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

## Key Findings

## 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.

