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SETON HALL UNIVERSITY
College of Education and Human Services
Department of Education Leadership, Management and Policy

K-12 COMPREHENSIVE DOCTORAL EXAMINATION

ELMP K-12 DOCTORAL PROGRAM

FALL 2011

EXAM DATE: NOVEMBER 4, 2011

Directions

Attached please find the K-12 Comprehensive Exam. The exam is divided into two main parts. In Part I, you are offered three questions and asked to answer two. In Part II, you are required to answer one Research question and all Statistics questions. Please indicate on each question answered, the number and title of the question (i.e. Question 2—Leadership, etc.)

- Before you begin, create a header for each page with your student ID number (found on the label of this envelope), the name of the exam you are taking (Comp K12) and today’s date.

- When you complete a section, insert a page break before starting the next section.

In developing your responses, be sure to organize them in a logically coherent way and to make optimal use of relevant/current research and literature applicable to each question.

Part I

Choose Two of Three Questions

1. Organization
2. Leadership
3. Curriculum

Part II

Answer Research and Statistics

4. Research – Answer one question
5. Statistics – Answer ALL questions
PART I

K-12 COMPREHENSIVE EXAM

Choose two of three questions from the subject areas below:

1. Organization
2. Leadership
3. Curriculum
K-12 COMPREHENSIVE EXAMINATION

PART I

1. ORGANIZATION

ORGANIZATIONAL STRUCTURES EXAM QUESTION

Examine the functions of the school principal or superintendent (choose only one perspective) and discuss how those functions relate to the theoretical and empirical research connections of the development of the four frames of structural, human resource, political, and symbolic.
2. LEADERSHIP

LEADERSHIP EXAM QUESTION

You are asked to prepare a critique of the following Educational Leadership professional journal article *Five Trends for Schools*. In so doing, be certain to include in your discussion the relationship of this article to current literature and related research on this topic. It is also important to employ the higher order thinking skills of analysis, synthesis and evaluation in writing your critique.
Educational Leadership

Summer 2007 | Volume 64
Best of Educational Leadership 2006-2007 Pages 8-13

Five Trends for Schools

Shelley Laskoff and Rose Maria Li

Schools in the United States grapple with change as demographics alter the education landscape.

On October 17, 2006, the U.S. population officially reached 300 million, double the nation’s population in 1950. The United States houses less than 5 percent of the world’s population, but it is the third most populous country in the world, after China (1.3 billion) and India (1.1 billion). The United States is expected to be the only developed country on the top-10 list of most populous countries by 2050 (U.S. Census Bureau, 2002a), at which point its population is expected to exceed 420 million.¹

In addition to the rapid growth of the U.S. population, there have been dramatic changes in the population’s composition in the last 50 years: Americans are growing older, more educated, and more diverse. These trends have implications for school districts in terms of enrollment levels, student characteristics, and the resources available for education. Five demographic trends in the United States are influencing school districts around the country.

TREND 1: The Enrollment Roller Coaster

As many long-time school administrators know firsthand, enrollment fluctuations can seem like a roller-coaster ride. U.S. enrollments increased throughout the 1950s and 1960s, peaked in 1970, and fell from the early 1970s through the mid-1980s. This caused many districts to close schools and reduce their teaching staffs. But then enrollment increases accelerated in the late 1980s and grew for the next decade, causing school districts to open new schools, reopen old ones, or otherwise cope with overcrowding.

By the late 1990s, elementary enrollments had leveled off (U.S. Census Bureau, 2007). Today, many districts are experiencing the results of the low birthrate of a decade ago. Most of the children born in 1997—a year that saw the fewest U.S. births in recent years—are now in 4th grade. In many districts, this will be the smallest cohort of students. A recent upward trend in U.S. births may reverse the elementary enrollment decline in a few years.

Meanwhile, many districts are experiencing a high school “bubble” as cohorts born around 1990 reach the high school grades. But high school enrollments will head downward during the next decade and then level off or inch up again, following the elementary trends.

U.S. birth patterns always have some effect on the nation’s school districts, but local conditions can sometimes overpower the national trend. Despite national increases in the number of children of high school age, enrollments did not increase in some urban areas. For example, in Oakland, California, the expected high school bubble never materialized because large numbers of families moved out of the area after the dot-com bust. And California’s Palo Alto Unified School District is experiencing higher—not lower—elementary enrollments due in part to the attractions of Stanford University and some of the state’s highest test-scoring public schools. Moreover, the district has seen an increase in immigrant Asian and Indian households, many of which have larger families than U.S.-born households.

