

Postsecondary Attendance and Success Patterns: An Interview with Clifford Adelman

By Geoffrey Akst



One of this country's most prominent education researchers, Dr. Clifford Adelman was until recently a senior research analyst with the U.S. Department of Education. He is the author of the Education Department report The Toolbox Revisited:

Paths to Degree Completion from High School Through College (2006). Other of his publications for the department include: Devaluation, Diffusion and the College Connection: A Study of High School Transcripts, 1964-1981 (1983), Women at Thirty-Something: Paradoxes of Attainment (1991), The New College Course Map and Transcript Files: Changes in Course Taking and Achievement, 1972-1993 (1995), Women and Men of the Engineering Path: A Model for Analyses of Undergraduate Careers (1999), Answers in the Tool Box (1999), A Parallel Postsecondary Universe: The Certification System in Information Technology (2000), and Principal Indicators of Student Academic Histories in Postsecondary Education, 1972-2000 (2004). Also the author of Lessons of a Generation: Education and Work in the Lives of the High School Class of 1972 (1994), Dr. Adelman now serves as a Senior Associate at the Washington-based Institute for Higher Education Policy.

Geoffrey Akst (G.A.): Dr. Adelman, it's a pleasure to meet you again. I believe in evidence-based decision-making in education, and you're one of this country's leading proponents of that point of view. Could we start by discussing your *Tool Box* studies? For readers not familiar with your background, these studies follow a sample of students from high school into postsecondary education, trying to identify which aspects of their schooling are associated with higher college graduation rates. They also stand out in my mind for their innovative emphasis on transcript analysis. What were some of the major conclusions you reached in the original *Tool Box* study and the more recent replicated study?

Clifford Adelman (C.A.): First, these studies

were about students who, following high school, attended a 4-year college at some time, including community college transfers. The dependent variable was whether they earned a bachelor's degree by their mid-to-late 20s. When bachelor's degree attainment is the dependent variable, you have to limit your population to people who actually walked through the door of a school that offered those degrees.

The *Tool Box* studies had a number of major conclusions: First of all, a student's high school record, dominated by a high academic intensity curriculum, provides the most significant momentum prior to college entry. It's far more important than what the student looks like. Second, delaying entry to higher education has a distinctly negative association with persistence. Third, the most important outcome of a student's 1st year in higher education is earning at least 20 credits that count toward a degree. Even part-time students can do this using the summer term.

There were other important conclusions. Noncontinuous enrollment—meaning stopping out of college for more than 1 semester—is a kiss of death. Also, if students withdraw or repeat 20% or more of their courses in college, they have a guaranteed kiss of death.

The data also confirm that purposeful transfer has positive results. Nomadic behavior—swirling from one school to another—does not. Finally, summer term credits add octane to a student's momentum toward degree completion. They have a particularly positive effect for African-American students (though why, I don't know).

G.A.: The findings of the *Tool Box* studies proved to be extremely influential, with a number of high-profile analyses and policy initiatives using its analyses for empirical support (eduwonk.com). The studies have been cited in the *New York Times*, the *Chronicle of Higher Education*, and other prominent publications. Why do you think the *Tool Box* studies received such widespread attention?

C.A.: For one thing, up until the first *Tool Box* study in 1999, most of the conversation and

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Geoffrey Akst
Borough of Manhattan Community
College/CUNY
Emeritus Professor of Mathematics
220 Madison Avenue, Apartment 14C
New York, NY 10016
gakst@nyc.rr.com

research about the relationship between what students did in high school and what happened to them in higher education was about test scores and grades. *Answers in the Tool Box* put curriculum front-and-center. It demonstrated that what you study is more important. Out of that analysis, state systems began looking at their high school graduation and college entry requirements in terms of course work, and we got the Texas Scholars program—which became the State Scholars program modeled on Tool Box—and ultimately, (though nobody acknowledges it), the federal Academic Competitiveness grants.

Secondly, people started paying far more attention to college attendance patterns than they ever had previously. Both studies opened up the whole field by pointing out just how dynamic college student attendance patterns are: multi-institutional, interstate, and so forth. People became a lot more interested in tracking student progress, and that led to the National Student Clearinghouse, the proposals for Unit Records, and state longitudinal studies.

G.A.: Could you tick off some of the other investigations that you've conducted of which you've been particularly proud?

C.A.: I'll mention a number. Two related studies, *Women at Thirty-Something: Paradoxes of Attainment* (1992) and *Women and Men of the Engineering Path* (1998), helped change the gender discussion by demonstrating the contrast between women's academic achievement and what happens to them on the anvil of the labor market. The study found that the overall attrition from the field after students reach the "threshold" of the field is much higher for women than men, particularly unfortunate in a field which historically has had a gender imbalance.

Then there was *A Parallel Postsecondary Universe* (2000), the first study of the certification movement in information technology. This report described the system of credentialing that arose in the information technology and telecommunications industries over a decade, comparing this system to traditional higher education. And finally *Moving Into Town—and Moving On: The Community College in the Lives of Traditional-Age Students* (2005), which brought both community design theory and migration theory to bear on the uses of the community college.

G.A.: A thread that runs through much of your work, Dr. Adelman, reflects a concern as to what extent American high schools are preparing students to succeed in college. Do you see any relationship between the studies that you've led

and developmental education in postsecondary institutions?

