

The National Education Data Summit
February 2006
Lake Buena Vista, Florida

Sample Question Requiring Longitudinal Data

Which high schools are best at getting low-income students who were below proficiency when they left 8th grade to graduate from high school well-prepared for college or other postsecondary opportunities?

10 Essential Elements

1. A unique statewide student identifier
2. Student-level enrollment, demographic and program participation information
3. The ability to match individual students' test records from year to year to measure academic growth
4. Information on untested students
5. A teacher identifier system with the ability to match teachers to students
6. Student-level transcript information, including information on courses completed and grades earned
7. Student-level college readiness test scores
8. Student-level dropout and graduation data
9. The ability to match student records between the pre-K-12 and higher education systems
10. A state data audit system assessing data quality, accuracy, and reliability

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Data Elements Required to Answer "High Schools and Postsecondary Readiness" Question

1. A unique statewide student identifier
2. Student-level enrollment, demographic and program participation information
3. The ability to match individual students' test records from year to year to measure academic growth
7. Student-level college readiness test scores
8. Student-level graduation and dropout data
9. The ability to match student records between the pre-K-12 and higher education systems
10. A state data audit system assessing data quality, validity and reliability

According to the 2005 NCEA Survey of State Data Systems, two states have all of these elements. This survey (www.dataqualitycampaign.org) assessed states' anticipated capability as of the 2005-06 school year.

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What You Can Do with Longitudinal Data

Longitudinal data gives you the power to answer questions about:

- Student academic growth
- Whether students are “on track” to later success
- School effectiveness with well-prepared and poorly-prepared students
- Student mobility and attrition

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Sample “Student Mobility and Attrition” Question

What percent of economically disadvantaged students graduated, based on the NGA graduation rate definition?

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NGA Graduation Rate Formula

$$\frac{\text{number of students in the cohort graduating in year } t}{(\text{first-time ninth-graders in year } t - 4^*) + (\text{transfers in}) - (\text{transfers out})}$$

*Calendar year $t - 4$ (Fall 2001 for Spring 2005 graduates)

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Data Elements Required to Answer "NGA Graduation Rate" Question

1. A unique statewide student identifier
2. Student-level enrollment, demographic and program participation information
8. Student-level graduation and dropout data
10. A state data audit system assessing data quality, validity and reliability

According to the 2005 NCEA Survey of State Data Systems, fifteen states have all of these elements

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Sample Academic Growth Question

What was the academic growth of economically disadvantaged students taught by recent graduates of your teacher preparation program?

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Data Elements Required to Answer Academic Growth Question

1. A unique statewide student identifier
2. Student-level enrollment, demographic and program participation information
3. The ability to match individual students' test records from year to year to measure academic growth
4. Information on untested students
5. A teacher identifier system with the ability to match teachers to students

According to the 2005 NCEA Survey of State Data Systems, five states have all of these elements

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Sample "On Track to Later Success" Question

What achievement levels on your state's test are associated with readiness for college?

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Texas 11th Grade Test Scores vs. College Readiness Measures

	11th grade TAKS score	predicted ACT score	predicted SAT score	approximate probability of THEA score > 230	approximate probability of THEA score > 270
English	2100	17.7	461	57%	n/a
	2200	20.1	502	77%	n/a
	2300	22.5	543	90%	n/a
	2400	24.9	584	100%	n/a
Mathematics	2100	19.5	472	67%	5%
	2200	21.9	521	90%	26%
	2300	24.3	570	100%	77%
	2400	26.7	618	100%	100%

- The 11th Grade TAKS English Language Arts test covers both reading and writing
- TAKS stands for the Texas Assessment of Knowledge and Skills

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Data Elements Required to Answer "Test Scores vs. College Readiness" Question

1. A unique statewide student identifier
3. The ability to match individual students' test records from year to year to measure academic growth
7. Student-level college readiness test scores
9. The ability to match student records between pre-K-12 and postsecondary systems

According to the 2005 NCEA Survey of State Data Systems, three states have all of these elements

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Additional "On Track to Later Success" Question

How many students who complete advanced courses are ready for college?

