DEVELOPING LEADERSHIP CONTENT KNOWLEDGE DURING SCHOOL LEADER PREPARATION*

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Abstract

This instructional module describes a performance assessment designed to equip prospective principals with the knowledge and skill needed to evaluate curriculum, observe and assess instruction, interact meaningfully with teachers about instructional decision-making, and design professional learning opportunities that enhance student learning outcomes. This project is conceptually grounded by Stein & Nelson's (2003) construct of "leadership content knowledge," which argues that effective leadership for instruction demands complex understandings of subject matter, how children learn that subject matter, and how teachers learn to teach that subject matter.

1 NCPEA Publications



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2 Sumario en español

Este módulo instruccional describe un desempeño que evaluación diseñó para equipar directores futuros con el conocimiento y la habilidad necesitó para evaluar plan, observar y valorar instrucción, interactúa de manera significativa con maestros acerca de la toma de decisiones instruccional, y profesional de diseño que aprende oportunidades que aumenta resultados de aprender de estudiante. Este proyecto es molido conceptualmente por Stein and Nelson (2003) constructo de "liderazgo el conocimiento contento," que discute que liderazgo efectivo para demandas de instrucción comprensiones complejas de tema, cómo niños aprenden que tema, y cómo maestros aprenden a enseñar ese tema.

NOTE: Esta es una traducción por computadora de la página web original. Se suministra como información general y no debe considerarse completa ni exacta.

3 Introduction

Preparing school leaders who have the knowledge, skill and disposition to be instructional leaders must be a priority. If this country is to realize it's dream for a K-12 educational system that provides all students with a rigorous, standards-based program of study, we will need leaders who do more than manage a curricular program. Needed are leaders who have a robust vision of teaching and learning, grounded in standards and reflective of researched best practice, yet flexible enough to meet the diverse and changing needs of students in today's classrooms. Unfortunately, the literature offers few models of how to provide prospective leaders with the authentic and powerful experiences needed to enact a leadership practice that privileges teaching and learning in the ways demanded by current reforms.

In this instructional module, I describe a performance assessment used in our masters degree principal preparation program that not only heightens prospective principals' awareness of their role as instructional leaders, but equips them with the beginning knowledge and skill needed to evaluate curriculum, observe and assess instruction, interact meaningfully with teachers about instructional decision-making, and design professional learning opportunities that enhance student learning outcomes. This project is anchored by Stein and Nelson's (2003) construct of "leadership content knowledge," which argues that effective leadership for instruction demands complex understandings of subject matter, how children learn that subject matter, and how teachers learn to teach that subject matter.

4 Project Overview: Leading Best Practice in Curriculum & Professional Learning

Leading Best Practice in Curriculum and Professional Learning is the culminating performance assessment in a curriculum course that students or candidates take midway through their principal preparation program. This assignment asks students to draw on new understandings about school improvement, curriculum, and professional development to design a job-embedded professional learning experience that addresses a specified curricular need. To increase relevance, students are further encouraged to connect this project to one or more school improvement goals, including implementation of the Common Core State Standards (CCSS). Drawing on local curriculum guidance materials, students are asked to assess the strength of the curriculum, identify recommendations, and design a sustained plan for teacher professional learning that addresses proposed recommendations.

Although students are not required to implement their proposed plans, as many as two-thirds put these plans to work in their employing districts, often as part of their required internship. As one student noted,

4.1

It was great for me to do a curriculum audit and plan PD opportunities for our district. A lot of times teachers complain about the PD that is offered. This gave me a chance to think about what would be most beneficial to plan and schedule as an administrator.

As described in the course catalog, "This course examines curriculum development and research as they relate to local school district planning and implementation. This course also focuses attention on various indices and paradigms of effective professional development from the literature and research as related to practical applications for school improvement." In accordance with state guidelines for principal preparation, program coursework is designed to align with the Interstate School Leaders Licensure Consortium Standards (ISLLC, 2008) for school leadership.

