# Mandatory Cognitive and Affective Testing and Placement of Students into College Courses

National Association for Developmental Education (NADE) Resolution

(Approved March 1, 1998, by NADE Executive Board; Revised July 31, 1998; Revised and approved December 2, 2010)

#### Resolution

Whereas, cognitive and affective assessments of incoming students provide essential information for advisement on enrollment in courses, educational and career options, program accountability, and student tracking;

Whereas, students' self-esteem and academic progress are lowered when students are allowed to enroll in courses in which they may have difficulty succeeding because they lack the requisite skills to attempt the course;

Whereas, allowing students to enroll in courses for which they are ill-prepared or underprepared increases the likelihood of students dropping out of courses and/or out of college;

Whereas, the absence of requisite skill levels of some students in a course can adversely affect the quality of instruction for all students in the course;

Whereas, research indicates that academic success is based on not only cognitive, academic, skills but also students' motivation, attitudes, anxiety levels, and other affective characteristics;

Whereas, tax dollars and students' time and money can be wasted if students are allowed to enroll in courses for which they have little chance of success;

Therefore, be it resolved that the National Association for Developmental Education supports institutional policies that require mandatory cognitive and affective assessment of incoming students and mandatory placement of students into appropriate courses or services based on these assessments.

#### **Background Research**

# **Student Demographics**

In 2000, Robert McCabe reported that one million students not prepared for college-level study enter higher education every year, representing forty-two percent of first-time college attendees. (McCabe, R.H. (2000). No one to waste: A report to public decision-makers and community college leaders. Washington, D.C.; Community College Press.)

In a report published November 2003, "Remedial Education at Degree-Granting Postsecondary Institution in Fall 2000," the National Center for Educational Statistics states, "Some 95 percent of community colleges have an open admissions policy. Community colleges enroll a diverse group of students, with various reasons for going to college, and have larger percentages of nontraditional,

low-income, and minority students than 4-year colleges and universities."  http://nces.ed.gov/programs/coe/2008/analysis/sa04.asp	

## **Placement Testing**

In 1997, the National Center for Developmental Education (NCDE) published results from the National Study of Developmental Education which assessed the efficacy of developmental education through analysis of a scientifically selected sample of 160 institutions. More than 6,000 students were selected for inclusion in the NCDE study. Mandatory testing and placement increased the likelihood of students successfully completing their developmental courses. Research indicates that success in developmental courses is related to higher academic achievement and student retention rates.

NADE Resolution: Need for Mandatory Academic Testing and Placement of Students in Appropriate College Courses (Approved March 1, 1998, by NADE Executive Board, Revised July 31, 1998.)

"Accurate assessment, effective academic advising, and appropriate placement are critical components of successful developmental education programs (Boylan, 2002; McCabe, 2000; Morante, 1989). Assessment is necessary in order to determine what student skills need to be developed. Advising is necessary to ensure that students know what assessment results mean and why they need to be placed in specific courses."

Saxon, D.P., Levine-Brown, P., Boylan, H.R., (2008). Affective assessment for developmental students, Part 1. Research in Developmental Education, 22 (1), 1-4.

In 2007, a national study of Developmental Education revealed that "[a]ssessment and mandatory placement have shown a dramatic increase, indicating that developmental programs ... are putting greater emphasis on placing students in appropriate courses based on test results." The report states, "In the 1992 study, only 35% of 2-year institutions mandated placement based on test results (Boylan, Bonham, & Bliss, 1994). By 1995, this rose to 67%, and by 2000 mandatory placement rose to 74% (NCES, 1996, 2003). In the 2007 study, 79% of participating institutions required students to take the courses into which they placed.

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.