Enrollment declines are often painful for districts, especially when the decline warrants school closures. In general, urban areas have been hardest hit, as families leave the cities and birthrates fall. Even if school buildings remain open, declining enrollments usually mean reduced funding for schools, which can result in teacher losses and program reductions.

TREND 2: Immigration and Diversity

Fertility and mortality rates are relatively low in the United States. When a nation reaches these low levels, which is the case in most developed countries, its population grows slowly and may even decline. At this point, immigration plays a crucial role in population growth.

In 2002, net migration to the United States (the difference between the numbers entering and leaving) was over one million, more than three times higher than the next highest-receiving countries: Afghanistan (300,000), which saw many refugees returning in 2002; Canada (190,000); Germany (160,000); Russia (140,000); United Kingdom (130,000); Italy (120,000); and Singapore (120,000; U.S. Census Bureau, 2002b).
The 1965 amendments to the U.S. Immigration and Nationality Act created a major shift in both the number of arrivals to the United States and their countries of origin, fueling increases in the numbers of entrants from Latin America and Asia. Moreover, once these populations arrive, family reunification laws make it likely that more people from these countries will follow.

In 1970, more than 60 percent of the nation’s 9.6 million foreign-born people originated in Europe, 19 percent in Latin America, 9 percent in Asia, and 10 percent in other areas. By 2000, only 15 percent of the 28.4 million foreign-born population came from Europe. More than half originated in Latin America—with Mexico accounting for more than half of this group—and more than one-quarter came from Asia (primarily from China, the Philippines, India, Vietnam, and Korea; U.S. Census Bureau, 2002a).

Immigrants continue to be attracted to a handful of states—California, New York, Florida, Texas, New Jersey, and Illinois—and half of the nation’s foreign-born population resided in five metropolitan areas in 2000—Los Angeles, New York, San Francisco, Miami, and Chicago (U.S. Census Bureau, 2002a). However, since 2000, the long-standing concentration of Hispanics and Asians in port-of-entry metropolitan areas has been eroding as these two groups disperse inland toward more suburban metropolitan areas (Frey, 2006) and new immigrant hot spots, such as North Carolina, Georgia, and Nevada (Martin & Higley, 2006).

The advantages and challenges of an ethnically diverse population are being felt throughout the United States. A diverse U.S. population may engender an entrepreneurial spirit and fresh perspectives conducive to new discoveries and approaches. At the same time, the recent influx of Hispanics and Asians to the United States has resulted in greater demands for social and education services, including English as a second language (ESL) instruction. The 2000 Census reported 380 categories of single languages or language families other than English spoken at home. Spanish is the most common, with more than 28 million speakers among the U.S. population 5 years and older, followed by Chinese (2 million); French (1.6 million); German (1.4 million); and Tagalog (1.2 million; Shin & Bruno, 2003).

In 2004, 9.9 million school-age children (ages 5–17) spoke a language other than English at home, representing 19 percent of all children in this age-group, a 9 percent increase from 3.7 million in 1979 (U.S. Department of Education, 2006). More than 67 percent of Hispanic children and almost 63 percent of Asian/Pacific Islander children spoke a language other than English at home, compared with only about 5 percent of their white and black counterparts. Of the children who spoke a language other than English at home in 2004, a disproportionate share were U.S.-born or naturalized U.S. citizens (81 percent); poor or near-poor (57 percent); and living in the West (40 percent) and South (29 percent) of the United States. About 2.8 million, or 28 percent of children who spoke a language other than English at home, reportedly spoke English less than "very well."

Virtually all children and grandchildren of immigrants accept the necessity of learning English (Alba, Logan, Lutz, & Suits, 2002). On the other hand, children in immigrant families are well positioned to become proficient bilingual speakers, for which there is a growing need in an increasingly multilingual world. From one-quarter to more than one-half of children in immigrant families speak English well, and, at the same time, speak a language other than English at home (Hernandez & Denton, 2005). In 2000, 92 percent of the U.S. population ages 5 and older had no difficulty speaking English (Shin & Bruno, 2003).

An often-overlooked characteristic of migration is that immigrant populations generally assimilate rapidly. Research has shown that second- and third-generation children assimilate on several economic and social measures, such as learning English at young ages, closing the college attendance gap with native-born whites, and achieving more than 50 percent home ownership in middle age.

In terms of residential segregation, generational status also makes a difference. Although immigrants tend to cluster in neighborhoods, second-generation Hispanic adults are about half as clustered as their parents, whereas many Asian groups are even more integrated into the general population. This suggests that ethnicity has less of an effect on indicators of economic and social well-being than does generation, age of arrival, or country of birth (Myers, 2007). Also, the continual flow of new immigrants might mask the fact that Hispanics and Asians are assimilating. Some third- and greater-generation Hispanics may not even identify themselves as Hispanics, further complicating efforts to measure assimilation.

