concept, self-appraisal, goal setting, community involvement, leadership experience, mentor presence, and the ability to deal with systemic bureaucracy and racism. His work also provided practitioners with an inexpensive instrument that provides a relatively quick means for assessing affective variables. Van Horne (2009) conducted qualitative research on a sample of nontraditional

developmental students which described the challenges involved in their transition to college. The research found cultural differences and perceptions that adversely affected student willingness to ask for and find needed academic and personal support were among the most problematic.

Inadequate and Low Performing Advising Systems

Boylan (2009) describes a proposed comprehensive model of student assessment and placement. The process utilizes assessment testing of academic skills, along with an evaluation of student cognitive, affective, and personal characteristics. The goal is to develop a refined and more accurate placement system that incorporates systematic review and improvement. A careful look at the model reveals its heavy reliance on quality advising. Prior to formal assessment the institution needs to provide information to students about its placement testing, what it means to the student, and available opportunities for practice and relearning. Advisors must analyze and interpret the results of assessment measures, discuss them with students, and give students information on options including courses, programs, and support services that are offered. To perform at an appropriate level, advisors need knowledge not only of programs, courses, and services available at the college but also of test scores and their variances, analyzing and interpreting assessment results, application of results to placement schema, and appropriate and effective communication with students.

Unfortunately, advising resources are often limited and challenged (Jenkins, 2006). Joseph and Carty's (2003) research shows that only 47% of advisors indicate they receive adequate training and only 37% feel they have adequate training to serve special populations. It is also likely that many colleges lack adequate staffing levels; the situation is exacerbated when colleges try to squeeze assessment, placement, advising, and registration for all beginning students into the few days preceding the term. This leads to a bottleneck due to high demand for student placement decisions and other advising needs. The research literature commonly reports issues with inadequate advising resources. In a classic study conducted by Astin (1993), he has found advising to be ranked among the lowest quality of campus services as evaluated by students. A more recent study on institutional effectiveness work by Jenkins (2006) has confirmed that advising and counseling services at most colleges were inadequately designed, poorly implemented, or nonexistent.

Gordon (2006) has listed specific advising challenges as limited time, large caseloads, lack of training, lack of consistency in contacts, lack of integration with other support programs, and lack of effective evaluation strategies. Specifically with regard to faculty advising programs, Ender

(1994) suggested that ineffective advising was associated with increased out-of-class expectations, lack of institutional reward incentives for advising tasks, and a tendency of institutions to rely more heavily on part-time faculty. These challenges are compounded by trying to handle large numbers of students during the week before classes begin.

Failure to Establish or Enforce Mandatory Assessment and Placement Policies

When an institution makes the effort to put a quality assessment, placement, and advising system in place, students should be required to access and use that system. As McClenney has found in her work, "students don't do optional" (Fain, 2012, p. 1). Gerlaugh, Thompson, Boylan, and Davis (2007) have reported that 92% of two-year colleges mandate assessment and placement. However, institutional commitment is essential for appropriate, rigorous policy enforcement. For example, do college registration systems effectively

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enforce the mandates for those students prescribed to developmental courses? If a student is displeased with their placement recommendation can they "find a way out of it," either through lapses in the registration system or by lobbying another campus official? This is often referred to as students slipping through the cracks of placement processes.

Allowing Opportunities for Students to Opt Out of the Entering Skills Assessment Process

Some states and college systems have implemented policies allowing particular groups of students to opt out of assessment testing. For example Texas targets active military personnel and returning veterans (THECB, n.d.) for such exemptions. Although the spirit of these exemptions may be understandable, the logic seems lacking as indeed these exempted groups are no more guaranteed to arrive at college fully prepared than any other student group. Allowing this type of exemption may be counter to success even as it may be intended to be helpful.

Some states and colleges also offer exemptions for students attaining particular scores on state mandated high school assessment and exit exams. In at least one case, these exemptions last as long as 5 years (Florida Senate Education Committee, 2014; Hudson County Community College, 2014;

THECB, n.d.). Although the concept may seem logical, the current reality is that the standards set for such high school tests are often below, and too often well below, the skills and standards needed and expected for college work. Some states and institutions allow exemptions for certain scores attained on SAT® or ACT® exams administered during secondary schooling. However, it should be considered that these exams are offered at the high school level, well in advance of a student's enrollment into college. Furthermore, research by Sanchez (2013) suggests that, in particular, the effective use of ACT® scores for determining college readiness is enhanced when combined with high school GPA. His work also shows that these measures tend to overpredict the success of minority, disadvantaged, and male students.

