

STATE SCHOLARS INITIATIVE



A scholar today ... A success tomorrow!

State Scholars Initiative Data:

Successes and Challenges

College Access Challenge Grants (CACG) Meeting

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The State Scholars Initiative (SSI)

The goal of State Scholars Initiative is two fold:

- 1) Increase the number of high school students taking a rigorous course of study.**
- 2) Engage the business community in this endeavor.**

What is SSI?



- **SSI brings business leaders into the nation's classrooms**, where these leaders work with educators to motivate middle and high school students to take and complete a rigorous course of study.
- The course of study is patterned after the recommendations of the **National Commission on Excellence in Education**.

The State Scholars Initiative Network



Arizona
Arkansas
Connecticut
Indiana
Kentucky
Louisiana
Maryland
Massachusetts
Michigan
Mississippi
Missouri
Nebraska
New Hampshire
New Jersey
New Mexico
Oklahoma
Rhode Island
South Dakota
Tennessee
Utah
Virginia
Washington
West Virginia
Wyoming

The State Scholars core course of study recommends four years of English, three of math (algebra I and II, geometry), three of lab science (biology, chemistry, physics), three and a half of social studies (chosen from U.S. and world history, geography, economics, and government), and two of a language other than English.

State Scholars Initiative Data: Findings

Three types of state performance data:

- **Qualitative Information**

- successful business-education partnerships
- business engagement
- promising practices

- **Student Course Level**

- **Perception**

SSI Data: Course Enrollment

- 1,458,724 total student enrollments since Fall 2006
- Good foundation of cross-sectional data for five semesters:
 - Fall 06-07
 - Spring 06-07
 - Fall 07-08
 - Spring 07-08
 - Fall 08-09