5 Conceptual Foundation: Developing Leader's Content Knowledge

As explained by Stein and Nelson (2003), "leadership content knowledge" is the subject matter knowledge used by administrators when acting as instructional leaders. For school principals, leadership content knowledge requires knowledge of the subject matter itself; knowledge of how students best learn that subject matter; and knowledge of how teachers learn to teach that subject matter. With this understanding, principals are equipped to act as instructional leaders, capable of observing and assessing effective teaching, and interacting with teachers in meaningful, substantive ways. As stated in the assignment guidelines:

5.1

As an educational leader, you are responsible for ensuring a high-quality program of teaching and learning in your building. This requires leadership content knowledge (Stein & Nelson, 2003), which includes knowing a subject matter deeply, as well as competing perspectives on how that subject is taught for optimal learning. This also requires an understanding of the organizational conditions and processes that facilitate teacher learning in support of student learning. Armed with this knowledge, however, you are well positioned to effectively lead the planning, implementation, monitoring, and evaluation of a strong curricular program that leads to high levels of student learning.

Stein and Nelson acknowledge that school leaders cannot be expected to know all subject areas equally. They should, however, know at least one subject matter deeply, including typical modes of inquiry within that subject area, ideas and concepts that students will likely find difficult (including common misconceptions), recognized evidence-based instructional practices, and features of a curriculum that support robust learning in that subject. With this as a foundation, leaders can then learn about additional subject areas as needed. Stein and Nelson (2003) refer to this as "post-holding", which they define as the "in depth exploration of an important but bounded slice of the subject, how it is learned, and how it is taught (p. 423). In their words,

5.2

Principals and district leaders cannot know subject matter in the same way as do mathematicians or historians – nor even to the level they expect their teachers to understand them. Nevertheless, as demands increase for them to improve teaching and learning in their schools, administrators must know strong instruction when they see it, to encourage it when they don't, and to set the conditions for continuous academic learning among their professional staff. (p. 424)

Through this assignment, I hope that students will begin to see their role as instructional leaders in a new light. I want them to understand the organizational conditions that are needed to support change, and I want them to feel confident in their ability to positively influence and lead the direction of instructional improvement in their schools and districts. Above all, I hope the project fosters in students an inquiry orientation to their work (see Nelson & Sassi, 2005). I want to draw students' attention to the relationship between effective teaching, learning and leadership, and more specifically, foster a renewed curiosity in the role that subject matter knowledge might play in supporting effective teaching, learning and leadership.

6 Assessment Description

Leading Best Practice in Curriculum and Professional Learning is a standards-based performance assessment, appropriate for use in a course that addresses issues of curriculum leadership, teacher professional

development, instructional supervision and school improvement. Based on Stein and Nelson's (2003) construct of "leadership content knowledge," this project supports effective instructional leadership practice by developing prospective leaders' subject matter knowledge, their understanding of how students best learn that subject matter, and how teachers learn to teach that subject matter. Project outcomes include:

6.1 Learner Outcomes

Students will know and be able to do

- 1. Demonstrate an understanding of research-based practices in K-12 subject matter teaching and learning that account for contrasting and/or competing views of good teaching and learning.
- 2. Demonstrate skill in planning, leading and evaluating the curriculum design process, and in planning, leading and evaluating corresponding learning opportunities for staff.

As outlined, this project is designed to take place over the course of a semester, building on and complementing course concepts and ideas as they are introduced. It's easily adapted for face-to-face, hybrid and online learning formats and addresses ISLLC Standards 1 and 2.

6.2 Learning Activities

Setting the stage. Students are introduced to the project after first studying the curriculum design process. Early in the course, students are encouraged to view curriculum with a critical eye, not only examining what gets taught, but also what understandings and beliefs are omitted, tacit or hidden. The distinction between curriculum management and leadership is reinforced (Wiles, 2009), as is the understanding that all curriculum decisions are inherently political (English, 2010). Additionally, students are supported in developing their own philosophy of good teaching and learning through select readings and course activities (e.g. Dewey, 1943; Kliebard, 2002; Labaree, 1997; McLaren, 2006). Students complete this portion of the course by examining curriculum design models and comparing them to the processes used in their home school or district (e.g. Jacobs, 1997; Makas, 2009; Wiggins & McTighe, 2005). Key concepts include the importance of vertical and horizontal curriculum articulation and coherence, as well alignment between the written, taught and tested curriculum. With this as a foundation, the project is introduced. [See Appendix A: Project Guidelines]