Predictive Validity of Assessment Tests

Belfield and Crosta (2012) reported that "in terms of how they are used by the colleges... placement test scores are not especially good *predictors* of course grades in developmental education classes" (p. 39). Hughes and Scott-Clayton (2011) discussed the validity of common skills assessment tests in the context of their ability to predict success for students diagnosed as needing developmental courses. In other words, these authors contended that the tests should not simply show that a student possesses a particular skill level but that the student should be more likely to benefit from the treatment that is prescribed as a result. These scholars have provoked a debate as to the use and purpose of skills assessment tests.

However, attempting to assess the effectiveness of placement tests by predictive validity, (or simply put, correlating test scores with developmental course performance) is a misunderstanding of their intended purpose. It should be considered that commonly used placement tests are measures of achievement rather than aptitude. As mentioned, they are designed to offer a snapshot of student proficiencies at the time of testing, not be used to predict future grades. Placement tests do not and should not be expected to take into account all or even many of the factors needed to predict success.

Gordon (2006) framed the argument in a more practical sense. Basically, he suggested that the skills assessment process must be designed to estimate student skills relative to a point at which the skill level precludes student success in a specified course. In other words, no matter what other attributes students bring to the course, they do not have the skill level to reach the basic demands of that course. Course grades however, are a function of skills in addition to other variables such as attitude, dedication, performance, attendance,

teacher grading, and instruction. Gordon (2006) summarizes:

Assessment relates only to students' residual basic skills. We don't measure dedication, maturity, the quality of tires on the car or the health of the kids, we measure basic skills. While we should be able to predict a failing grade from assessment, we cannot and we should not attempt to, predict a passing grade. (pp. 3-4)

Another confounding variable of the student decision-making process impacts predictive validity: whether or not students actually enroll in and complete all prescribed developmental courses and support services. Bailey, Jeong, and Cho (2009) have reported on the significant numbers of students prescribed to developmental education who either did not enroll in the courses or failed to attend and complete them. In these cases, students do not receive the intended and prescribed treatment. Failure to enroll in or attend class is not (and should not be) treated as an equal outcome to completing but failing the course. In other words, do common skills assessment exams have the capacity to predict when students will neglect to enroll in developmental education, withdraw early from such classes, or simply not

Ultimately, it has been reported that predictive validity is indeed weak for commonly used assessment instruments (Hughes & Scott-Clayton, 2011). Assessment instruments explain only a small portion of the variance in student success in developmental courses. Studies have found (Armstrong, 2000; Robbins, Allen, Casillas, Peterson, & Le 2006) low predictive validity for standardized skills assessment tests and subsequent course performance. According to both studies, more of the variance is explained by demographic and affective student variables. Some of the variables the studies have identified include academic discipline and commitment to college—as measured by the Student Readiness Inventory (ACT, 2008)—along with hours worked, family support and income, and outside responsibilities. Placement tests are much better suited for identifying current academic skill sets and not future performance. A combination of both cognitive and noncognitive variables seems to play an important role in future student performance and retention. Assessments of both are needed for accurate assessment and

Perhaps the debate is moot among scholars since both factions advocate that skills tests should not be the sole consideration in a student course placement decision. This includes those who advocate for mandatory assessment and placement (Boylan, 2002) and those researchers challenging the low predictive validity of the instruments

(Hughes & Scott-Clayton, 2011). Both suggest that assessment tests should be but one of multiple measures used to place students in appropriate courses, and much research supports the reasoning for doing so.