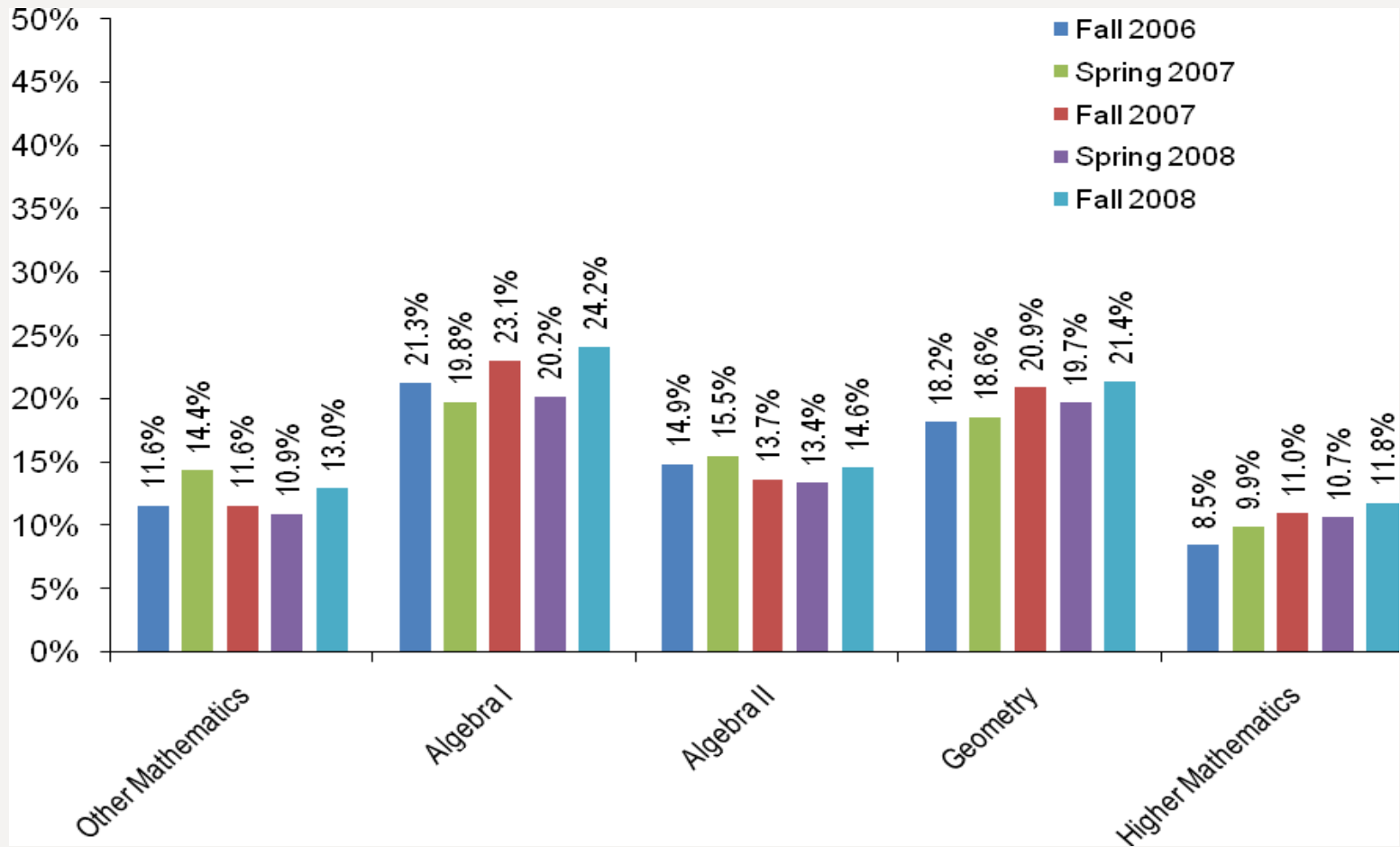
SSI Data: Course Enrollment

- Presumes that all students in a school district were participating in SSI
- No way to follow individual students therefore data is not longitudinal
- Due to data inconsistencies between and among school districts and states, only a subset of data could be analyzed

SSI Data: Course Enrollment

- Based on comparable data available as of March 10, 2009
- Includes 18 districts from four states
 - LA, MO, SD, VA
- School Year
 - 2006-07:18,136 students;191,581 courses
 - 2007-08:16,638 students; 186,417 courses
 - Fall 2008:14,610 students; 90,995 courses
 - Total: 49,384 students; 468,993 course enrollments

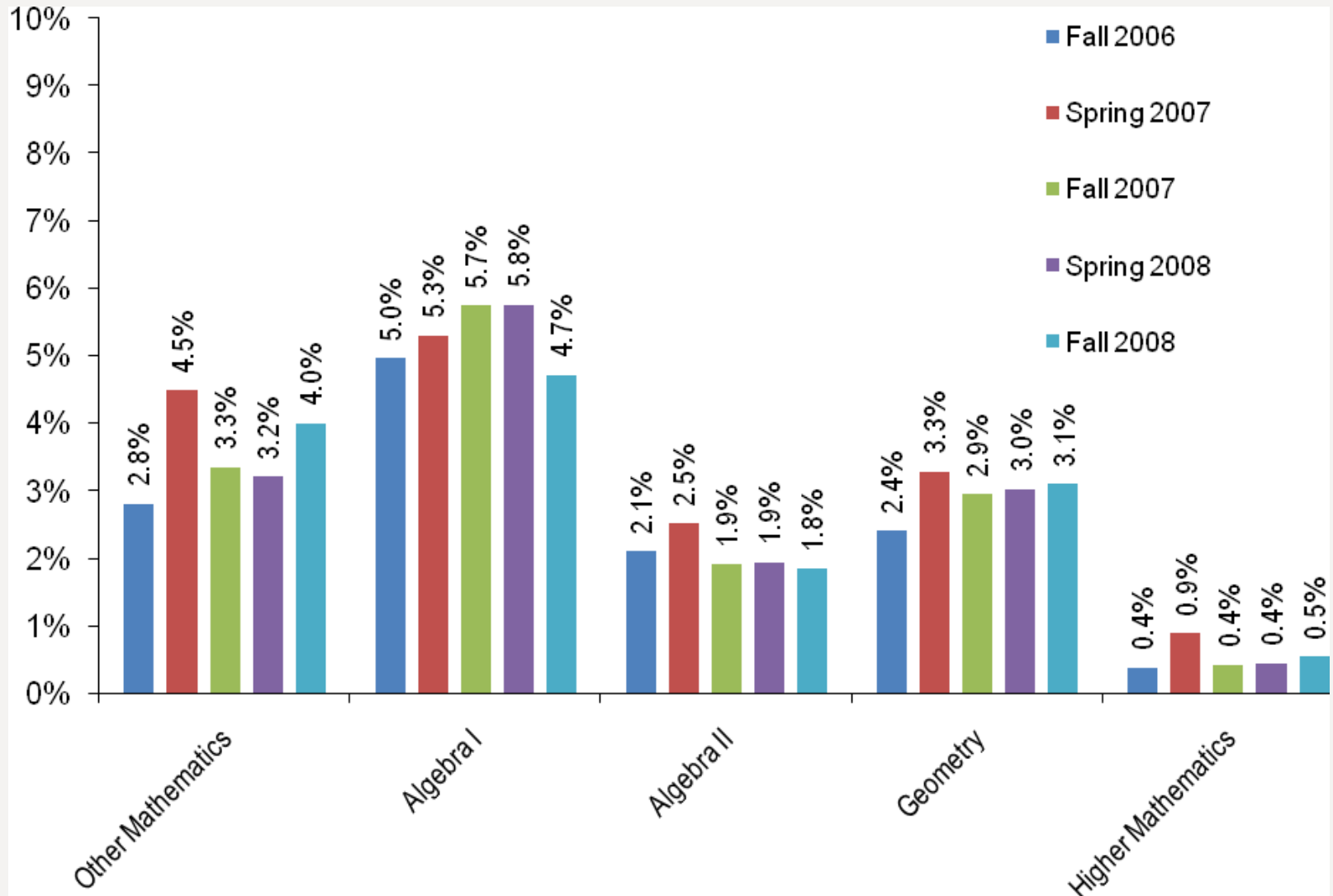
Comparison of SSI Enrollment All Grades (9th – 12th) 2006-07, 2007-08, and Fall 2008 - MATHEMATICS



