



KEY MESSAGE ...

College-level learning can be assessed in a cost-effective and minimally intrusive way to give states credible, comprehensive and comparable information. States can use the results to improve their higher education policies and practices, in order to increase the knowledge and skills of their residents.

QUICK LOOK ...

- ★ The *extent* of college-level learning varies from state to state and, within each state, from group to group.
- ★ The *pattern* of learning varies from state to state, leading to different policy challenges.
- ★ The racial and ethnic groups that are growing the fastest lag the most in learning, and more so in some states than in others.
- ★ Teachers are not equally well prepared across states.
- ★ All states should be able to use the same assessment strategy to get similar information.

NEXT STEPS ...

- ★ Each state should adopt the model described here, as recommended by the SHEEO (State Higher Education Executive Officers) National Commission on Accountability in Higher Education.
- ★ Once results are in, state officials should convene policy and higher education leaders to discuss the findings, identify challenges, and target state policies and resources that will help address those challenges.
- ★ Institutions should use the results to benchmark their performance and enrich their campus-based assessment programs.

ASSESSING COLLEGE-LEVEL LEARNING

By Margaret A. Miller

A recent five-state project, the National Forum on College-Level Learning, has demonstrated that learning, higher education's most important product, can be assessed in ways that make interstate comparison possible, that these assessments are consistent with other information we have about the states, and that the results can be useful to policymakers.

In a knowledge-based global economy, the economic, social, and civic welfare of states depends on the capacity of their residents to *think* at an increasingly sophisticated level. Certificates and degrees are increasingly inadequate proxies for this kind of "educational capital." It is the *skills* and *knowledge* behind the degrees that matters. A state-level approach to assessing college-level learning can give states that essential information.

A focus on the state as a whole can tell policymakers:

- ★ the extent to which its institutions are *collectively* effective in contributing to its store of educational capital,
- ★ how well higher education is serving various regions or sub-populations within the state,
- ★ how well the state's workforce-development efforts are working,
- ★ whether higher education is producing enough well-trained professionals in areas critical to the state's welfare,
- ★ what economic development options are available or lacking to the state because of the educational capital it has, and
- ★ whether the state has the range of programs needed for the economy and lifestyles its residents want.

A collective examination also enables cost-benefit analyses concerning the learning that the state's system of higher education is producing relative to the state's investment.

Armed with answers to these kinds of questions, a state can undertake further analyses, target resources where they are most needed to address urgent state priorities, and promote collective solutions to collective problems.

NATIONAL ACCOUNTABILITY MOVEMENT

Since the development of the 1990 National Education Goals, the federal government has encouraged higher education to demonstrate the capacities of college graduates to communicate, solve problems, and think critically.

Due to a lack of common benchmarks to compare student learning outcomes across states, *Measuring Up 2000*, the first state-by-state report card on higher education performance, gave all states an 'Incomplete' in the category of learning.

Shortly after the release of *Measuring Up*, the National Center convened an invitational forum of public-policy, education, and business leaders to examine how student learning could be measured at the state level. Between 2002 and 2004, the National Forum on College-Level Learning piloted the newly developed assessment model in five states, demonstrating that providing comparative state-by-state information is not only feasible, but also important and useful for policy.

The 2001 No Child Left Behind (NCLB) Act mandated that K–12 education demonstrate its commitment to standards and educational equity through evidence of learning. Now a similar demand is beginning to be felt in higher education, particularly since recently released results of the National Assessment of Adult Literacy survey have shown that certain measures of American college graduate literacy have decreased significantly over the last decade.

Most recently, U.S. Secretary of Education Margaret Spellings' Commission on the Future of Higher Education has been discussing how higher education might be held accountable for its results. In a 2006 memo to the commissioners, Chairman Charles Miller pointed to the National Forum's project as evidence that those results can be measured in a cost-effective, minimally intrusive way.

For more information on the National Forum, visit <http://collelevellearning.org>.

