THE NATIONAL CENTER FOR PUBLIC POLICY AND HIGHER EDUCATION

Policy Alert

April 2004

QUICK LOOK …

Key Issue

States that adopt effective education policies can increase the success rates of students at four key transition points spanning the period from high school to completion of a college degree. Developing such policies is a state's primary tool for gaining high numbers of knowledgeable, skilled workers in its workforce.

Primary Findings

- ★ More and more, states are moving toward adopting education policies that increase the number of students successfully progressing from ninth grade through high school graduation to a four-year degree.
- ★ Increasing the number of college graduates is more than an educational issue; it is also a key social issue. Residents holding college degrees are the basis of a state's "educational capital."
- ★ High levels of educational capital provide the foundation of a state's economic development and the preferred quality of life for its residents.

Main Conclusions

- ★ The success rate of the "educational pipeline" varies radically from state to state. This indicates that educational policies *matter*.
- ★ Studies show that a range of policies used in combination has the greatest impact.

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THE EDUCATIONAL PIPELINE: BIG INVESTMENT, BIG RETURNS

Many states are now focusing on improving their "K–16" policies—those local and statewide policies that seek to bolster student success at key transitions from high school into college, and from college admission to completion of a degree. This new trend derives from efforts to create a stronger "educational pipeline," a productive, integrated system of high schools, colleges and universities within the state.

The educational pipeline is being viewed as the key avenue to increasing a state's "educational capital." This is the number of highly knowledgeable, skilled people in a state's workforce.

Educational capital has a direct impact on a state's economy and quality of life. With this increased awareness, supported by publications such as *Measuring Up* (National Center for Public Policy and Higher Education 2000, 2002), state leaders are renewing their interest in helping students gain college degrees.

BENEFITS

Encouraging a college-educated population in the workforce results in pivotal benefits to the state:

- ★ Individuals with higher degrees can expect to earn higher incomes. The result: more tax revenue and economic activity for the state.
- ★ An educated, skilled population makes fewer demands on social services such as welfare and corrections. The result: less expense to the state.
- ★ People with more education make more informed health and lifestyle choices. The result: state savings in public resources.
- ★ Educated individuals are more comfortable handling decisions about health care, personal finance, and retirement. The result: less government responsibility in those areas.

MEETING THE GOAL

State policymakers can use three primary methods to increase educational capital:

- ★ Create a high-quality K–16 system for bringing students to a college degree. This is the most direct and reliable way of increasing educational capital.
- ★ Develop and maintain an economy to employ the state's educated residents.
- ★ Attract educated workers from outside the state by creating an appealing state economy and quality of life.

EDUCATIONAL PIPELINE SUCCESS RATE

FOUR KEY TRANSITION POINTS

Four key transition points mark students' progress from high school to completion of a college degree. The most effective policies address these important transitions.

1. ***High School Graduation***
   The first key transition measure is the proportion of ninth graders who attain a high school diploma within four years. This is important because increasing numbers of students are dropping out of high school.
2. ***Entry into Higher Education***
   The number of high school graduates who enter college depends on student preparation levels and the capacity of the college and university system. Improving these factors is within the reach of state policies.
3. ***Persistence in Higher Education***
   The highest number of college dropouts generally occurs in the first year. Because of this, the number of freshmen who enroll for a second year is a telling milestone.
4. ***Completing Higher Education***
   Holding a college degree generally increases an individual's income level. Still, less than 50 percent of first-time, full-time college students complete an associate's degree within three years or a bachelor's degree within six years at their original institution.

TABLE 1: Success Rate per 100 Ninth Graders at Each Transition Point (2002)

Out of 100 Ninth Graders, How Many ...