Selecting a focus; gathering data. Students first task is to identify a subject area and grade level of interest that taps into an authentic need in their school or district, e.g. middle school algebra or early literacy. Sometimes students select a subject area that aligns with a pressing leadership responsibility connected to their internship, e.g. chair of the school improvement sub-committee on early reading, or the development of instructional materials using the newly adopted CCSS. Oftentimes students select a subject area that they want to understand better, e.g. mathematics. Once a decision is made, students are asked to gather all available curriculum materials, e.g. textbooks, curriculum maps, pacing guides, standards and benchmarks. When available, they are asked to collect assessment data, e.g. standardized test scores, common assessment results. Frequently, students also choose to interview teachers for additional background information about an instructional program. Based on the data gathered, students are asked to complete a curriculum audit.

Conduct curriculum audit. Students complete a curriculum audit by reviewing all materials gathered using concepts and frameworks introduced in class, e.g. How strong is curricular coherence and articulation? How strong is alignment between the written, taught and tested curriculum? What story does the data tell and to what extent is the selected curriculum meeting external (e.g. board of education, state) expectations? Additionally, does the curriculum address the recently released Common Core State Standards? Because I want students to puzzle over the criteria they will use in this audit, I do not provide a review template in advance. Rather, I encourage students to work together, sharing their ideas on how best to critically review materials. I do this by asking students to share drafts of their audit in subject-specific small groups for feedback.

Analysis of a curricular program. Once students have completed their curriculum audit, they are asked to search the literature for recognized best practices in teaching and learning this subject area. This

phase of the project coincides with course discussions aimed at the future of curriculum, e.g. globalization, technology, $21^{\rm st}$ Century skills. Frequently students work in small groups on this part of the project, sharing resources, literature and insights. In addition to a traditional library search, students are encouraged to explore the websites of related subject area associations (e.g. National Council for Teachers of Mathematics or International Reading Association), and interview local resources in their building or district. As students are searching the literature and related sources, I ask them to pay particular attention to competing viewpoints. I want them prepared to use the literature to defend any curricular or instructional decisions that they make through this project.

Recommendations for teacher professional learning. Once students have completed the tasks outlined above, I ask them to compare the results of the curriculum audit to the literature reviewed, e.g. How does the selected program compare to the literature in the field? Do gaps exist, and, if so, how might they be filled? What do teachers need to know and be able to do in order to implement this instructional program with fidelity? Based on the results of their inquiry, I ask students to identify a set of recommendations for curriculum re-design and/or teacher professional development. Students will select from this list as they move into the next phase of the project.

Professional development plan. By the time students get to this phase of the project, we have discussed the nature of teacher learning across the career (e.g. Ball & Cohen, 1999; Putnam & Borko, 2000; Feiman-Nemser, 2001) and the principles of effective professional learning (e.g. Desimone, 2011; Guskey, 2003). We have also examined models of job-embedded, sustained professional development (Yendol-Hoppey & Dana, 2010). Through selected readings and activities, I am hoping to reinforce for students their role, as prospective leaders, in fostering a collaborative professional culture that supports regular and meaningful learning opportunities for teachers. With that as the foundation, students are ready to begin designing a sustained, job-embedded professional development program that addresses one or more of their suggested recommendations.

The final plan is expected to include intended goals for professional learning; a summary of the data supporting this focus; a rationale for selecting this approach; and enough detail so that the reader can begin to see the plan in action, e.g. clear timeline of events and thorough description of each event planned. Moreover, the plan should utilize the talents of staff in the district and build upon previous professional development activities. Students are also encouraged to develop a budget for the proposed plan and consider appropriate uses of instructional technology.