CURRENT STATE ASSESSMENT PLANS INADEQUATE FOR POLICY PURPOSES

Most states have some kind of statewide assessment requirement in place to improve performance and/or give state officials a sense of what their investment in higher education has yielded.

But the information they have on statewide collegiate learning is incomplete. Even those states that employ common measures for public colleges and universities know virtually nothing about the learning results of their private institutions.

And when every public campus within a state assesses its students' learning differently, the state has no way to interpret the resulting information, because there are no external benchmarks against which to measure a given program's or institution's performance. Nor does the state know how the learning of its college-educated residents or current college attendees compares to the learning of those in other states—hence what its competitive position is with regard to its educational capital.

Comparable assessment allows a state to:

- ★ chart its progress in developing its educational capital,
- ★ compare its performance to those of like states, and
- ★ identify good practices.

Given sample sizes that are large and sufficiently representative, institutions too can see how well they perform relative to their peers on key assessment measures. These external benchmarks can serve to anchor their more extensive campus-based assessment methods, which continue to be essential to improvement.

THE LEARNING PROFILES

The states in the demonstration project were Illinois, Kentucky, Oklahoma, Nevada, and South Carolina. Between 2002 and 2004, for each of those states the project assembled information on:

- ★ the National Adult Literacy Survey to determine the literacy levels of the population,
- ★ graduate-admission and licensure tests to establish the performance of the college educated, and
- ★ general intellectual skills tests (WorkKeys at the two-year colleges and the Collegiate Learning Assessment at the four-year colleges) administered to a sample of students at public and private two- and four-year institutions.

The learning profiles that resulted gave an idea of each state's strengths and challenges it faces with regard to collegiate learning.¹ See page 3 for two examples of states' learning profiles.²

¹ Since the sample sizes were small, it's important to look at the overall pattern of results rather than the individual measures.

² Learning profiles for Illinois, Nevada, and South Carolina, as well as Kentucky and Oklahoma, can be found in the full report, available at http://www.highereducation.org/reports/mu_learning/index.shtml.

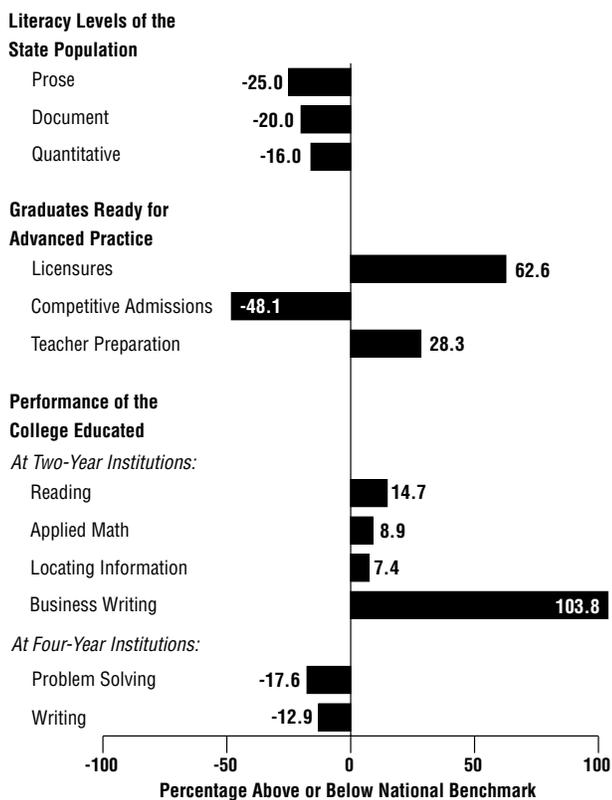
KENTUCKY

Kentucky’s recent substantial investments in both K–12 and postsecondary education have been a good public-policy response to its low literacy levels.

Its investments in community and technical colleges have paid off both in the form of higher-than-average proportions of graduates taking and passing licensing exams and in the high-level performance of those students on the WorkKeys exams, especially in the writing section.