SSI Mathematics Enrollment

- Algebra I increased steadily from a Fall 2006 enrollment of 21.3% to 23.1% in Fall 2007 to 24.2% in Fall 2008. Spring enrollments show slight decreases, probably a result of students dropping the class.
- Geometry, which is usually the second course in a mathematics sequence, also shows a modest but steady increase across the three Fall terms from 18.2% to 20.9% to 21.4%.
- Enrollments in algebra II remained steady across terms.
- An encouraging signal in these data is that the percent enrollment in other mathematics is showing some decrease and the percent enrolling in higher mathematics shows an upward trend, which could indicate that students are taking their mathematics courses earlier in high school.

Comparison of Failure Rates All Grades (9th – 12th) 2006-07, 2007-08, and Fall 2008 – MATHEMATICS

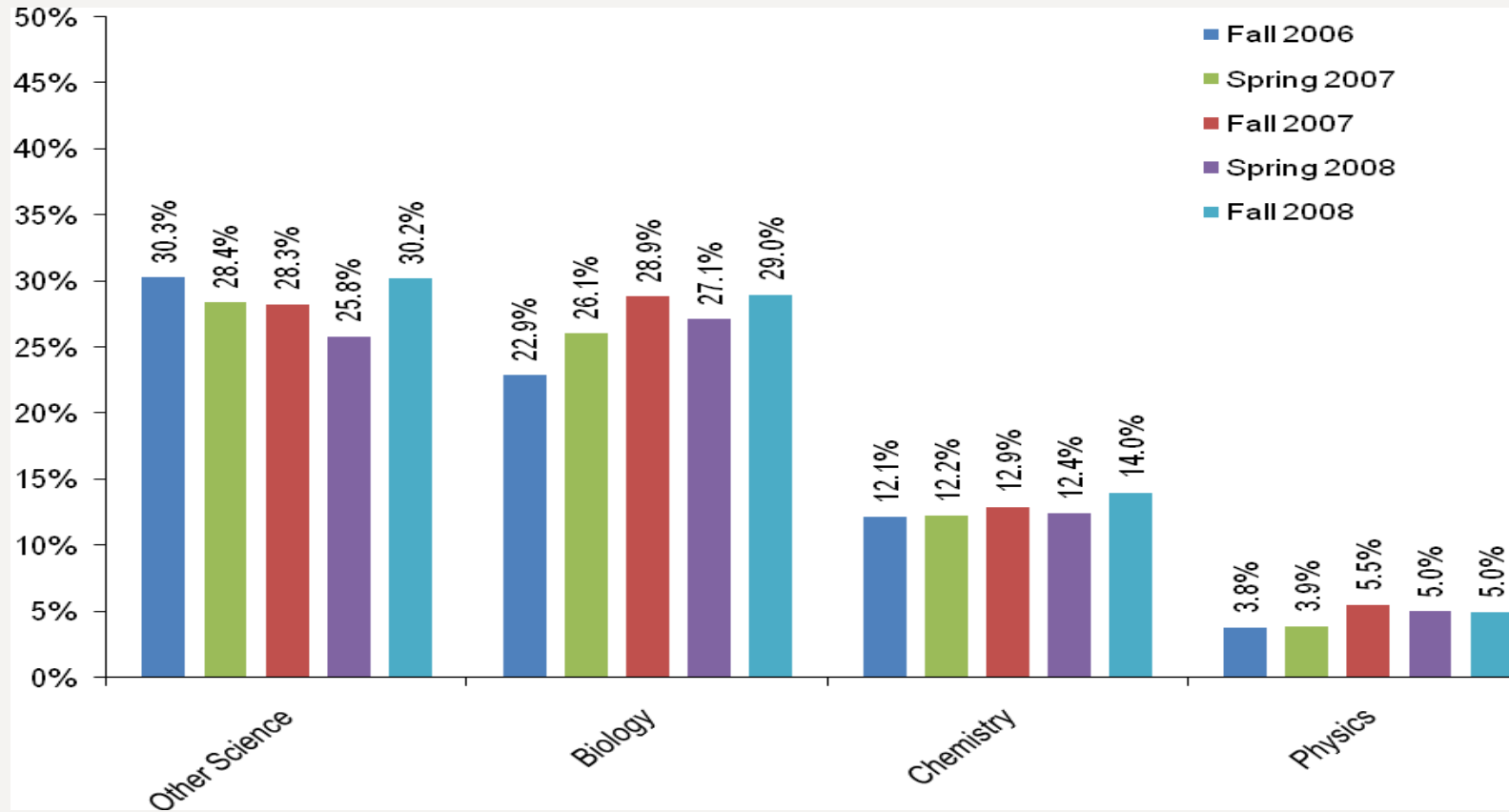


SSI Mathematics Failure Rates

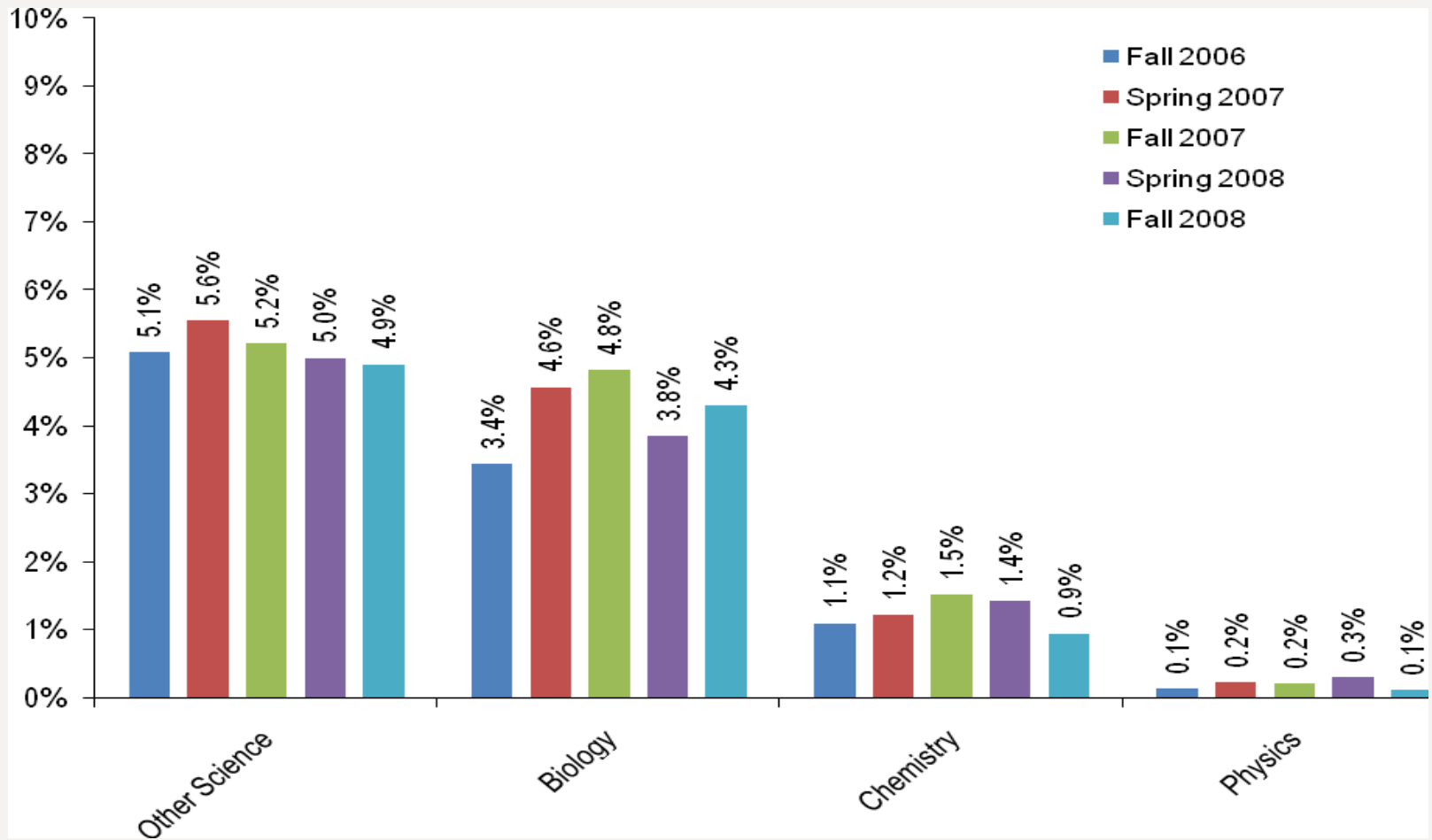
- Students failing or withdrawing from the various mathematics courses did not change dramatically from Fall 2006 through Fall 2008.
- It might be expected that if more students were encouraged to take mathematics courses above their current abilities the failure rates would increase as well.
- This phenomenon is not seen in data from these 18 districts in four SSI states.
- Although there is a small increase in rates for algebra I in Fall 2007 and Spring 2008, the failure rate returns to a more moderate level in Fall 2008.

