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

K-12 QUALIFYING DOCTORAL EXAMINATION

ELMP K-12 DOCTORAL PROGRAM

EXAM DATE: OCTOBER 31, 2014

Directions

ALL STUDENTS MUST ‘SUBSTANTIALLY’ ANSWER ALL QUESTIONS AS INDICATED IN THE EXAM INSTRUCTIONS OR RISK FAILURE OF THE ENTIRE EXAM

Attached please find the K-12 Qualifying Exam. There are five (5) sections as outlined below.

• 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 [Qual K12] and today’s date.

• Answer one question in each of the Sections I - IV and all questions in Section V.

• Paginate your exam and insert a page break before starting each section.

• Please indicate on each question answered, the number and title of that question. (i.e. Question 2 – Policy)

You must answer all five sections below. 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.

I. CURRICULUM

II. POLICY PERSPECTIVES

III. ORGANIZATION

IV. RESEARCH

V. STATISTICS
I. CURRICULUM

You are asked to prepare a critique of the following professional journal article. 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 science instructors to see where their own curriculum might coordinate with the math department's objectives, or allows English teachers to see when 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 he’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 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


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leadership with a focus on curriculum and current events. Mills can be contacted at
mills@ascd.org.
II. POLICY PERSPECTIVES

PLEASE SELECT ONE (1) OF THREE (3) POLICY QUESTIONS TO ANSWER
(Questions on pages 4, 5, 6)

Directions: Select one (1) of the three (3) policy questions to answer. Respond to it in a coherent essay. Be sure to draw on your knowledge of policy analysis and the literature to frame your basic position, support the position with the best available evidence, and develop your response in clear and coherent prose.
PLEASE SELECT ONE (1) OF THREE (3) POLICY QUESTIONS TO ANSWER
(Policy Questions on Pages 4, 5, 6)

POLICY QUESTION #1

Imagine you are a superintendent in a low-performing, high poverty district that is considering the possibility of adopting a year-round school calendar. Please do the following:

I. Discuss the analytic process you would go through to determine whether or not to pursue this policy of year-round school. Be specific about the following:
   a. The data you will need to make a decision
   b. The factors that will influence your decision
   c. The people you will consult when deciding
   d. The activities you will engage in prior to making a decision
   e. How you will communicate your decision to policy opponents, advocates and the general public.

II. (FOR THIS PART, ASSUME THAT YOU HAVE DECIDED TO ADOPT THE POLICY): Discuss what you will do to evaluate the policy in the short-term (after 1 year) and longer term (after 2 or more years),

- OR -

4
PLEASE SELECT ONE (1) OF THREE (3) POLICY QUESTIONS TO ANSWER
(Policy Questions on Pages 4, 5, 6)

POLICY QUESTION #2

According to Fowler (2009), education policy is influence by competing values: (a) social, (b) economic, and (c) democratic. Explain what you think are the underlying values, philosophies, and theories at work for three of the following policies/practices/programs:

- Common Core State Standards
- Teacher evaluation system in the state in which you work
- State and federal promotion for increasing Charter Schools
- Merit pay for teachers
- School vouchers

- OR -
PLEASE SELECT ONE (1) OF THREE (3) POLICY QUESTIONS TO ANSWER
(Policy Questions on Pages 4, 5, 6)

POLICY QUESTION #3

A large group of parents, in an urban school district under state control, introduced a policy proposal to eliminate state control of the operations of the school district and return to local control by an elected school board and superintendent hired by the school board. The community is in favor of a return to local control. To better understand the dynamics and players involved in this policy issue, please do the following:

1) Identify the policy issue and write it in a sentence.

2) Identify at least three of the primary stakeholders you imagine would be supportive of approving this policy and three stakeholders you believe would be opposed.

3) For each stakeholder, conduct the following analysis:
   a) Discuss their position;
   b) Describe their power relative to other stakeholders in their camp and relative to the stakeholders in the opposition;
   c) Identify the type of power they possess;
   d) Describe the mechanisms/tools they might use to exercise power.

4) After analyzing all stakeholders, pick one side and propose a campaign to gather support for that one side. If you were the leader of that side (either for or against the policy), what would you do to influence the School Board to adopt your position?
III. ORGANIZATION

Identify one educational issue today that you feel has reached crisis proportions. Indicate why you feel that way and then given your understanding of organizational theory how might you respond to the crisis and still preserve the essential integrity of the teaching and learning process? In responding make certain you make appropriate references to the literature and research.
Choose Only One of the Three Topic Choices to Answer

Choose one of the three general topic areas listed on the next page and develop a research study that addresses that topic. As you explain the study, be sure to include and address each of the following components:

- A statement of the “problem” you intend to investigate.
  - The problem statement should define the scope (magnitude) and the precise nature of the problem (dilemma, phenomenon of interest), as well as the usefulness of framing the problem in this form.