**TREND 3: The Varied Home Front**

Three family characteristics in the United States materially influence a child’s situation: the presence of married parents in the household, poverty, and secure parental employment. Children who live with two married parents generally have access to better economic and social resources and experience more favorable health and education outcomes (Carlson, 2006; Fields & Smith, 1998). Today, more than two-thirds of children ages 0–17 live in households with two married parents. The percentage has been stable since the mid-1990s but with striking and persistent differences by race and ethnicity (Federal Interagency Forum on Child and Family Statistics, 2006). In 2005, 76 percent of white-alone, non-Hispanic children lived with two married parents, compared with 35 percent of black-alone children and 65 percent of Hispanic children (who may be of any race). For at least the past decade, children with one or more foreign-born parents were more likely to live in two-parent households (81 percent in 2005) than native-born children (68 percent in 2005; Federal Interagency Forum on Child and Family Statistics, 2006).

Children in married-couple families are much less likely to live in poverty than children living with only one parent. In 2004, 9 percent of children in married-couple families lived below the poverty
threshold, compared with 42 percent of children in single-mother families (Federal Interagency Forum on Child and Family Statistics, 2006). Nationally, 17 percent of children under age 18 lived in families with incomes below the poverty threshold.

The proportion living below poverty generally has declined for all household types nationally since the 1990s. This is good news because economic deprivation is associated with a variety of poor outcomes for children at all stages of development, from low birth weight to problems with cognitive development, school achievement, and emotional well-being (Duncan & Brooks-Gunn, 1997).

The period between 1980 and 2004 saw a steady increase in the percentage of children who lived with at least one parent who worked full-time year-round (Federal Interagency Forum on Child and Family Statistics, 2006). Of children living in families with two parents, the percentage with both parents working full-time year-round increased from 17 percent in 1980 to 33 percent in 2000. Since 2000, however, the percentage has slightly dropped.

An increase in parental employment may be a mixed blessing. When both parents work full-time, the family has greater economic resources, and parents may share childcare responsibilities. However, the family's schedule may be more stressful, and parents may be less nurturing, less emotionally available, and less likely to set limits for their children (Schor, 1995).

To improve student performance, schools may need to look increasingly beyond the academic curriculum and offer support to children of working parents outside of normal school hours. This might take the form of after-school enrichment opportunities, organized athletic activities, or meaningful volunteer or community-service projects. Support would also include high-quality child care before and after school, particularly for elementary school students.

**TREND 4: An Aging Population**

The baby-boom generation will soon reach retirement age. The 55- to 64-year-old population group is projected to be the fastest-growing segment of the U.S. adult population during the next decade. By 2030, the over-65 population will most likely be twice as large as its 2000 counterpart, growing to 70.6 million, or nearly 20 percent of the total U.S. population.

Americans are living longer than ever before. A baby born in 2004 can expect to live almost 78 years, up from 71 years in 1970 (National Center for Health Statistics, 2006). Despite such impressive gains in survival, racial/ethnic and gender disparities persist, although they have narrowed. By far, the largest variation in death rates is by education attainment: In 2002, the age-adjusted death rate for people with fewer than 12 years of schooling was four times higher than that for people ages 25-64 with at least 13 years of schooling (National Center for Health Statistics, 2003).

Each succeeding cohort of older individuals has higher education attainment. Today, 19 percent of people age 65 and over have a college education, compared with only 5 percent of that age-group in 1965. And the trend continues: When the baby-boom generation retires, more than 30 percent will have been college educated (Federal Interagency Forum on Child and Family Statistics, 2006). Higher levels of education are usually associated with higher incomes, higher standards of living, above-average health, and longer life expectancy.

The aging of the population necessarily offers challenges for schools. First, districts may lose a large proportion of their most-experienced teachers and administrators during the next two decades. In anticipation of potential labor shortages in K-12 districts, various colleges and some states are developing new programs to encourage second careers in teaching (Poster, 2003). For example, Virginia's community colleges are providing a statewide "career switcher" initiative. Second, an aging population could diminish school funding for education because older and childless voters are generally less supportive of public school funding than are voters with school-age children (Poterba, 1998). In California, most districts exempt seniors from special local parcel or bond taxes. In close elections, this helps ameliorate the potentially negative senior vote on school funding initiatives. Districts in other states with significant proportions of older residents may want to consider adopting similar approaches to protect school budgets.

But the soon-to-retire baby boomers also offer great opportunities for schools. Well-educated, committed, and healthy, many could serve as volunteers in local communities or embark on second careers as teachers and school administrators. Retiree volunteers could help boost a declining education workforce (see The Longevity Dividend, p. 14). The flexibility of part-time work and creative job situations may appeal to prospective teachers in this age-group.