Byron McClenney (2010) summarized key results in Achieving the Dream colleges (based on over 1,200 visits to 130 colleges in twenty-four states), Bridges to Opportunity (Ford Foundation) working in six states (2003-2008), and the California Leadership Alliance for Student Success (current), McClenney notes that effective practices for student success and course completion include mandatory assessment and placement of students. This research supports the following best practices:

"Make Effective Practice Mandatory

- Stop Late Registration
- Math Refresher Before Assessment
- Assessment
- Placement
- Orientation
- Student Success Course For Those Not College Ready
- Advising (Leading to a Plan)

• Learning Lab Participation"

McClenney, B. Transformation for student success and completion. PowerPoint for CRLA Conference, November 2, 2010.

http://webcache.googleusercontent.com/search?q=cache:aWWJp1FT4Y8J:www.crla.net/conference/presentations/McClenney-

<u>Transformation\_for\_Student\_Success\_and\_Completion\_110210.ppt+mandatory+placement&cd=2&hl=en&ct=clnk&gl=us</u>

# **Course Enrollment Based on Placement Testing**

"Remedial Education at Higher Education Institutions in Fall 1995" states that, in the 1995-96 school year, a national study reported that about three-quarters of the institutions require students to enroll in developmental courses based on entry-level testing. About sixty percent of institutions offer entry-level testing of all entering students. About two-thirds of the institutions placed some restrictions on the regular (non developmental-level) academic courses that students may take.

National Center for Education Statistics. Statistical Analysis Report October 1996. Remedial Education at Higher Education Institutions in Fall 1995, nces.ed.gov/pubs/97584.pdf

A 2008 report by the National Center for Education Statistics of the U.S. Department of Education, NCES 97-584, "Special Analysis 2008: Community Colleges," asked students to self-report taking "remedial" coursework during their first year of postsecondary education: "Based on a survey of beginning postsecondary students in 2003-04, about 29 percent of community college students (compared with 19 percent of students at public 4-year institutions) reported having taken some remedial coursework in their first year."

http://nces.ed.gov/programs/coe/2008/analysis/sao2h.asp

## Types of Placement: Cognitive and Affective

Saxon, Levine-Brown, and Boylan state, "Unfortunately, practically all assessment done in U.S. colleges and universities is cognitive.... For instance, few efforts are made to assess students' affective characteristics such as motivation, attitudes toward learning, autonomy, or anxiety.

"This lack of assessment information on the affective characteristics of developmental students represents a serious weakness in the assessment, advising, and placement processes of postsecondary institutions. Bloom (1976), for instance, estimates that as much as 25% of student performance is determined by affective characteristics. Nolting (2007) emphasizes that performance in mathematics has almost as much to do with students' attitudes and beliefs as it has to do with their mathematical knowledge. Weinstein, Dierkling, Husman, Roska, and Powdrill (1998) argue that successful students must not only possess sound cognitive study strategies but also the affective will to use these strategies."

Saxon, D.P., Levine-Brown, P., Boylan, H.R, (2008) Affective assessment for developmental students, Part 1. Research in Developmental Education, 22 (1), 1-4.

Only 7% of institutions used noncognitive assessments as part of the placement process.

According to a recent study by Gerlaugh, Thompson, Boylan, and Davis (2007), although almost all community colleges assess students' cognitive skills, only 7% assess students' affective characteristics.

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.

## **Recommendations of Other Professional Organizations**

The American Mathematical Association for Two-Year Colleges (AMATYC) adopted in November 2002 and reaffirmed Spring 2007 the following Position Statement on the initial placement of two-year college students into the mathematical curriculum: "AMATYC recommends that all two-year colleges develop procedures for the initial placement of two-year college students into the mathematics curriculum. The placement process should determine the highest level of mathematics appropriate to students' educational goals at which they have the prerequisite knowledge to be successful. The criteria used to determine mathematics placement should be based on the goals of the mathematics program...." <a href="https://www.amatyc.org/documents/Guidelines-Position/Placement.htm">https://www.amatyc.org/documents/Guidelines-Position/Placement.htm</a>

#### **Other Sources**

Allen, N., Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organisation. *Journal of Occupational Psychology*, 63 (1): 1-18.

Boylan, H. R. (2002). What works: Research-based best practices in developmental education. Boone, NC: Continuous Quality Improvement Network/National Center for Developmental Education. <a href="http://www.ncde.appstate.edu/publications/what-works/">http://www.ncde.appstate.edu/publications/what-works/</a>

Morante, E. (1989). Selecting tests and placing students. *Journal of Developmental Education*, 13 (2): 2-4, 6.

Young, C.J., (2010). How key is commitment? Findings from pilot study by researcher for Aimhigher in LIFE Partnership, Bournemouth University, United Kingdom. Forum for Access and Continuing Education (FACE) Conference 2010.

http://www.f-a-c-e.org.uk/conference10/young.pdf