But the state is less competitive when it comes to the proportion of its graduates taking and performing competitively on graduate-admission exams.

**Figure 1.
Kentucky Learning Measures**



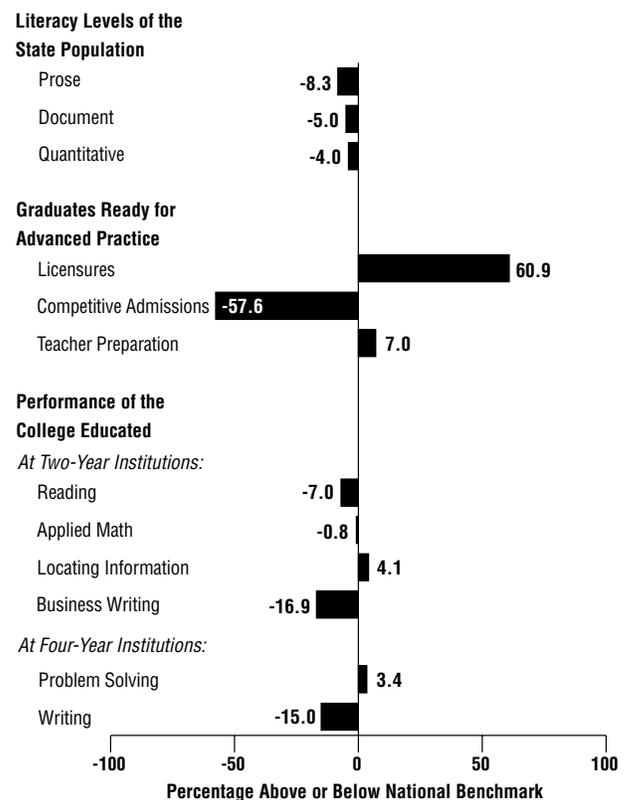
OKLAHOMA

Oklahoma’s recent activity in improving the quality of its higher education system is a response to the substantial challenges it faces in its K–12 system and in its low levels of college graduation. The disappointing literacy levels of its residents reflect those challenges.

Oklahoma’s higher-education orientation toward workforce preparation is seen in the high number of students who take and do well on licensure exams, as compared to students’ below-average performance on graduate admissions tests.

Written communication skills constitute a particular challenge for the state in both its two- and four-year colleges.

**Figure 2.
Oklahoma Learning Measures**



Note: Learning profiles for Illinois, Nevada, and South Carolina are available at: http://www.highereducation.org/reports/mu_learning/index.shtml.

Source for Figures and Tables: Margaret A. Miller and Peter T. Ewell, *Measuring Up on College-Level Learning* (San Jose, CA: The National Center for Public Policy and Higher Education, 2005).

FURTHER ANALYZING THE RESULTS

In addition to the general state learning profile that emerges from the data, this model reveals patterns of performance that suggest other state policy challenges. Two such challenges are:

- ★ performance gaps by race and ethnicity, and
- ★ considerable variation in how well teachers are prepared across the states.

Information on how well it is meeting these two key national challenges is invaluable to a state, because improving performance in these areas is crucial to its future well-being. So what do the data tell us about how the demonstration states are meeting these challenges?

Performance Gaps by Race/Ethnicity

As figures 3 and 4 show, white students perform better than students of color on virtually all direct learning measures. If these performance gaps could be eliminated or even narrowed, any state would be substantially better off.

Figure 3.
WorkKeys Examinations: Mean Scores
(Demonstration States: Two-Year College Students)