**TREND 5: Obesity**

Despite the generally positive circumstances of older Americans, unaddressed health issues foreshadow potential problems. Between 1999 and 2002, almost two-thirds of adults (ages 20-74) were considered overweight; almost one-third were considered obese; (National Center for Health Statistics, 2005).

This problem begins in childhood for many people. According to data from the 1999–2002 National Health and Nutrition Examination Surveys, which collect data from physical examinations throughout the United States, nearly 16 percent of children were considered obese (National Center for Health Statistics, 2005). The historical trend is troublesome; only 4 percent of children were considered obese in the early 1970s. The high percentage of Americans who are physically inactive raises significant concerns because overweight and obesity are risk factors for many chronic diseases and disabilities, including heart disease, hypertension, diabetes, some types of cancers, and back pain. To counter these trends and help establish health-promoting habits early in life, schools should consider placing greater emphasis on health programs, nutrition, and
physical activity during the elementary school years.

The Two Ends of the Spectrum

Compared with 20 years ago, the average child entering school today is less likely to live in a family with two married parents but is more likely to have a living grandparent, reside in a nonpoor family with secure parental employment, encounter classmates of other races and ethnicities who speak a language other than English at home, and become obese. At the other end of the age spectrum, older adults in the United States are, on average, more educated and can expect to live longer and be healthier than previous generations. As involved community members, older adults can serve as intergenerational role models. They can also help schools face the challenges of the 21st century by sharing their skills and experiences and contributing to improving school and after-school learning environments in their neighborhoods.

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The Longevity Dividend

With the growth of an elderly population destined to live longer and healthier, it makes sense to harness the experience and social capital of older adults—not just for the benefit of future generations but also for their own good health. One key to successful psychological aging is "generativity," the opportunity to leave the world better for future generations through productive, meaningful engagement (Fried et al., 2004). Generative roles not only give meaning and purpose but also provide social engagement, which has been shown to maintain cognition, decrease disability, and delay mortality. Findings also indicate that loneliness has implications for health (Cacioppo et al., 2002).

The challenge for our aging society is to provide opportunities for the elderly to engage in meaningful roles after retirement. Experience Corps (www.experiencecorps.org) does just that (see “The Value of Experience,” Educational Leadership, March 2005). Launched in 1995, the program seeks to:

- Channel the talent and energy of growing numbers of older adults into public and community service.
- Provide significant benefits for the older people who participate.
- Achieve real outcomes in the community.

Now active in 19 U.S. cities, the program enlists volunteers ages 55 years and older to serve in public elementary schools (grades K–3).

Volunteers ideally commit to at least 15 hours each week for a full school year and are paid a monthly stipend to cover expenses. Experience Corps projects place a critical mass of tutors and mentors at each school so that the presence of the older adults influences the climate of the entire school. Volunteers are involved in academic support (literacy, math, and computer support; working in school libraries); behavioral support (conflict resolution, positive attention); school attendance, parental outreach, and public health (asthma cub).

Initial results suggest that high-intensity volunteering can lead to improvements in the level of physical activity among previously physically inactive volunteers. The program also can lead to meaningful improvements in student reading scores and to a reduction in student behavior problems. Moreover, as Experience Corps members engage with students and teachers and take on key leadership roles, they create healthier and more positive perceptions about aging in the schools and communities in which they work.

References


References


Endnotes

1 In contrast, the population in more than half of the world's developed countries is expected to decline over the next 50 years. By 2050, Germany's current population of 82 million and Japan's current population of 127 million are expected to fall below 74 million and 100 million, respectively (U.S. Census Bureau, 2006).

2 The "white-alone" and "black-alone" categories refer to those who indicate only one racial category.

3 For adults, obese is defined as a body mass index greater than or equal to 30; overweight (including obese) is a body mass index greater than or equal to 25.

Editor's Note: This article originally appeared in the March 2007 issue of Educational Leadership.

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K-12 COMPREHENSIVE EXAMINATION

PART I (Con’t)

3. CURRICULUM

CURRICULUM EXAM QUESTION

You are asked to prepare a critique of the following Curriculum Technology professional journal article, *Curriculum Mapping as Professional Development*. In so doing, be certain to include in your discussion the relationship of this article to current literature and related research on this topic. It is also important to employ the higher order thinking skills of analysis, synthesis and evaluation in writing your critique.
Curriculum Mapping as Professional Development
Using Maps to Jump-Start Collaboration

Michael S. Mills

To make sure students have a high-quality education, instructional leaders must now more than ever take up the charge to redesign professional development into a bold, substantive use of time for veteran and novice teachers alike. Curriculum mapping is one powerful way to sharpen teachers' curriculum-design and teaching skills while promoting collaboration across subjects and grade levels.