Comparison of SSI Enrollment All Grades (9th – 12th) 2006-07, 2007-08, and Fall 2008 – SCIENCE

Based on comparable data available on 3/10/2009. Includes 18 districts from four states, Total N = 18,136 in 2006-07, Total N = 16,638 in 2007-08, and Total N = 14,610 in Fall 2008



Comparison of Failure Rates All Grades (9th – 12th) 2006-07, 2007-08, and Fall 2008 – SCIENCE



SSI Science Enrollment

- Enrollments in biology increased from 22.9% in Fall 2006 to 28.9% in Fall 2007 to 29.0% in Fall 2008.
- Similarly, chemistry increased gradually from 12.1% to 14.0% in that time frame.
- Physics enrollments increased from 3.8% in Fall 2006 to 5.5% in Fall 2007 but fell back slightly in Fall 2008 to 5.0%.
- Enrollments in other science decreased steadily from Fall 2006 to Spring 2008 but inexplicably increased again to 30.2% in Fall 2008.
- Only biology failure rates indicate much variation and even those rates are in a limited range (3.4% to 4.8%).

Lessons Learned

- Generally, there are as many data systems as there are **school districts** and **states**.
- Maryland >> 24 school districts
- Utah >> 95 school districts
- Tennessee >> 137 school districts
- Arizona >> 313 school districts

Lesson Learned cont.

- We are gathering course enrollment data; we have over 1.4 million course enrollments. BUT...
- Absence of student identifiers makes it difficult to know over time which students are taking which courses.
- We can't say with certainty: the number of course enrollments and the corresponding number of students.
 - Duplicate files are possible

Lessons Learned cont.

- Gathering student data is challenging
 - Personnel
 - Often, the school administrative assistant doubles as the school data contact.
 - Skilled staff are overburdened and hard to find
 - Data Infrastructure
 - Several issues and areas for improvement

Lessons Learned cont.

- State data systems are not necessarily the answer
 - In Utah, for example, the law stipulates that data can only be requested once a year. Determining semester by semester progress is difficult.
 - Turf issues persist. The agency responsible for maintaining a state's data system may not be willing to work with other agencies or groups.

Lessons Learned cont.

- Data systems are changed often
 - without sufficient planning
 - without training
 - without technical assistance
 - without understanding of how to transfer data from the previous system to the new system

Lessons Learned cont.

- Data systems are designed to answer administrative, not educational, questions
 - Ask: What is the gender of our bus drivers?
 - Answer: We know.
 - Ask: How many students are taking physics this semester versus last semester?
 - Answer: We probably don't know.

Lessons Learned

- Identifying courses is challenging
 - No unified method for coding courses
 - No method for which courses are assigned to a given course category
 - Integrated or multidisciplinary courses present special challenges
 - Some states only report whether a student has passed or failed; no grades are given

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