Assessment and the Redesign and Elimination Agendas

One of the common arguments used to promote eliminating or changing the delivery of developmental education courses is that a majority of students do not make it through the typical developmental education course sequence (Complete College America, 2012). It is speculated that much of the basis for their argument comes from a study by Bailey, Jeong, and Cho (2009). As noted, this study has shown low completion rates for students placed in developmental course sequences. CCA (Complete College America; 2012) has used these reported low completion rates as an argument to declare developmental education as a failure or a "bridge to nowhere" (p. 1). However, they fail to

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mention that significant percentages of students (about 30%) never enrolled in the developmental courses to which they were prescribed. This likely implies a failure to mandate or to enforce a mandate to enroll in developmental education. Furthermore, the low completion rates may point to a first-year college retention issue rather than a failure of particular (in this case, developmental education) courses. Nevertheless, there is evidence that components of developmental education including the quality of instruction, structure and delivery of courses (especially in mathematics), support services' needs and availability, and assessment and placement practices-including preassessment activities—needs to be improved (Burdman, 2012; Silva & White, 2013; Smith Jaggars & Hodara, 2013).

Well-funded policy advocates assert that too many students are being placed into developmental courses (CCA, 2012).. Some of the options that are being promoted as solutions include streamlining developmental course sequences, self-placement into redesigned course options, or the elimination of developmental education entirely. Ultimately, the impact may be a reduced emphasis on entering skills assessment. Care must be taken to validate these options or reform could lead to both lowering both standards and student success.

Recommendations for an Effective Assessment and Placement System

These debates about assessment practices imply that the preparation, assessment, and placement process is, at a minimum, subject to improvement. Following are recommendations, based on the review and analysis of related literature, for improving entering college student assessment and placement practice.

Manage Transition

Colleges, especially community colleges, should work with local high schools to improve the transition from high school to college. These efforts should include aligning writing and math skills for college preparation, practicing and taking placement tests in high school, using the results to provide feedback and to improve skills, providing career guidance, and hosting college expectations workshops for students.

Require Mandatory Assessment, Placement, and Advising for All Entering Students

These support services should be mandatory because students are unlikely to engage in them on a voluntary basis. It also seems that students who most need help from these types of services are the least likely to access them. Therefore, making them mandatory affirms their importance, ensures their use, and encourages administrative support for resourcing and implementation. These services should also be structured and presented as helpful for student success, not as burdens or obstacles. The National Academic Advising Association (NACADA; 2014) notes that advisors who work with first-year or transfer students should have fewer advisees than that of the typical student adviser. The ratio should also be lower for advisors who work with students demonstrating academic difficulty.

Coordinate and Integrate Assessment Services

The entering student assessment process needs strong coordination with college marketing, registration, and orientation. In the appropriate promotional and informational messages that are disseminated by the college, the assessment policy and test information should be specified. At the outset, as students are considering college attendance, they need to be informed about the assessment test: what it is, what it means to them, and how to prepare and practice for it. The opportunity to discuss and prepare for the test should also be addressed at preenrollment orientation.

At the very least, test preparation opportunities should be tied to the registration process.

As students register for college, they should be referred immediately to practice opportunities prior to assessment testing. A problematic issue in implementing such a policy is late registration (allowing students to register for courses after the term has begun). For assessment testing to be effective, late registration should be eliminated. An alternative for those students who show up at the last minute would be to utilize late starting classes. Allowing late registration hurts the students involved, adds an unnecessary burden on the faculty and staff to provide needed services already provided to on-time registrants, and reinforces poor planning and behavior.

Modify Placement Tests to Assist with the Diagnosis of Skills Deficiencies

Many faculty and some states and colleges have sought the development of more diagnostic assessment instruments. For example, in North Carolina, this was done particularly with mathematics in order to contribute to an accelerated redesigned modular style of course delivery (NC Community Colleges, 2012). The concept of using tests for both placement and diagnostic purposes is laudable. More evidence is needed as to the efficacy of achieving both purposes, recognizing that this may lead to longer tests as additional questions are added to meet the needs of student assessment and improved faculty understanding of score results. Care should be taken before discarding diagnostic activities of faculty who often use the first class of the semester for diagnostic assessment.

Strengthen Bridge Programs

These programs, which are generally offered in the summer but can also be available during the regular academic year, provide opportunities for students who test into developmental education courses to improve skill proficiencies and thereby decrease the need for developmental education. El Paso Community College is among several colleges that have demonstrated success in significantly decreasing the need for developmental courses with summer bridge programs (Kerrigan & Slater, 2010). However, bridge programs should not enable students to repeatedly retake a placement test until they manage to place out of developmental education by eventually guessing their way to a sufficient score. The practice of allowing repeated retesting - during bridge programs or other venues - does not improve proficiency, is expensive, and often undermines the notion of learning.

