NATIONAL CENTER ON EDUCATION AND THE ECONOMY

What Does It Really Mean to Be College and Work Ready? The Mathematics and English Literacy Required of First Year Community College Students



Mathematics

- Many college programs demand little or no mathematics
- Mathematics needed is mostly middle school mathematics
- Students command of middle school mathematics concepts is weak
- Don't rush through middle school mathematics; Master Algebra I by sophomore year
- Algebra II not a prerequisite for success in community college or in most careers; high schools should abandon requirement that all high school students take it
- Mathematical modeling, statistics and probability, complex measurement, schematics and geometric visualization needed in many community college programs but not now taught in most schools
- Mathematics tested in community colleges falls far short of what is in students' textbooks and short of what they need in careers they have chosen

English

- College texts written at 11th -12th grade levels; most high school graduates cannot understand them
- College instructors reducing material in the textbooks to Power Points, videos and flash cards
- Reading that is required demands little more than searching for basic facts
- Most college courses require very little writing
- Most community college tests involve little complex thinking—and no writing
- Industry courses rarely require students to do the kind of writing required of workers in the industry for which they are training
- Community college students need better instruction in constructing arguments and in laying out their thinking logically and persuasively. Such writing is essential in many workplaces.