Project self-assessment. Once projects are complete, students are asked to self-assess the quality of their work using Learning Forward's (2011) newly revised *Standards for Professional Learning* and the ISLLC (2008) *Standards for School Leaders*. Introduced through coursework, each set of standards provides a useful lens for helping students consider the quality of their work and, if needed, revise accordingly. [See Appendix B: Project Rubric]

6.3 Project Evaluation

Students are enthusiastic about this project. First, it deliberately connects abstract course concepts to authentic problems of practice, which students find immediately practical and helpful. In the words of one student, "The realistic connection between theory and practice was very helpful." Those who select subject-areas in which they are already invested find the literature review especially helpful in guiding their leadership activities and decision-making. Those who select subject areas for which they have limited background find that this project gives them a welcome confidence boost to lead in new areas. And while many students have designed and led short-term professional development for teachers, few have been this thoughtful and deliberate about their choice of format and delivery, especially when planned over time around a data-driven focus. Thus, the experience students acquire through this project is both practical and relevant. Finally, because students are encouraged to select a topic of interest that is connected to their internship or employment, and because the assignment is flexible enough to accommodate a wide variety of interests and needs, students frequently report putting all or part of the plan into action within six months of completing the class. When completed, students are more aware of their role as instructional leaders and have the

confidence (and skill) to lead curriculum and professional learning at the building-level, regardless of subject area. As one student concluded, "This assignment prepared me to be a strong and effective instructional leader by making me think about PD days, do a curriculum audit, and assess my progress using standards."

7 Conclusion

The traditional approach to preparing future instructional leaders has been to focus on the organizational conditions that support high quality teaching and learning, e.g. promoting high expectations for student learning, facilitating a positive school climate that supports teachers learning from and with one another, and decentralizing decision-making for instruction (Stein & Spillane, 2005). As important as these leadership practices are, however, this focus can serve to distance prospective leaders from the real work of the classroom. As instructional leaders, principals also need to know how to observe and assess instruction, how to identify needed instructional supports for struggling students and how to give feedback to teachers, how to evaluate curriculum materials, how to design and lead effective professional learning, and how to engage in meaningful and sustained conversation with teachers. Naturally, at the point of the classroom, these leadership practices are always situated in a subject matter. As Stein and Nelson (2003) explain, leadership content knowledge sharpens the lens by which we look at leadership for teaching and learning.

7.1

The construct of leadership content knowledge opens entirely new realms of thought about leadership — connecting it directly to the core function of schooling, learning and teaching — and raising the question whether generic studies of leadership can really get at the heart of what it means to lead schools and school districts. Without knowledge that connects subject matter, learning, and teaching to acts of leadership, leadership floats disconnected from the very processes it is designed to govern. Just as the construct of pedagogical content knowledge has marked out new and very generative research questions and sites for research, so the construct of leadership content knowledge may open up new questions about what it means to provide instructional leadership in schools. (Stein & Nelson, 2003, p. 446)

The heightened focus on accountability for student achievement ushered in by No Child Left Behind is not likely to change any time soon, nor is the accompanying laser-like focus on leadership for teaching and learning. The expectations for effective leadership have changed, and, so too must our approach to leadership preparation. As Elmore (2000) proposed, when principals understand the instructional core, they are no longer limited to managing the processes and structures that surround the core. The performance assessment described here equips prospective leaders with the knowledge, skill and confidence to enact a leadership practice that recognizes and elevates the role of subject matter.

8 REFERENCES

Ball, D. L., & Cohen, D. K. (1999). Developing practice; developing practitioners: Toward a practice-based theory of professional development. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3-32). San Francisco: Jossey-Bass.

Desimone, L. M. (2011). A primer on effective professional development. *Phi Delta Kappan*, 92(6), 68-71.

Dewey, J. (1943). The child and the curriculum. Chicago: University of Chicago Press.

Elmore, R. F. (2000). Building a new structure for school leadership. Washington, DC: The Albert Shanker Institute

English, F. (2010). Deciding what to teach and test: Developing, aligning and leading the curriculum. Thousand Oaks, CA: Corwin Press.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. Teachers College Record, 103 (6), 1013-1055.

Guskey, T. R. (2003). What makes professional development effective? *Phi Delta Kappan*, 84(10), 748-763.

Interstate School Leaders Licensure Consortium (ISLLC). (2008). Educational Leadership Policy Standards. A Washington, DC: Chief Council of State School Officers and National Policy Board for Educational Leadership.