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Students Completing Recommended High School Courses

Percent of those students passing readiness exam on entry to state public higher education system:

Non-Low-Income Students:	67%
Low-Income Students:	37%
White Students:	73%
Hispanic Students:	41%
African-American Students:	39%

Source: Texas Higher Education Coordinating Board, summarized by Dougherty, Mellor and Jian in "Orange Juice or Orange Drink? Ensuring that 'Advanced Courses' Live up to Their Labels", available after February 15, 2006 on www.dataqualitycampaign.org

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Data Elements Required to Answer "High School Courses and College Readiness" Question

1. A unique statewide student identifier
6. Student-level transcript information, including information on courses completed and grades earned
7. Student-level college readiness test scores
9. The ability to match student records between pre-K-12 and postsecondary systems

According to the 2005 NCEA Survey of State Data Systems, two states have all of these elements

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Sample "School Effectiveness with Students at Different Prior Achievement Levels" Question

How does your high school perform with students who enter the school well-prepared? With students who entered poorly-prepared?

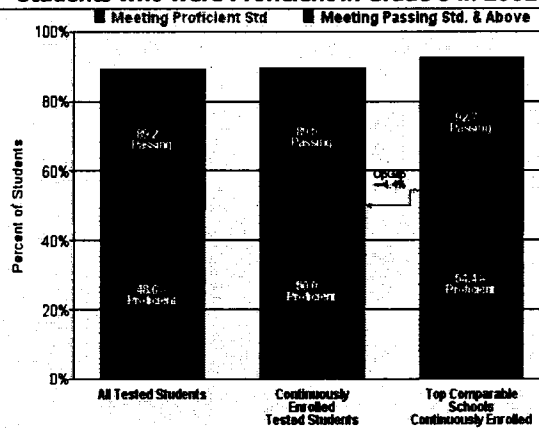
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Performance of Edge City High School with Previously Well-Prepared Students

2005 Student Performance in Grade 11 Mathematics
Students who were Proficient in Grade 8 in 2002



Source: www.just4kids.org

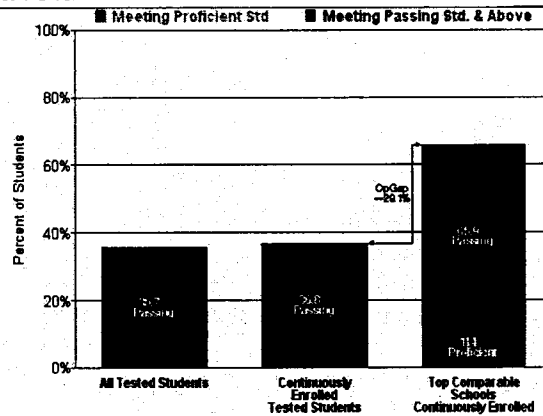
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Performance of Edge City High School with Previously Poorly-Prepared Students

2005 Student Performance in Grade 11 Mathematics
Students who were Below Proficient in Grade 8 in 2002



Source: www.just4kids.org

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Data Elements Required to Answer "School Effectiveness and Prior Achievement" Question

1. A unique statewide student identifier
2. Student-level enrollment, demographic and program participation information
3. The ability to match individual students' test records from year to year to measure academic growth
4. Information on untested students

According to the 2005 NCEA Survey of State Data Systems, twenty-one states have all of these elements

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Data Quality Campaign: Building Support and Political Will Among Policymakers to:

- Fully develop high-quality longitudinal data systems in every state by 2009
- Increase understanding and promote the valuable uses of longitudinal and financial data to improve student achievement
- Promote, develop, and use common data standards and efficient data transfer and exchange

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DQC Founding Partners

Achieve, Inc
Alliance for Excellent Education
Council of Chief State School Officers
The Education Trust
National Center for Educational Accountability*
National Center for Higher Education Mgt Systems
National Governors Assoc. Center for Best Practices
Schools Interoperability Framework Association
Standard & Poor's School Evaluation Services
State Higher Education Executive Officers

**The campaign is supported by The Bill & Melinda Gates Foundation and managed by the National Center for Educational Accountability.*

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Data Quality Campaign Approach

- Build Policymaker understanding and will to invest in and use quality data infrastructures
 - Success Stories
 - Recognition of leadership
- Provide tools, materials and information
 - Examples of the powerful use of data to inform policy & practice
 - ToolKits for various audiences on uses of data to improve achievement
- Create national forum to ensure collaboration, develop consensus and reduce duplication of effort
 - Leverage existing efforts to maximize impact
 - Collaborate/communicate through national partnership whenever possible
 - One-stop resource center: www.DataQualityCampaign.org

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Campaign Resources

www.DataQualityCampaign.org

- White Paper & Brochure on Building State Longitudinal Data Systems
- State Data Systems Survey Results
- Calendar of Data-Focused Events & Meetings
- Resource Center highlighting existing work on data quality and use
- Overview of the Campaign & Partners

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**National Center for
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