C.A.: It's hard to avoid writing about developmental education when one studies colleges, particularly community colleges, let alone in the type of analyses set out in the Tool Box studies. One of the major conclusions of both Tool Box studies is that students who are determined to succeed get through developmental education and on to earn credentials. So in fancy statistical analyses, the number and timing of credits in developmental education is not a significant variable. Where excessive developmental education course work does turn up, though, is in that minimum 20 additive-credit yard line in the first calendar year of attendance. A part-time student who takes nothing but developmental courses doesn't have a chance of reaching that goal.

G.A.: The study of mathematics seems to play a special role in your research. In one study, you found that of all high school disciplines,

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the highest level of math that a student studies in high school significantly affects the student's likelihood of earning a bachelor's degree. Do you think this means that the math preparation students receive in high school should be of interest beyond the mathematics community?

C.A.: Oh, yes. The world has gone quantitative. You cannot perform the majority of jobs without one of three types of mathematics proficiencies, all of which have their roots in algebra: (a) statistics, (b) finite/discrete math (the source of computer programming), or (c) calculus. The Tool Box studies have shown that math in high school is a principal academic engine. That means that students who get beyond Algebra II in high school or who earn more than 4 credits in college-level math are much more likely to earn a baccalaureate degree than students who don't.

G.A.: Recently, I've heard you argue for non-traditional ways of assessing the effectiveness of colleges and of calculating graduation rates. How does your approach to institutional assess-

ment differ from more traditional approaches? Does your approach have implications for developmental education?

C.A.: Let's focus on the calculation of graduation rates. At the present moment, we count only those students who enter in the fall term, full-time. That criterion excludes 40% of all beginning undergraduates and more than 60% of community college entrants. The formula I proposed in a "Views" piece in *Inside Higher Education* on March 12, 2007, which was vetted at a number of meetings and has since been revised, sanded, and polished, would count part-time students as well as full time and those who entered in terms other than fall. Regarding developmental education, the formula includes a threshold of more than 6 attempted credits of any kind (including nonadditive) in the first calendar year of enrollment. That is, we don't count students who attempted 6 or fewer credits of any kind. A lot of developmental students do not enter full time and are not counted now but would be under the formula, provided they attempted more than 6 credits in that 1st year. Why include this threshold criterion? It sorts out people whose behavior does not indicate intent to continue or attain a degree. It's not fair to include in the denominator of a graduation rate calculation the Emergency Medical Technician who comes in to a community college for one course a year to maintain a license.

G.A.: In your body of research, what conclusions were you able to draw that could be helpful to developmental educators and policy makers? Put another way, what advice would you give to postsecondary institutions trying to better meet the needs of developmental students?

C.A.: The most serious developmental problem—and the Tool Box studies spent some time on this—is reading. Students placed in developmental reading can't read the math problem either, let alone the biology textbook or the on-line history documents or the instruction manual for construction cost estimating software. The level of reading one needs for the range of tasks one faces in academic and occupational programs is that of complex inference. College language arts faculty tend to know this, and they know how to move students from simple comprehension to simple inference and then to complex inference when dealing with text. The range of faculty who are fluent in identifying these stages of reading development needs to be expanded, and total immersion reading courses as early as possible in a student's postsecondary career should be mandated. This is particularly essential for non-native speakers of English. The guidance and

advising environment has to be straightforward in telling students that unless they are reading at this level their chances of learning anything are severely diminished.

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NADE News: NADE 2008 Conference in Boston: "Developmental Education: The New Revolution"

By Geraldine L. McBroom, NADE President

The National Association for Developmental Education will hold its annual conference in Boston, Massachusetts, February 27 through March 1, 2008. The conference hotel, the Marriott Copley Place, is located in the beautiful Back Bay area of Boston, the heart of American democracy.

The Learning Assistance Association of New England (LAANE) is the NADE chapter sponsoring the conference. They have chosen the conference theme "Developmental Education: The New Revolution" and the logo which incorporates the Leonard Zakim/Bunker Hill Bridge and Paul Revere's ride. The NADE Executive Board agrees that the theme and logo appropriately represent NADE as an organization as well as the work of developmental educators:

- NADE and developmental educators are bridge builders.
- NADE members have revolutionary attitudes about students, how much they can excel, and what they will accomplish.
- NADE members are committed, even in the face of challenge, to developmental education: helping students prepare, advance, and excel.

The conference begins on Wednesday with Pre-Conference Institutes and the Leadership Congress. Wednesday evening's Conference Grand Opening includes a special welcome for newcomers. From Thursday

through Saturday, participants may choose from over 150 concurrent and poster sessions with topics covering 15 different conference strands. Also included in the excellent program are tours of Boston, extended hours at the exhibit hall, and keynote addresses by Steven Brookfield, Distinguished University Professor at the University of St. Thomas, and Dr. Ponomi Khumoetsile-Taylor, Director of the Office of Diversity and Inclusion at Bunker Hill Community College.

Contributions of NADE's Special Interest Networks (SPINs), committees, and chapters are being highlighted during the conference with sessions specifically set aside so that participants may attend these meetings—whether they are currently members or not—to learn about the work of these groups.

The NADE 2008 conference is designed to promote professional renewal and growth for the builders of students' dreams in a city representing the dreams of American democracy. More conference information and registration materials may be found on the NADE Web site: www.nade2008.net. Those unable to attend the national conference might investigate local chapter conferences on the NADE Web site, www.nade.net, under "Chapter Conference Dates."

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