- Research question(s) that derive logically from your problem statement.

- A coherent research plan and appropriate methods of data collection.
  - Identify what data are required to answer the question(s), the sources of those data, and how the data will be obtained. Justify the effectiveness of this design in addressing the research question(s).
  - As you thoroughly describe and explain the data you intend to collect and the methods for doing so, be sure to clarify your strategy for ensuring reliability and validity.

- Data Analysis Plan. Articulate your plan for organizing and analyzing the raw data; be sure to specify how your analytical approach will appropriately address your research questions.
K-12 Research Topic Choices: Choose only one to answer:

1) The effect of increasing the daily instructional time in Mathematics on student performance on the state standardized assessment in Mathematics at the elementary school level.

2) The factors that influence the job satisfaction level of Directors of Special Education in the State of New Jersey.

3) The relationship between the start of the high school day and student efficacy as measured by student attendance rates and student performance on the LAL and Math sections of the High School Proficiency Assessment (HSPA).
K-12 QUALIFYING DOCTORAL EXAM

STATISTICS QUESTION
October 31, 2014

V. STATISTICS

Answer ALL Statistics Questions
Statistical Analysis Questions

Answer all of the following questions and fully explain your rationale for interpreting the statistical information. The following context is provided as context information for all questions and analyses that follow. Any similarities to real names, programs and/or data are for illustrative purposes only and not intended as factual.

Context:
The U.S. Department of Education (U.S.DOE) School Leadership Program (SLP) offers competitive grants to support the development, enhancement, or expansion of innovative programs to recruit, train, and mentor principals for high-need LEAs. This competitive grant program has been in existence since 2002 and since its inception has provided awards to over 110 Institutions of Higher Education (IHEs), Local Education Agencies (LEAs), and Nonprofit Organizations. Many of the grant funded projects have included activities such as: a) providing financial incentives to aspiring new principals, b) providing stipends to principals who coach existing principals, c) implementing professional development programs in instructional leadership, and d) providing incentives that are appropriate for teachers or individuals from other fields who want to become principals and that are effective in retaining new principals.

The School Leadership Preparation and Development Network (SLPDN) connects leadership preparation providers across the United States. This network is intended to facilitate collaboration, research, and information dissemination among School Leadership Program grantees and other leadership preparation and development providers. The network supports research efforts of grant recipients as the numerous and varied SLP program interventions are evaluated and reviewed from the perspectives of effectiveness and sustainability (Sanzo, 2012).

The following questions are examined from this context.

References
Question #1

In 2012, a large west coast state university received a U.S. DOE School Leadership Program (SLP) grant which involved offering 20 full scholarships to promising candidates as a financial incentive toward the completion of their Master of Education degree in educational leadership and subsequently to work in high need urban districts. There were over 100 applicants for the initial 20 scholarships. The selection committee worked carefully on developing a selection protocol which would increase the likelihood that the chosen candidates would be successful in their academic work. Toward that objective, the SLP grant administrators incorporated into their selection process data obtained from the use of a survey tool designed to objectively measure a predetermined set of attributes typical of high success in the area of educational leadership. Each of the 20 selected candidates completed the Target Sketch online survey which produced raw scores between 20 and 60. After the candidates completed their leadership program, the grant administrators examined the relationship between the Target Sketch scores and candidates’ grade point averages (GPA) in their M.Ed. program. They hoped this analysis would inform their decision about the advisability of future use Target Sketch as one component in a complex rubric intended to ascertain the best potential candidates to be offered scholarships.

Complete a thorough review of the SPSS correlation analysis below. Be certain to separately identify/report and interpret the essential components of a correlation analysis including: a) the strength of the relationship, b) the direction of the relationship, c) the significance, and d) the coefficient of determination or shared variation.

What does the following output reveal to you with respect to the relationship between GPA and the scores on the Target Sketch assessment survey? Should they continue to use Target Sketch? Why or why not?

<table>
<thead>
<tr>
<th></th>
<th>Target Sketch</th>
<th>Grade Point Average</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correlations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target Sketch</td>
<td>Pearson Correlation</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Grade Point Average</td>
<td>Pearson Correlation</td>
<td>.862</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>
Question #2

After completing the leadership training program, candidates were required to pass the School Leaders Licensure Assessment (SLLA) Praxis Series test in order to be eligible for state licensure as a school principal. These tests provide carefully validated assessments for states to use as part of the licensure process for principals and school leaders. They reflect the most current research on professional judgment and experience of educators across the country. They are based on both national job analysis studies and a set of standards for school leaders identified by the Interstate School Leaders Licensure Consortium (ISLLC). Scores are reported on a scale that ranges from 100-200.