Use Test Cut Score Ranges

Rather than using a single test cut score at any given area, develop score ranges in which placement can be determined but with gray areas in which other data on student attributes would be considered to further inform the placement decision. Cut ranges

should be set that closely align with the prerequisites of each level of developmental course, keeping in mind the SEM of the assessment test score.

Use Multiple Variables to Place Students

As noted, assessment instruments are imperfect. Applying other measures of student academic and affective attributes will help advisors to more accurately determine the course level at which a student should begin. These variables may include high school performance (GPA or high school rank), years out of high school, courses taken in high school (especially in math) and the grades earned in those courses, motivation, maturity or level of responsibility, and other noncognitive factors.

High school GPA—the measure that appears to be getting the most traction—is likely a proxy for many student performance and affective attributes. And it is probably simple and quick for advisors to access. However, care must be taken when using high school performance as a placement measure

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for adult learners who have been out of school for more than 5 years. This measure is not meant to be a replacement for assessment testing but rather an important component added to the more reliable and valid placement test scores.

Finally, student opinions about their placement may also be applied. This should be considered with caution and only as part of an effective advisory process. It may be useful when the other data are contradictory or inconclusive. Especially with recent high school graduates, many tend to overestimate their proficiencies. In contrast, those students who have been out of school for many years tend to underestimate their skills. The advisor should consider student opinion in the context of the responsibility and maturity of the student.

Maintain Inventories of Options, Develop Student Attributes Profiles and Provide Advisor Training for Placement

In a comprehensive assessment, advising, and placement system it is important that a current inventory of developmental courses and support service options is maintained and shared with advisors. This will help them maintain an awareness of the range of courses and support service options that are available to meet the diverse needs of students. Advisors should be trained to develop profiles of student attributes and corresponding

placement options in order to improve advising effectiveness (Boylan, 2009).

Evaluate the Placement Process Systematically

Fulton (2012) reported that only three states mandate that colleges regularly review their placement assessments and cut scores. It appears that a decision to engage in this process in a systematic fashion has been left up to individual colleges. With regard to the test instrument, a professional content evaluation of the test by curriculum and faculty experts should take place periodically. The test content should adequately sample and represent the kinds of proficiencies that a student needs to be ready to handle the appropriate gateway college courses.

With regard to the placement process, too many course changes for students made after placement is an indication of problems in the system. Periodically using a faculty rating system similar to that developed by Gordon (2006) is strongly recommended. In this system, instructors who teach both developmental courses and first semester college English and math courses are surveyed as to the accuracy of placement.

Summary

A college may have hundreds if not thousands of students entering and decisions must be made that will impact their time, their academic paths, their finances, and perhaps their career paths and potential to succeed. To be both efficient and effective, colleges should offer these services over time, beginning well before the start of the academic term. There is very rarely a need to attempt to provide all services to all students the week before classes begin. Many students can begin the process while still in high school (including combining these services with dual enrollment activities). Using both large group sessions for general information and small group activities for more specific information, the application of technology, as well as employing a variety of student services personnel and faculty in a comprehensive process will all help to alleviate the crunch of trying to implement an effective system without overwhelming the institution. Ultimately, rather than assessment being an event whereby a test is taken, a score is attained and students get an up or down vote on college courses, it must become a coordinated process where students are informed about the test, advised on what it means to them, and offered assistance in practicing and preparing.

Conclusion

Proper student placement for entering students is a challenge for postsecondary institutions which must be addressed; a comprehensive and well integrated entry system is essential, representing a crucial gateway to the college culture and environment. Venezia, Bracco, and Nodine (2010) have characterized the assessment and placement process as having high stakes for students, yet viewed by them as a one-shot deal about which they lacked understanding. The majority of challenges and criticisms of the current processes are focused on this type of isolated, incomplete model. There is no need for this type of model.