Mapping, a system of curriculum analysis and alignment, has been cited as a valuable component of curriculum renewal and staff development (English, 1983; Jacobs, 1997). Foremost, curriculum mapping offers the much-needed flexibility to address the changing curricular needs of school districts. Its reliance on a broad range of teacher participation also strengthens any efforts to restructure the curriculum of a school or district.

Our ongoing project at Sheridan High School in Sheridan, Ark., outside Little Rock, involves mapping the school's entire curriculum so that every person involved in the educational process—students, parents, teachers, administrators, and others—can have an overview of what we teach. Part of this project, which began in the 2001–02 school year, calls for teachers from different disciplines to review each subject area's map. This enables subject instructors to see where their own curriculum might coordinate with the math department's objectives, or allows English teachers to see where they might help a history teacher who has assigned a research paper. A dynamic and data-driven model of learning, curriculum mapping can replace the often unused and dusty curriculum guides on teachers' shelves.

Lesson Planning and Reflection
To ensure success for all students, schools should be committed to regular planning of and reflection upon what is taught. At the beginning of each six-week teaching period, faculty members at Sheridan complete a lesson plan template outlining what they will teach. The formatted lesson plan includes the following:

- Content and skills to be covered.
- State subject area and learning standards to be mastered.
- Assessment strategies.
- Essential questions, which serve as the scope and sequence of a unit.

Using the formatted lesson plan as an overview, the teachers then create their daily lesson plans. At the end of each month, teachers reflect upon what they outlined in the formatted lesson plan and then create a curriculum map of what they actually taught.

For example, a formatted lesson plan for teaching Hamlet might contain the following:

- Content—the play itself.
• Related skills and state standards—write a coherent, unified essay that focuses on one of the curriculum's essential questions, such as "How is the concept of existentialism expressed in Shakespeare's Hamlet?"

• Assessment—an open-response prompt with an excerpt from the play, which will also give students practice with similar questions in an 11th grade end-of-course literacy test.

Creating the Curriculum Map
The curriculum map has the same components as the formatted lesson plan. If a teacher has kept to the plan, creating the map becomes a matter of cutting and pasting from one computer file to another. More often than not, however, gaps in or additions to the actual instruction will appear on the map.

Just as formatted lesson plans represent an intention of what is to be taught, maps are the reality of what has been taught (Jacobs, 1997). Once the formatted lesson plans exist, the instruction has taken place, and each teacher has completed a map of what he actually taught, the faculty can then compare the curriculum in various ways: within a subject area or department, across all disciplines, or across grade levels. This process of comparing, referred to as articulation, usually reveals repetition or gaps in the curriculum. For example, if a 9th grade algebra teacher and a 10th grade geometry teacher are both teaching polynomials, articulation reveals the repetition and raises the question about why the topic is being taught twice. Articulation also helps to determine whether what a teacher says she's teaching is what her students are actually learning by revealing topics or skills, across grade levels, where remediation most often occurs.

It is essential that all teachers be involved in this formal process of curriculum realignment and articulation. Teachers' collaboration with their peers promotes a commitment to adhering to specific state and organizational curriculum frameworks and to a team approach to teaching all students in all disciplines.

Beginning the curriculum mapping process can be difficult across a school district. In Sheridan, for example, schools are grouped into four levels—elementary, intermediate, junior high, and high school—and each is working at mapping at a different rate. There is also the issue of sharing maps unless they are accessible in a central database. Adopting a systematic yet flexible process is vital to counteract nonprogressive sentiments and the false sense of autonomy of many teachers, particularly those in the secondary school settings (Jacobs, 2001). Curricular isolation does not fit with a 21st century school model; subjects are much too interrelated for teachers to be entrenched in autonomous and unilateral curriculum decisions.

Therefore, planning the stages of the mapping project before teachers actually map is crucial. Whether the mapping is to take place on a district or school level, its organizers will need to establish structures for collecting, reviewing, reflecting on, and collaboratively using the curriculum information that will be forthcoming.

To bring about real and sustained improvement in student learning and achievement, educators must primarily rely on cold, hard data that can be seen side by side with curriculum maps. Instructional leaders may claim that a particular program is successful, but they should also ask, Successful to what end? If the goal is to improve student achievement on state benchmarks, do educators make sure that subtest scores are analyzed? Does the school know how to interpret the results and share them with parents and other stakeholders? For these and other questions, instructional leaders must continually assess how professional development can integrate data collection with the mapping process.