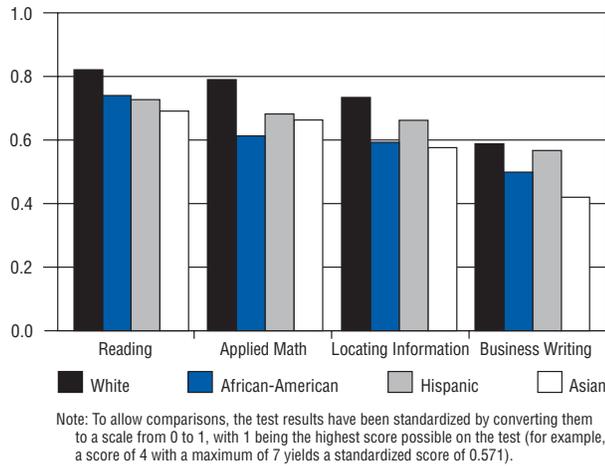
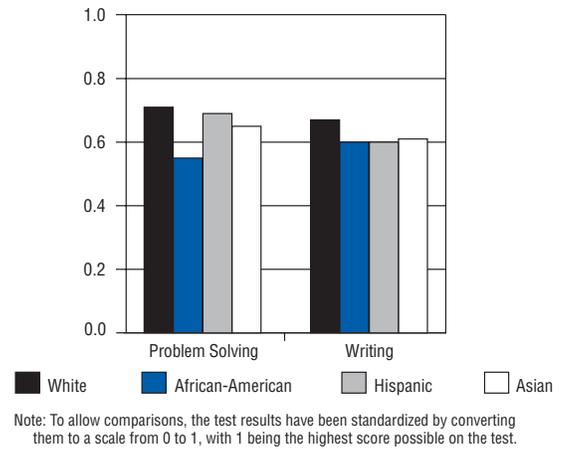


Figure 4.
Collegiate Learning Assessment: Mean Scores
(Demonstration States: Four-Year College/University Students)



While performance gaps occur in all states, variability in the size of those gaps across states suggests that some states do a better job than others of meeting that challenge and may have some best practices to share.

Figures 5 and 6 highlight the performance gaps in the demonstration states.³ The impact of these gaps on overall state performance varies according to the size of the states' minority populations.

- ★ South Carolina, for instance, takes a double hit: the first from the relatively large size of its minority population and the second from the size of the performance gaps.
- ★ Illinois, with an even larger gap on the CLA problem-solving exam, still performs strongly on that measure because of the limited number of students of color in that state.

The analysis strongly suggests that students of color, the fastest-growing part of our student population, continue to be underserved by our educational system even in college. Given that other nations are overtaking the United States in the proportion of young residents earning a baccalaureate degree, and that states' and our nation's future prosperity depends on these students, the performance gap is worthy of concentrated policy attention.

Figure 5.
WorkKeys, Applied Math: Mean Scores

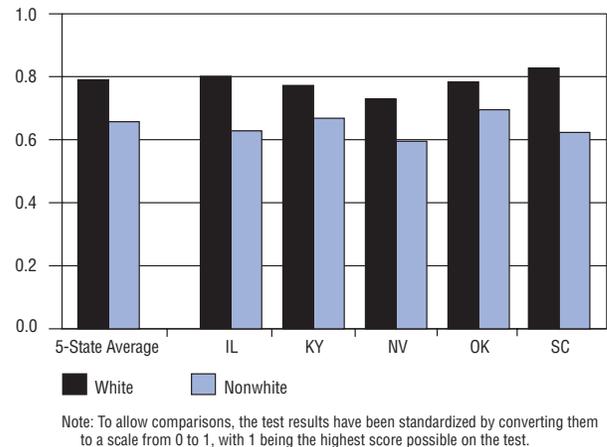
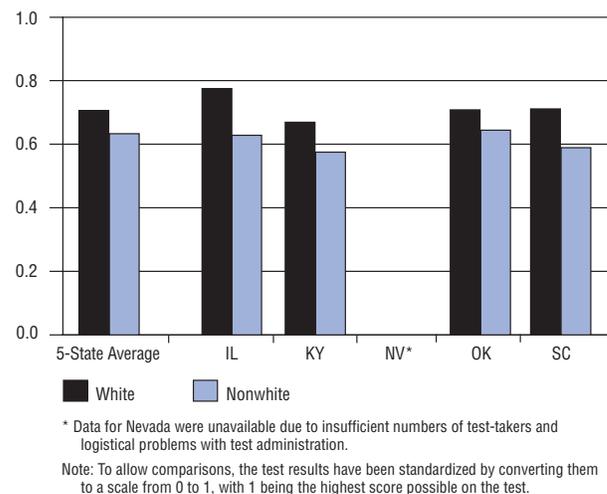


Figure 6.
CLA, Problem Solving: Mean Scores



³ For the results of additional WorkKeys and CLA exams, see http://www.highereducation.org/reports/mu_learning/index.shtml.