Jacobs, H. H. (1997). Mapping the big picture: Integrating curriculum and assessment K-12. Alexandria, VA: ASCD.

Kliebard, H. M. (2002). Changing course: American curricular reform in the 20th century. New York: Teachers College Press.

Labaree, D. F. (1997). Public goods, private goods: The American struggle over educational goals. American Educational Research Journal, 34(1), 39-81.

Learning Forward. (2011). Standards for professional learning. Oxford, OH: Author.

Makas, E. (2009). From mandate to achievement: 5 steps to a curriculum system that works! Thousand Oaks, CA: Corwin Press.

McLaren, P. (2006). Life in schools: An introduction to critical pedagogy in the social foundations of education (5th ed.) New York: Allyn & Bacon.

National Policy Board for Educational Administration. (2008). Educational leadership policy standards: ISLLC 2008. Washington, DC: Council of Chief State School Officers.

Nelson, B. S., & Sassi, A. (2005). The effective principal: Instructional leadership for high-quality learning. New York: Teachers College Press.

Putnam, R. T., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29(1) 4-15.

Stein, M. K., & Nelson, B. S. (2003). Leadership content knowledge. Educational Evaluation & Policy Analysis, 25(4), 423-448.

Stein, M. K., & Spillane, J. (2005). What can researchers on educational leadership learn from research on teaching? Building a bridge. In W. A. Firestone & C. Riehl (Eds.), A new agenda for research in educational leadership (pp. 28-45). New York: Teachers College Press

Yendol-Hoppey, D., & Dana, N. F. (2010). Powerful professional development: Build expertise within the 4 walls of your school. Thousand Oaks, CA: Corwin Press.

Wiles, J. (2009). Leading curriculum development. Thousand Oaks, CA: Corwin Press.

Wiggins, G., & McTighe, J. (2005). Understanding by design (2nd ed.). Alexandria, VA: ASCD.

APPENDIX A: PROJECT GUIDELINES

As an educational leader, you are responsible for ensuring a high-quality program of teaching and learning in your building. This requires leadership content knowledge (Stein & Nelson, 2003), which includes knowing a subject matter deeply, as well as competing perspectives on how that subject is taught for optimal learning. This also requires an understanding of the organizational conditions and processes that facilitate teacher learning in support of student learning. Armed with this knowledge, however, you are well positioned to effectively lead the planning, implementation, monitoring, and evaluation of a strong curricular program that leads to high levels of student learning.

The following performance-based final project provides you with an opportunity to apply the big ideas of the course to an authentic curriculum problem of your choice. After completing a review of the "best practice" literature in that curricular area, you will do a curriculum audit, complete with recommendations for professional learning. Your next step will be to develop a series of job-embedded professional learning experiences for teachers that address those recommendations. Finally, you will analyze your efforts against the Learning Forward (2011) Standards for Professional Learning and ISLLC (2008) Standards for School Leaders.

9 Part I: Audit and Analysis of a Curricular Program

Determine the focus and scope of your project based on your professional needs, interests and responsibilities, e.g. elementary writing; technology in the middle grades; global competencies in the high school; K-12 instrumental education. Then, working individually or in small groups, review the literature on research-based practices in your subject area of choice and complete a curricular audit of your home school or

district. (Note: These two tasks are designed to complement one another; thus, can be completed in any order.) Finally, compare the results of your curriculum audit and analysis, noting recommendations for curriculum re-design and professional development.

Curriculum Audit

Select an area of interest for sustained inquiry. Gather relevant curricular documents (e.g. standards and benchmarks, pacing guides, curriculum maps, textbooks, test score data, school improvement plan) and conduct an audit of this subject area in your building or district, e.g. How strong is curricular coherence and articulation? How strong is alignment between the written, taught and tested curriculum? What story does the data tell and to what extent are you meeting external (e.g. board of education, state) expectations? Does your existing curriculum address the Common Core State Standards?