Refining the Process
Instructional leaders should also evaluate and note the efficiency and relative success of each professional development session during the mapping process and make improvements from those observations. At one all-day cross-curricular mapping session, leaders hosted a working lunch to help teachers stay on task, ease personal tensions, and avoid extending the working day.

Data-driven analysis is the main benefit of mapping. Ideally, a computer database would help teachers and administrators establish and assess meaningful activities and programs in a timely and efficient way. A central database, which Sheridan High School does not yet have, would also permit easy collaboration with other schools in the district.

Mapping also gives credence to what teachers do and validates the curriculum. Inherent in the success of the mapping process is knowing where students are supposed to be going in coverage
of content and to what extent they have reached their objectives. Curriculum maps can help
guide students and show teachers that what they are teaching is actually being learned and used.
Collaboration through critical feedback based on data is vital to the success of the student as
learner and the teacher as teacher (Costa & Kallick, 1993).

Making Mapping Part of the School Culture
A long-term commitment to mapping can come only by infusing the process into the culture of
the school. Commitment is developed when teachers understand the workings and the value
of the process. At Sheridan, we insisted that the mapping process could not be rushed. This idea of
acclimating everybody to the idea is vital; after all, it can be jarring for a veteran teacher to do
something different after two decades of established routines. In our first year, teachers just
drew up individual maps, which eased them into the process. Encouragement also came in the
form of professional leave time, inservice training, and guided departmental meetings. Teachers
thus had the opportunity to view mapping not as a passing educational fad but as a working
model of curriculum alignment and articulation that ultimately makes better use of teacher time
and school resources.

Mapping Tips
The following suggestions can give schools a solid start on the road of
curriculum mapping:

• **Have teachers lead the process.** At Sheridan, teachers as curriculum
coaches are instructional leaders. Several teachers even volunteered to
get the information on mapping on their own time during spring break.
Their leadership lent credibility to the mapping process so it was not
perceived as a “top-down” activity.

• **Don’t rush, and be flexible.** Don’t fall in love with the process. Be
willing to modify anything, whether it is a data entry form, a submission
policy for maps, or a decision about how subject area teachers can best
collaborate. Flexibility makes the mapping program more realistic and
inviting. For example, Sheridan allowed the math department teachers to
move ahead at a faster rate because of earlier work they had done in
curriculum alignment.

• **Use technology.** Using computerized document templates or a
comprehensive database will ultimately pay off in reduced data entry time
and dissemination of mapping findings.

• **Focus on long-term progress.** Mapping is a continuous, long-term
commitment. There should never be a final document from this practice
that cements the curriculum. Curriculum planning is continuous and
dynamic—don’t ever forget that.

References
*Educational Leadership*, 51(2), 49–51.

Alexandria, VA: Association for Supervision and Curriculum Development.

Alexandria, VA: Association for Supervision and Curriculum Development.

Arkansas standards.* Presentation by Curriculum Designers, Inc., Little Rock, AR.

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leadership with a focus on curriculum and current events. Mills can be contacted at rmichaelmills@sheridancsd.net.
PART II

K-12 COMPREHENSIVE EXAM

(Answer Both Questions)

4. RESEARCH
   (Answer one question)

5. STATISTICS
   (Answer ALL questions)
Comprehensive Examination

Fall 2011

Research and Statistics

You Must Answer One of the Research Questions and all Four Statistics Questions.

Research Question

Choose one question from the three research topics listed below. In your description of the proposed research study include the following: 1) A clear problem statement; 2) the purpose of the study; 3) the research questions; 4) your proposed research design; 4) description of the population; 5) description of sample or subjects; 6) description of instrument to include instrument development, reliability and validity; 7) data collection strategy and 8) data analytical approach.

Research Topics

1) Reasons for the decline in the number of educators assuming the principalship role.
2) Understanding school culture in charter schools.
3) Do small schools work?

Statistics

Background Information: The data in the statistical outputs come from a study of 1100 students in 12 schools in the Bronx. Half of these students were randomly assigned to receive an abstinence only curriculum in their health classes; and half to receive their regular health curriculum. Use the following information on the variables to answer the questions.