State	Graduate from High School	Rank	Immediately Enter College	Rank	Are Still Enrolled Their Sophomore Year	Rank	Graduate Within 150% Time	Rank
Alabama	59	44	32	45	22	45	12	46
Alaska	61	41	30	48	NA	NA	12	47
Arizona	69	31	35	37	22	41	17	30
Arkansas	74	19	42	16	27	27	15	36
California	70	30	37	31	25	31	19	25
Colorado	70	29	42	15	29	20	20	18
Connecticut	75	18	47	6	37	7	26	5
Delaware*	64	38	38	29	30	19	21	15
Florida	53	49	32	46	24	35	14	38
Georgia	56	48	34	41	24	32	13	41
Hawaii	65	36	34	42	22	42	12	48
Idaho	77	11	34	40	22	43	14	37
Illinois	72	24	43	13	30	18	20	20
Indiana	68	34	41	19	31	16	21	17
Iowa	83	3	54	4	37	5	28	3
Kansas	75	16	43	14	27	26	19	27
Kentucky	65	35	39	27	26	30	15	34
Louisiana	59	45	33	43	23	39	13	45
Maine	76	14	41	23	31	15	22	13
Maryland	75	17	45	11	32	12	19	26
Massachusetts	76	13	52	5	40	3	29	1
Michigan	70	27	41	17	29	22	18	28
Minnesota	82	5	54	3	38	4	25	7
Mississippi	58	46	37	32	23	37	13	43
Missouri	73	21	40	25	27	25	20	21
Montana	77	10	41	18	27	28	17	29
Nebraska	78	8	47	9	33	11	22	11
Nevada	62	39	27	50	18	49	10	49
New Hampshire	75	15	46	10	35	8	27	4
New Jersey	90	1	60	1	44	1	25	8
New Mexico	60	42	34	39	22	47	10	50
New York	57	47	41	20	31	14	19	23
North Carolina	60	43	41	22	29	21	19	22
North Dakota	83	2	57	2	41	2	25	6
Ohio	70	28	40	26	29	23	19	24
Oklahoma	73	22	36	34	23	38	13	40
Oregon	69	32	33	44	23	40	15	35
Pennsylvania	77	12	47	8	37	6	28	2
Rhode Island	72	25	40	24	33	10	23	10
South Carolina	49	50	29	49	20	48	13	42
South Dakota	78	7	44	12	30	17	21	16
Tennessee	61	40	38	30	26	29	16	32
Texas	64	37	35	36	22	46	13	44
Utah	83	4	36	33	24	34	17	31
Vermont	77	9	36	35	28	24	21	14
Virginia	74	20	41	21	31	13	22	12
Washington	68	33	30	47	22	44	15	33
West Virginia	71	26	34	38	24	33	14	39
Wisconsin	79	6	47	7	34	9	25	9
Wyoming	73	23	38	28	23	36	20	19
United States	68		40		27		18	

**Delaware data are partly from 2000 because technical colleges did not report first-time freshmen enrollment.*

Table 1 presents the four key transition points using national data for all 50 states. The table uses a starting group of 100 ninth graders. From the left, it presents the figures state by state for:

1. High school students graduating compared to the number of ninth grade students four years earlier.
2. High school graduates immediately entering college.
3. College starters returning for their second year.
4. College entrants completing an associate's degree within three years or a bachelor's degree within six years (150% time).

SOURCES

Data are from 2002. The figures in Tables 1 and 2 are calculated based on data from the following sources:

ACT. "Institutional Data Questionnaire 2003." Unpublished analysis prepared for the National Center for Public Policy and Higher Education, Iowa City, Iowa, 2004.

National Center for Education Statistics. "Common Core of Data": http://nces.ed.gov/ccd/ (accessed Jan. 26, 2004).

---. "IPEDS Fall Enrollment Survey 2002": http://nces.ed.gov/ipeds/ (accessed Jan. 26, 2004).

---. "IPEDS Graduation Rate Survey 2002": http://nces.ed.gov/ipeds/ (accessed Jan. 26, 2004).