The SLP grant recipient administrators wanted to know if their most recent cohort of leadership candidates scored differently on average than the national SLLA mean score of 176 calculated from the records of 15,987 examinees who took the test between August 2011 and July 2014.

Please present a thorough analysis of the data including comments on policy, practice and/or future research.

### One-Sample Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Leadership Licensure Assessment (SLLA)</td>
<td>20</td>
<td>181.70</td>
<td>10.58</td>
<td>2.37</td>
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</tbody>
</table>

### One-Sample Test

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<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Leadership Licensure Assessment (SLLA)</td>
<td>2.410</td>
<td>19</td>
<td>.026</td>
<td>5.70</td>
<td>.75</td>
</tr>
</tbody>
</table>
Question #3

This was the second grant that this particular west coast university had received since the SLP grant inception in 2002. Several program design changes were made over the course of the 12 years based on the feedback from the grant program evaluation and from information that was shared through the School Leadership Preparation and Development Network (SLPDN). The grant project administrators wanted to compare two cohorts of candidates to determine if they performed differently over the course of the many years of program changes. The first grant cohort was selected in 2002 and completed their program in 2004 while the most recent cohort was selected in 2012 and completed their program in 2014. The SLLA scores for each leadership cohort were compared and the results are outlined below.

Are the mean SLLA scores from the 2012 leadership cohort graduates significantly different than those of the 2014 cohort? Please present a thorough analysis of the data including comments on policy, practice and/or future research.

<table>
<thead>
<tr>
<th>Grouping</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Leadership Cohort 2004</td>
<td>20</td>
<td>174.15</td>
<td>11.45</td>
<td>2.56</td>
</tr>
<tr>
<td>Licensure Assessment Cohort 2012</td>
<td>20</td>
<td>181.70</td>
<td>10.58</td>
<td>2.37</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig</td>
<td>t</td>
</tr>
<tr>
<td>---</td>
<td>-----</td>
<td>---------</td>
</tr>
<tr>
<td>School Leadership Licensure Assessment SLLA 2004</td>
<td>Equal variances assumed 0.068</td>
<td>0.785</td>
</tr>
<tr>
<td>School Leadership Licensure Assessment SLLA 2004</td>
<td>Equal variances not assumed -2.166</td>
<td>37.786</td>
</tr>
</tbody>
</table>
Question #4

One of the common components of recent SLP grant recipient programs is the inclusion of Professional Development (PD) activities offered to experienced principals in the high-need LEAs. The most recent 2012 west coast university grant proposed a five year implementation timeline of a PD program that included three activities: 1) participation in a yearly summer leadership institute, 2) participation in three full-day professional development sessions per year based on the principal cohort self-identified problems of practice, and 3) the assignment of a leader in residence who provides job-embedded professional development services that are determined and identified through a needs assessment in collaboration with the principal.

The Target Sketch instrument was one of several program assessment tools utilized to document the dispositional change of existing principals toward a more collaborative leadership style. The Target Sketch instrument was administered to principals (N=15) at the beginning of the program in the summer of 2012 and again to the same principals (N=15) in the summer of 2014. The final administration is planned to be administered at the end of the five-year grant period in 2017. Recall that the Target Sketch online survey produces raw scores between 20 and 60. The preliminary results of the 2012 and 2014 surveys are outlined below. Has there been any significant change in the mean scores of the 15 principal participants between 2012 and 2014? Please present a thorough analysis of the data including comments on policy, practice and/or future research.

Samples Statistics

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Principals Target Sketch 2014</th>
<th>48.13</th>
<th>15</th>
<th>8.01</th>
<th>2.07</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Principals Target Sketch 2012</td>
<td>42.67</td>
<td>15</td>
<td>12.59</td>
<td>3.25</td>
</tr>
</tbody>
</table>

Paired Differences

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Principals Target Sketch 2014 - Principals Target Sketch 2012</th>
<th>5.47</th>
<th>11.87</th>
<th>3.07</th>
<th>-1.11</th>
<th>12.04</th>
<th>1.783</th>
<th>14</th>
<th>.096</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>95% Confidence Interval of the Difference</td>
<td>t</td>
<td>df</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>Lower</td>
<td>Upper</td>
<td>t</td>
<td>df</td>
<td>Sig. (2-tailed)</td>
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