Educating Future Teachers

Title II of the 1998 Higher Education Act requires states to report their pass rates on teacher licensure exams, which assess how much the prospective teachers know about the subjects they are preparing to teach. Since the majority of states give one of only two exams, states should be able to compare their performance on this crucial measure.

Not so. Every state sets its own passing score on whatever exam it administers. The same performance might earn a student a passing mark in one state but not pass muster in another.

The project addressed this problem by comparing the raw scores of students in three states (Kentucky, Nevada, and South Carolina) that administer many of the same Praxis exams. By obtaining actual test results from these states, the project could compare the students' performances by then determining what pass rates each state would have seen if its students had been held to the highest state standard for passing that particular exam.

The results were startling (see Table 1).

Kentucky's students, who had an 81.3% pass rate on the Praxis subject-matter exams, would have had only a 57.4% pass rate if they had been measured by the highest standard in the nation. In contrast, 77.4% of South Carolina's students passed the exam, even though they did better—at 59.1%—than Kentucky's if measured by the highest standard.

The situation was even more extreme in the basic-skills test, Praxis I (see Table 2). All Kentucky's future teachers passed that test (since they needed to do so to enter the state's teacher-education programs). But they performed less well than Nevada's students,

Table 1.
Pass Rates for Praxis II: Subject Knowledge Percentage of Students Passing

	<i>Reported Pass Rate Based on State's Own Standards</i>	<i>Recalculation of Pass Rate Based on Highest State Standard for Passing</i>
Kentucky	81.3%	57.4%
South Carolina	77.4%	59.1%
Nevada	89.9%	71.9%

Table 2.
Praxis I: Basic Skills Percentage of Students Passing

	<i>Reported Pass Rate Based on State's Own Standards</i>	<i>Recalculation of Pass Rate Based on Highest State Standard for Passing</i>
Kentucky	100.0%	31.1%
South Carolina	69.1%	37.8%
Nevada	82.8%	52.7%

only 82.8% of whom passed the exam. If measured by the nation's highest standard, only 31.1% of Kentucky's students would have passed, whereas 52.7% of Nevada's would have succeeded.

A state that is complacent about its pass rates on teacher licensure exams would do well to examine the numbers more closely, since they may mask serious underperformance in an area critical to the state's future.

ABOUT THE PROJECT

The National Forum on College-Level Learning was established in 2002 to measure what college-educated people know and can do in a comparable way across states. Between 2002 and 2004, the forum worked with the states of Illinois, Kentucky, Oklahoma, Nevada, and South Carolina on a project sponsored by The Pew Charitable Trusts to assess student learning. The project used national assessments of adult literacy, tests that many students already take when they leave college, and specially administered tests of general intellectual skills. The results made it possible to begin assessing both the educational capital available to the states and the contributions their colleges and universities collectively make to it. For project findings, see the full report, *Measuring Up on College-Level Learning*, at: http://www.highereducation.org/reports/mu_learning/index.shtml.

WHAT'S A STATE TO DO?

States that would like to have similar information to guide their higher education policy can replicate the project's methods, which are described in detail in the full report, *Measuring Up on College-Level Learning* (available at http://www.highereducation.org/reports/mu_learning/index.shtml). Once they have assembled the data, policymakers should:

- ★ convene policy and higher education leaders to discuss the findings, identify challenges, and target state policies and resources that could help address them; and
- ★ encourage institutions to use their results to benchmark their performance and enrich their campus-based assessment programs.

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