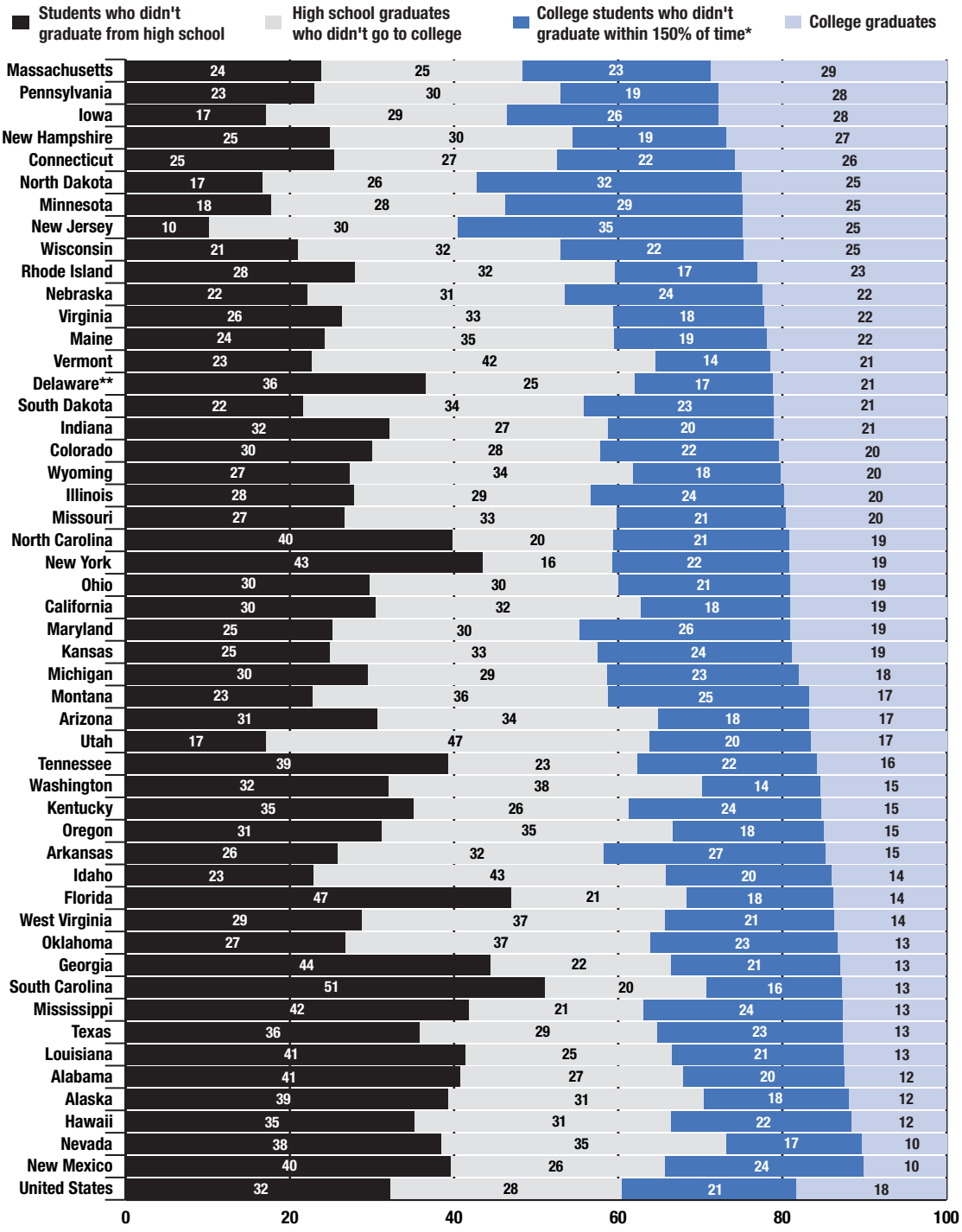
---. "IPEDS Residency and Migration File 2002": http://nces.ed.gov/ipeds/ (accessed Jan. 26, 2004).

Western Interstate Commission for Higher Education. *Knocking at the College Door: Projections of High School Graduates from 1988 to 2018.* Boulder, CO: 2004.

For more detailed source information, see our web site at http://www.highereducation.org/reports/pipeline/

EDUCATIONAL PIPELINE LOSS RATE

TABLE 2: Loss Rate per 100 Ninth Graders at Each Transition Point (2002)



**150% time refers to college entrants completing an associate's degree within three years or a bachelor's degree within six years.*

***Delaware data are partly from 2000 because technical colleges did not report first-time freshmen enrollment.*

Using the same data and starting group of 100 ninth graders, Table 2 shows the proportion of students lost at each transition point.

Table 2 shows the following trends in state success:

★ ***Wide Differences in Results.*** The states' results vary widely. The average success rate of the top 25 percent is about double that of the bottom 25 percent. The highest performers are almost three times as productive as the lowest performer.

★ ***Similar Results, Different Routes.*** States with the same final results vary in how they got there. Georgia, Idaho, and Oklahoma are close in results. Yet Idaho and Oklahoma graduate more than 70 percent of their ninth graders. Georgia loses half its ninth graders before high school graduation, but a higher percentage of its high school graduates go to college.

★ ***Different Degrees of Policy Focus.*** Educational needs vary in different states, resulting in widely different levels of attention needed at each transition point.

RECOMMENDATIONS

- ★ ***Increase the Number of High School Graduates.*** Develop strategies to improve basic skills: involve parents, business leaders, and the community in the educational process, and ensure sufficient financial support of low-income districts.
- ★ ***Improve College Access.*** Create college tuition policies based on median income and support need-based financial aid; build high-capacity, open-entry, two-year college systems that encourage transfer; encourage dual enrollment and advanced placement policies that speed the transition from high school to college.
- ★ ***Promote Graduation from College.*** Set up programs for individual learners; support intensive enrollment in basic coursework in the first college year; develop schedules based on students' needs; avoid pushing students toward a high education debt; establish transfer policies that retain academic credit.

CONCLUSIONS

- ★ Creating educational policies to address key transition points in the educational pipeline can pay substantial dividends in educational capital.
- ★ Changes in educational approach, organization, and delivery result in changes in performance. Policy *matters*. Policies used in combination have the greatest impact.
- ★ Those who can prosper in an environment tend to remain, so increasing the state's benefits to its residents in turn increases the state's health and wealth.