The recommendations offered in this report should all be part of a comprehensive assessment, advising, placement, and registration system. Indeed, it takes resources and commitment in order to put such systems in place, but planning and rethinking how best to meet student needs while utilizing alternative processes can accomplish an important part of serving students, especially at-risk students at what may be the most at-risk point in their college matriculation. It is harmful to assume that every entering student is ready for college-level courses. This assumption places students in jeopardy and teachers in compromising positions. To return to that mentality today would be to return colleges to the revolving door (Cross, 1971) policies that existed in the past. Students' entering cognitive skill levels and affective attributes should be systematically assessed by postsecondary institutions; placement into instructional and support programs based on such integrated assessment practices will promote student development and success to the greatest extent possible.

References

- ACT. (2008). Student Readiness Inventory. Retrieved from http://www.act.org/sri/pdf/UserGuide.pdf
- Armstrong, W. B. (2000). The association among student success in courses, placement test scores, student background data, and instructor grading practices. *Community College Journal of Research and Practice*, 24, 681–695.
- Astin, A. W. (1993). What matters in college. San Francisco, CA: Jossey-Bass.
- Bailey, T., Jeong, D., & Cho, S.-W. (2009, November). Referral, enrollment, and completion in developmental education sequences in community colleges. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Belfield, C., & Crosta, P. M. (2012). Predicting success in college: The importance of placement tests and high school transcripts (CCRC Working Paper No. 42). Retrieved from http://ccrc.tc.columbia.edu/Publication. asp?UID=1030
- Bettinger, E. P., & Long, B. T. (2005). Addressing the needs of underprepared students in higher education: Does collegeremediation work? (NBER Working Paper 11325). Cambridge, MA: National Bureau of Economic Research.
- Boylan, H. R. (2002). What works: Research-based best practices in developmental education. Boone, NC: Continuous Quality Improvement Network/National Center for Developmental Education.
- Boylan, H. R. (2009). Targeted intervention for developmental education students (T.I.D.E.S). *Journal of Developmental Education*, 32(3), 14–23.
- Boylan, H. R., Bliss, L. B., & Bonham, B. S. (1997). Program components and their relationship to student performance. *Journal of Developmental Education*, 20(3), 2-8.

- Boylan, H. R., & Saxon, D. P. (2006). Affirmation and discovery: Learning from successful community college developmental programs in Texas. Retrieved from http://ncde.appstate.edu/sites/ncde.appstate.edu/files /TACC%20Final%20Report.pdf
- Burdman, P. (2012). Where to begin? The evolving role of placement exams for students starting college. Retrieved from http://www.jff.org/sites/default/files/u3/ATD_WhereToBegin_073112.pdf
- Casazza, M., & Silverman, S. (1996). Learning assistance and developmental education. San Francisco, CA: Iossev-Bass.
- Complete College America. (2012). Remediation: Higher education's bridge to nowhere. Retrieved from http://www.completecollege.org/docs/CCA-Remediation-final pdf
- Complete College America. (2013). Complete college Texas.

 Retrieved from http://www.completecollege.org/docs/CCT-low-res.pdf
- Cross, K. P. (1971). *Beyond the open door.* San Francisco, CA: Jossey-Bass.
- Ender, S. C. (1994). Impediments to developmental advising. NACADA Journal, 14(2), 105-107.
- Fain, P. (2012, February 2). Make it mandatory? *Inside Higher Ed.* Retrieved from http://www.insidehighered.com/news/2012/02/02/academic-support-offerings-go-unused-community-colleges

Too many course changes for students made after placement is an indication of problems.

- Florida Senate Education Committee, (2014). Summary: CS/CS/SB 1720 education. Retrieved from http://www.flsenate.gov/Committees/billsummaries/2013/htm/501
- Fulton, M. (2012). Using state policies to ensure effective assessment and placement in remedial education. Retrieved from http://www.ecs.org/clearinghouse /01/02/28/10228.pdf
- Gerlaugh, K., Thompson, L., Boylan, H., & Davis, H. (2007). National study of developmental education II: Baseline data for community colleges. *Research in Developmental Education*, 20(4), 1-4.
- Gordon, R. (2006). Why do we do what we do, and how do we know if it is working? Paper presented at the ACCUPLACER Placement Conference, Washington, DC.
- Hudson County Community College. (2014). Welcome to HCC testing and assessment. Retrieved from http:// hccc.edu/testing/
- Hughes, K. L., & Scott-Clayton, J. (2011). Assessing developmental assessment in community colleges (Working Paper No. 19). Retrieved from http://ccrc.tc.columbia.edu/media/k2/attachments/assessing-developmental-assessment.pdf
- Jenkins, D. (2006). What community college management practices are effective in promoting student success? A study of high- and low-impact institutions. New York, NY: Teachers College, Columbia University, Community College Research Center.
- Joseph, C., & Carty, H. (2003). Advising administrators' and academic advisors' perceptions of group dynamics in the workplace. Retrieved from http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Workplace.aspx
- Kerrigan, M. R., & Slater, D. (2010). Collaborating to create change: How El Paso Community College improved the readiness of its incoming students through Achieving the Dream (Report No. 4). Retrieved from http://ccrc