Literature Review

Search the literature for recognized best practices in your selected subject area. In addition to a traditional library search, explore the websites of related subject area associations, e.g. National Council for Teachers of Mathematics (NCTM), International Reading Association (IRA); interview local resources in your building, district or ISD; examine textbooks, especially their introductory materials. As you search, pay particular attention to competing viewpoints. Look for high quality sources and be sure to record key findings from your search.

Recommendations

Once you have completed the two tasks outlined above, compare the content of your curriculum materials to the literature reviewed. How is your program doing relative to the literature in the field? Where are the gaps, if any? Finally, what recommendations does your audit surface for curriculum re-design and for professional development?

10 Part II: Professional Development Program Design

Draw on your curricular audit, literature review and subsequent recommendations to create a job-embedded professional development plan. Importantly, this plan must reflect the qualities of effective professional learning supported by the literature and represented by the Learning Forward Standards for Professional Learning.

Professional Development Plan

Design a sustained, job-embedded professional development program that addresses one or more Part 1 recommendations. Ideally, this plan will be relevant to your current position (e.g. subject or grade level, building or district), address school improvement goals, and/or be connected to your internship. For example, if you would like to see increased curricular planning across subject areas, you might create a plan for using technology to enhance departmental or grade level communication and curriculum mapping during and between monthly staff meetings. Or, if your internship entails responsibility for assisting with the induction of new math teachers in the district, you might develop a series of after-school seminars that introduce new hires to the local curriculum and how it is articulated K-12. Or, perhaps you want to design a PD plan that facilitates implementation of the CCSS in a subject area.

Project Self-Assessment

When your project is complete, take a moment to assess your efforts against the Learning Forward (2011) Standards for Professional Learning, as well as the ISLLC (2008) Standards for School Leaders.

APPENDIX B: SELF ASSESSMENT RUBRIC
Leading "Best Practice" in Curriculum & Professional Learning
UNACCEPTABLE
DEVELOPING
EXEMPLARY

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Curriculum Audit

Audit is missing or fails to demonstrate an understanding of the curriculum design process. Audit is incomplete, e.g. analysis occurs at a surface level; analysis appears "rushed," resulting in unanswered questions; analysis doesn't follow a logical progression; analysis doesn't account for pressing practical concerns, e.g. CCSS implementation. Analysis is sufficiently comprehensive and thorough. Inquiry follows a natural progression, using tools and frameworks discussed in class. Resulting claims are based on data and evidence. Future orientation evident in analysis, e.g. CCSS implementation.

Literature Review

Review is missing, or fails to draw on the research to demonstrate understanding of best practices in selected area of inquiry. Review is incomplete, e.g. best practices discussed are loosely connected to the topic of inquiry; best practices are not supported by sources and are reviewed uncritically. Review addresses recognized best practices in selected field of study. Competing perspectives acknowledged. Review complements choice of inquiry.

Recommendations for Professional Learning Recommendations are missing, or do not flow logically from the curriculum audit and/or literature review. Recommendations seem to come out of thin air, not connecting to the audit, literature review or both. Recommendations reflect a limited or incomplete understanding of teachers needs as learner. Recommendations follow clearly and logically from the audit, as informed by the literature review. Recommendations reflect an understanding of teachers' learning needs.

Professional Development Plan

Plan is missing, or fails to demonstrate understanding of the principles of job-embedded professional learning. PD plan reflects an incomplete or limited understanding of job-embedded professional development. Plan does not flow logically from recommendations based on audit and lit review. Plan lacks coherence and goals are not directly aligned with stated needs. PD plan follows principles of effective job-embedded professional learning, e.g. content-focused, sustained, collaborative. Plan provides teachers with time to learn new skills and follows a logical skill progression. Plan is based on clear goals for teacher learning. Plan addresses needs identified by the audit and lit review.

Self-Assessment

Self-assessment is missing, or fails to demonstrate a willingness or capacity to reflect on the quality of one's work. Demonstrates uneven understanding of the Learning Forward and ISLLC Standards, and self-analysis lacks detail or extended discussion. Self-analysis appears rushed. Demonstrates sophisticated understanding of the Learning Forward and ISLLC Standards and uses that understanding to critically and honestly assess one's work.