<table>
<thead>
<tr>
<th>Name of Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental condition (Var 00001)</td>
<td>Students randomized to two conditions. Dummy coded: 0=Control regular health class without an abstinence curriculum infused; 1=Experimental condition in which an abstinence-only curriculum is taught in the health classes</td>
</tr>
<tr>
<td>Grade Level</td>
<td>Grade 6, Grade 7</td>
</tr>
<tr>
<td>I can say &quot;no&quot; to activities that I think are wrong</td>
<td>Scaled, the higher the value the more confident students are that they can say no to activities that they think are wrong</td>
</tr>
<tr>
<td>I will give up my happiness now so that I can get what I want in the future</td>
<td>Scaled, the higher the value, the more confident students are that they can defer their happiness</td>
</tr>
<tr>
<td>Are you a girl or a boy?</td>
<td>Dummy coded: 0=male; 1=female</td>
</tr>
<tr>
<td>How old are you?</td>
<td>Students' age in years</td>
</tr>
<tr>
<td>It's pretty hard for my friends to try to change my mind.</td>
<td>Scaled, the higher the value, the more likely students are to agree with the statement</td>
</tr>
<tr>
<td>How important is it for you to not have sex until marriage?</td>
<td>Scaled, the higher the value, the more likely students are to say it is important.</td>
</tr>
<tr>
<td>You can say no to sex even if the other person says they will break up with you if you don't have sex</td>
<td>Scaled, the higher the value the more confident students are that they can say no</td>
</tr>
</tbody>
</table>
Statistics Questions

Question 1: Provide a discussion on the models in Output 1. Which model provides the best explanation of the dependent variable?

Question 2: How do the predictors in Output 2 influence the dependent variable?

Question 3: How do the main effects and the interaction effect explain the dependent variable in OUTPUT 3?

Question 4: The federal government has invested heavily in teenage pregnancy prevention programs. Many of these programs are implemented in school settings. The outputs that you have analyzed have provided you with data on the association between several variables and a number of dependent variables. Based on your analysis of the three outputs, what recommendations if any, would you have to share with policymakers?
Regression- OUTPUT 1

### Variables Entered/Removed

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Are you a girl or a boy?, How old are you?(^a)</td>
<td></td>
<td>Enter</td>
</tr>
<tr>
<td>2</td>
<td>It's pretty hard for my friends to get me to change my mind(^a)</td>
<td></td>
<td>Enter</td>
</tr>
<tr>
<td>3</td>
<td>VAR000001(^a)</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. All requested variables entered.

b. Dependent Variable: I will give up my happiness now so that I can get what I want in the future

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.145(^a)</td>
<td>.021</td>
<td>.019</td>
<td>20.210</td>
<td>.021</td>
<td>11.961</td>
<td>2</td>
<td>1112</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.399(^b)</td>
<td>.159</td>
<td>.157</td>
<td>18.738</td>
<td>.138</td>
<td>182.545</td>
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<tr>
<td>3</td>
<td>.404(^c)</td>
<td>.163</td>
<td>.160</td>
<td>18.705</td>
<td>.004</td>
<td>4.987</td>
<td>1</td>
<td>1110</td>
<td>.026</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Are you a girl or a boy?, How old are you?
b. Predictors: (Constant), Are you a girl or a boy?, How old are you?, It's pretty hard for my friends to get me to change my mind

c. Predictors: (Constant), Are you a girl or a boy?, How old are you?, It's pretty hard for my friends to get me to change my mind, VAR00001

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>11.961</td>
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<td>Residual</td>
<td>454183.571</td>
<td>1112</td>
<td>408.438</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>463954.344</td>
<td>1114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Regression</td>
<td>73865.179</td>
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<td>24621.726</td>
<td>70.124</td>
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<td></td>
<td>Residual</td>
<td>390089.166</td>
<td>1111</td>
<td>351.115</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>463954.344</td>
<td>1114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Regression</td>
<td>75609.802</td>
<td>4</td>
<td>18902.450</td>
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<td>Residual</td>
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<td></td>
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</tbody>
</table>

a. Predictors: (Constant), Are you a girl or a boy?, How old are you?

b. Predictors: (Constant), Are you a girl or a boy?, How old are you?, It's pretty hard for my friends to get me to change my mind

c. Predictors: (Constant), Are you a girl or a boy?, How old are you?, It's pretty hard for my friends to get me to change my mind, VAR00001

d. Dependant Variable: I will give up my happiness now so that I can get what I want in the future

-10-
OUTPUT 2

Regression

[DataSet1] F:\2010mergedflap.sav

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>You can say no to sex even if the other person says they will break up with you if you don't have sex, VAR00001&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. All requested variables entered.
b. How important is it for you to not have sex until marriage?

---

**Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.317&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.100</td>
<td>.099</td>
<td>13.794</td>
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a. Predictors: (Constant), You can say no to sex even if the other person says they will break up with you if you don't have sex, VAR00001
### ANOVA

<table>
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<th>Model</th>
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<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
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<tr>
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<td>11813.715</td>
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<tr>
<td>Residual</td>
<td>211583.104</td>
<td>1112</td>
<td>190.273</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>235210.535</td>
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<td></td>
<td></td>
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a. Predictors: (Constant), You can say no to sex even if the other person says they will break up with you if you don’t have sex, VAR00001

b. Dependent Variable: How important is it for you to not have sex until marriage?

### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>3.954</td>
<td>.643</td>
<td>6.145</td>
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</tr>
<tr>
<td>VAR00001</td>
<td>-1.981</td>
<td>.833</td>
<td>-2.378</td>
<td>.018</td>
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<tr>
<td>You can say no to sex even if the other person says they will break up with you if you don’t have sex</td>
<td>.193</td>
<td>.018</td>
<td>.309</td>
<td>10.880</td>
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</table>

a. Dependent Variable: How important is it for you to not have sex until marriage?
OUTPUT 3

### Between-Subjects Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>N</th>
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<tr>
<td>Grade level 6</td>
<td>542</td>
</tr>
<tr>
<td>7</td>
<td>573</td>
</tr>
<tr>
<td>VAR000001 .00</td>
<td>487</td>
</tr>
<tr>
<td>1.00</td>
<td>628</td>
</tr>
</tbody>
</table>

---

### Descriptive Statistics

**Dependent Variable:** I can say "No" to activities that I think are wrong.

<table>
<thead>
<tr>
<th>Grade level</th>
<th>VAR000001</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
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<tbody>
<tr>
<td>6 .00</td>
<td>14.21</td>
<td>32.023</td>
<td></td>
<td>263</td>
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<tr>
<td>1.00</td>
<td>13.48</td>
<td>31.228</td>
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<tr>
<td>Total 13.83</td>
<td>31.569</td>
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<tr>
<td>7 .00</td>
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<td>25.986</td>
<td></td>
<td>224</td>
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<tr>
<td>1.00</td>
<td>17.21</td>
<td>35.029</td>
<td></td>
<td>349</td>
</tr>
<tr>
<td>Total 14.20</td>
<td>31.999</td>
<td></td>
<td>573</td>
<td></td>
</tr>
<tr>
<td>Total .00</td>
<td>12.04</td>
<td>29.465</td>
<td></td>
<td>487</td>
</tr>
<tr>
<td>1.00</td>
<td>15.55</td>
<td>33.420</td>
<td></td>
<td>628</td>
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<tr>
<td>Total 14.02</td>
<td>31.787</td>
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</table>
Tests of Between-Subjects Effects

Dependent Variable: I can say "No" to activities that I think are wrong.

<table>
<thead>
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<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>8213.666a</td>
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<td>2737.889</td>
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<tr>
<td>Intercept</td>
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<td>.000</td>
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<tr>
<td>Grade</td>
<td>63.820</td>
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<td>.063</td>
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<tr>
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<td>3.294</td>
<td>.070</td>
</tr>
<tr>
<td>Grade * VAR00001</td>
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<td>4832.036</td>
<td>4.804</td>
<td>.029</td>
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<td>Error</td>
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<td>1005.749</td>
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</tr>
<tr>
<td>Total</td>
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<tr>
<td>Corrected Total</td>
<td>1125600.526</td>
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<td></td>
</tr>
</tbody>
</table>

a. R Squared = .007 (Adjusted R Squared = .005)

Estimated Marginal Means

1. Grade level

Dependent Variable: I can say "No" to activities that I think are wrong.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>6</td>
<td>13.843</td>
<td>1.363</td>
<td>11.169</td>
</tr>
<tr>
<td>7</td>
<td>13.358</td>
<td>1.358</td>
<td>10.695</td>
</tr>
</tbody>
</table>
2. VAR00001

Dependent Variable: I can say "No" to activities that I think are wrong.

<table>
<thead>
<tr>
<th>VAR00001</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>11.855</td>
<td>1.442</td>
<td>9.026</td>
</tr>
<tr>
<td>1.00</td>
<td>15.346</td>
<td>1.273</td>
<td>12.848</td>
</tr>
</tbody>
</table>

3. Grade level * VAR00001

Dependent Variable: I can say "No" to activities that I think are wrong.

<table>
<thead>
<tr>
<th>Grade level</th>
<th>VAR00001</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>0.00</td>
<td>14.205</td>
<td>1.956</td>
<td>10.368</td>
</tr>
<tr>
<td>6</td>
<td>1.00</td>
<td>13.480</td>
<td>1.899</td>
<td>9.755</td>
</tr>
<tr>
<td>7</td>
<td>0.00</td>
<td>9.504</td>
<td>2.119</td>
<td>5.347</td>
</tr>
<tr>
<td>7</td>
<td>1.00</td>
<td>17.212</td>
<td>1.698</td>
<td>13.881</td>
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</tbody>
</table>
Estimated Marginal Means of I can say "No" to activities that I think are wrong.