GET MORE INFORMATION

The concepts reflected in this supplement are from *Conceptualizing and Researching the Educational Pipeline*, by Peter T. Ewell, Dennis P. Jones, and Patrick J. Kelly of the National Center for Higher Education Management Systems. For most current data, see The National Information Center for Higher Education Policymaking and Analysis web site at www.higheredinfo.org

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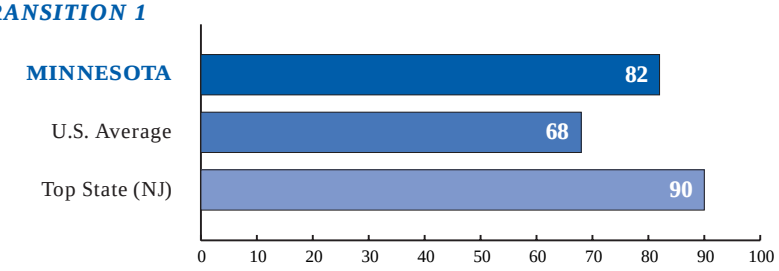
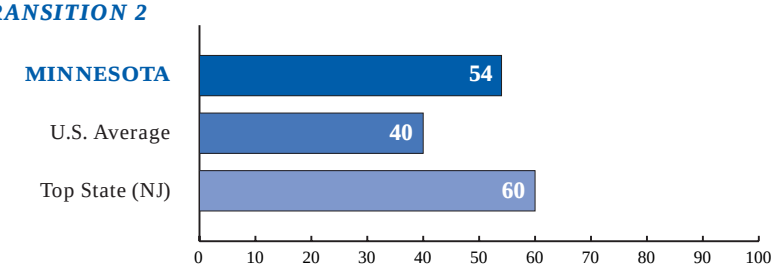
How Does *MINNESOTA* Compare to the Top State and the National Average?

TRANSITION 1



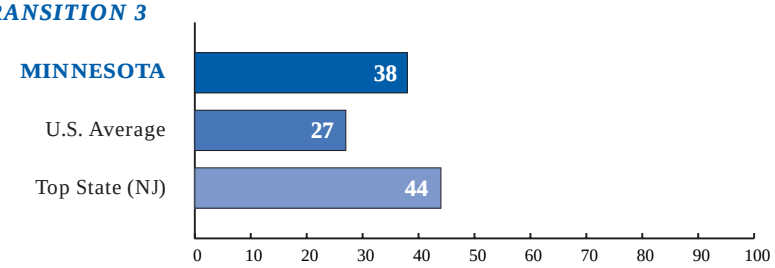
In Minnesota, for every 100 ninth grade students, 82 graduate four years later.

TRANSITION 2



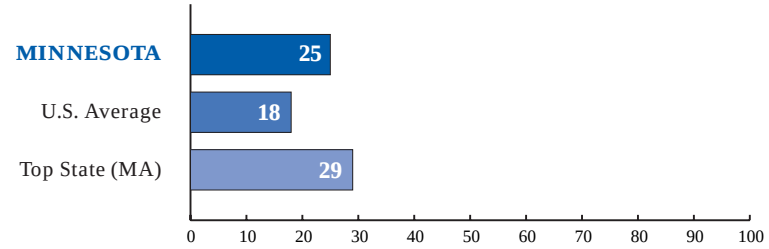
Of the 82 high school graduates, 54 immediately enter college.

TRANSITION 3



Of the 54 students who enter college, 38 are still enrolled in sophomore year.

TRANSITION 4



Twenty-five (25) go on to graduate within 150% time, with either an associate's degree within three years or a bachelor's degree within six years.

Note: "Top State" is the best performing of the 50 states.

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Data are from 2002. For more detailed source information, see our web site at http://www.highereducation.org/reports/pipeline/
For 50-state comparison charts, see pages 2-3 in *The Educational Pipeline Policy Alert,* April 2004.

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Policy Alert Supplement

April 2004

MINNESOTA's Educational Pipeline

In Minnesota, for every **100** ninth grade students ...

... **82** students graduate from high school four years later.

... **54** students immediately enter college.

... **38** students are still enrolled in their second year.

... **25** students graduate with either an associate's degree within three years or a bachelor's degree within six years.

Data are from 2002. Sources: ACT. "Institutional Data Questionnaire 2003." Unpublished analysis prepared for the National Center for Public Policy and Higher Education, Iowa City, Iowa, 2004; National Center for Education Statistics. "Common Core of Data": http://nces.ed.gov/ccd/ (accessed Jan. 26, 2004); ---. "IPEDS Fall Enrollment Survey 2002": http://nces.ed.gov/ipeds/ (accessed Jan. 26, 2004); ---. "IPEDS Graduation Rate Survey 2002": http://nces.ed.gov/ipeds/ (accessed Jan. 26, 2004); ---. "IPEDS Residency and Migration File 2002": http://nces.ed.gov/ipeds/ (accessed Jan. 26, 2004); Western Interstate Commission for Higher Education. *Knocking at the College Door: Projections of High School Graduates from 1988 to 2018*. Boulder, CO: 2004. For more detailed source information, see our web site at http://www.highereducation.org/reports/pipeline/

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