- .tc. columbia. edu/media/k2/attachments/el-paso-achieving-the-dream.pdf
- Maxwell, M. (1997). *Improving student learning skills*. Clearwater, FL: H & H Publishing.
- McCabe, R. (2000). No one to waste: A report to public decision-makers and community college leaders. Washington, DC: Community College Press.
- Morante, E. (1989). Selecting tests and placing students. *Journal of Developmental Education*, 13(2), 2-4, 6.
- NACADA. (2014). The global community for academic advising. Retrieved from http://www.nacada.ksu.edu/
- NC Community Colleges. (2012). Success NC: Developmental education initiative. Retrieved from http://www.successnc.org/initiatives/developmental-education-initiative
- Parsad, B., Lewis, L., & Greene, B. (2003). Remedial education at degree-granting postsecondary institutions in Fall 2000: Statistical analysis report (NCES 2004-010). Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubs2004/2004010.pdf
- Robbins, S. B., Allen, J., Casillas, A., Peterson, C. H., & Le, H. (2006). Unraveling the differential effects of motivational and skills, social, and self-management measures from traditional predictors of college outcomes. *Journal of Educational Psychology*, 98(3), 598–616.
- Roueche, J., & Roueche, S. (1999). Remedial education: High stakes, high performance. Washington, DC: Community College Press.
- Safran, S., & Visher, M. G. (2010). Case studies of three community colleges: The policy and practice of assessing and placing students in developmental education courses (Working Paper). New York, NY: National Center for Postsecondary Research and MDRC.
- Sanchez, E. I. (2013). Differential effects of using ACT college readiness assessment scores and high school GPA to predict first-year college GPA among racial/ethnic, gender, and income groups. Retrieved from http://www.act.org/research/researchers/reports/pdf/ACT_RR2013-4.pdf
- Scott-Clayton, J. (2012, April 20). Are college entrants overdiagnosed as underprepared? Retrieved from http://economix.blogs.nytimes.com/2012/04/20/are-college-entrants-overdiagnosed-as-underprepared/
- Scott-Clayton, J. (2012). *Do high-stakes placement exams* predict college success? (CCRC Working Paper No. 41). Retrieved from http://ccrc.tc.columbia.edu/media/k2/attachments/high-stakes-predict-success.pdf
- Sedlacek, W. E. (2004). Beyond the big test: Noncognitive assessment in higher education. San Francisco, CA: Jossey-Bass.
- Silva, E., & White, T. (2013). Pathways to improvement: Using psychological strategies to help college students master developmental math. Retrieved from http://www.carnegiefoundation.org/sites/default/files/pathways_to_improvement.pdf
- Smith Jaggars, S., & Hodara, M. (2013). The opposing forces that shape developmental education. *Community College Journal of Research and Practice*, 37(7), 575–579.
- THECB (Texas Higher Education Coordinating Board). (n.d.). Texas administrative code. Retrieved from http://info.sos.state.tx.us/pls/pub/readtac\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=1&ch=4&rl=54
- Van Horne, K. A. (2009). Against the odds: The success phenomenon of Latino developmental community college students. Research in Developmental Education, 22(4).
- Venezia, A., Bracco, K. R., & Nodine, T. (2010). One shot deal? Students' perceptions of assessment and course placement in California's community colleges. San Francisco, CA: WestEd.
- Zientek, L. R., Ozel, Z. E. Y., Fong, C. J., & Griffin, M. (2013). Student success in developmental mathematics courses. Community College Journal of Research and Practice, 37, 990–1010.