Writing Quality

Writing is illogical and incoherent with multiple grammatical and/or spelling errors. Writing does not meet graduate standards for scholarship. Writing lacks coherence between sections, as evidenced by missing transitions and summary statements. Errors in referencing the literature, spelling and/or grammar interfere

with readability. Writing is clear, logical, coherent. Sections are clearly marked with strong transitions between sections. Citations are accurate and appropriate. Errors are minimal.

UNACCEPTABLE DEVELOPING EXEMPLARY

Curriculum Audit

Audit is missing or fails to demonstrate an understanding of the curriculum design process. Audit is incomplete, e.g. analysis occurs at a surface level; analysis appears "rushed," resulting in unanswered questions; analysis doesn't follow a logical progression; analysis doesn't account for pressing practical concerns, e.g. CCSS implementation. Analysis is sufficiently comprehensive and thorough. Inquiry follows a natural progression, using tools and frameworks discussed in class. Resulting claims are based on data and evidence. Future orientation evident in analysis, e.g. CCSS implementation.

Literature Review

Review is missing, or fails to draw on the research to demonstrate understanding of best practices in selected area of inquiry. Review is incomplete, e.g. best practices discussed are loosely connected to the topic of inquiry; best practices are not supported by sources and are reviewed uncritically. Review addresses recognized best practices in selected field of study. Competing perspectives acknowledged. Review complements choice of inquiry.

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Professional Development Plan

Plan is missing, or fails to demonstrate understanding of the principles of job-embedded professional learning. PD plan reflects an incomplete or limited understanding of job-embedded professional development. Plan does not flow logically from recommendations based on audit and lit review. Plan lacks coherence and goals are not directly aligned with stated needs. PD plan follows principles of effective job-embedded professional learning, e.g. content-focused, sustained, collaborative. Plan provides teachers with time to learn new skills and follows a logical skill progression. Plan is based on clear goals for teacher learning. Plan addresses needs identified by the audit and lit review.

Self-Assessment

Self-assessment is missing, or fails to demonstrate a willingness or capacity to reflect on the quality of one's work. Demonstrates uneven understanding of the Learning Forward and ISLLC Standards, and self-analysis lacks detail or extended discussion. Self-analysis appears rushed. Demonstrates sophisticated understanding of the Learning Forward and ISLLC Standards and uses that understanding to critically and honestly assess one's work.

Writing Quality

Writing is illogical and incoherent with multiple grammatical and/or spelling errors. Writing does not meet graduate standards for scholarship. Writing lacks coherence between sections, as evidenced by missing transitions and summary statements. Errors in referencing the literature, spelling and/or grammar interfere with readability. Writing is clear, logical, coherent. Sections are clearly marked with strong transitions between sections. Citations are accurate and appropriate. Errors are minimal.

UNACCEPTABLE DEVELOPING EXEMPLARY

Curriculum Audit

Audit is missing or fails to demonstrate an understanding of the curriculum design process. Audit is incomplete, e.g. analysis occurs at a surface level; analysis appears "rushed," resulting in unanswered questions; analysis doesn't follow a logical progression; analysis doesn't account for pressing practical concerns, e.g. CCSS implementation. Analysis is sufficiently comprehensive and thorough. Inquiry follows a natural progression, using tools and frameworks discussed in class. Resulting claims are based on data and evidence. Future orientation evident in analysis, e.g. CCSS implementation.

Literature Review

Review is missing, or fails to draw on the research to demonstrate understanding of best practices in selected area of inquiry. Review is incomplete, e.g. best practices discussed are loosely connected to the topic of inquiry; best practices are not supported by sources and are reviewed uncritically. Review addresses recognized best practices in selected field of study. Competing perspectives acknowledged. Review complements choice of inquiry.

Recommendations for Professional Learning Recommendations are missing, or do not flow logically from the curriculum audit and/or literature review. Recommendations seem to come out of thin air, not connecting to the audit, literature review or both. Recommendations reflect a limited or incomplete understanding of teachers needs as learner. Recommendations follow clearly and logically from the audit, as informed by the literature review. Recommendations reflect an understanding of teachers' learning needs.

Professional Development Plan

Plan is missing, or fails to demonstrate understanding of the principles of job-embedded professional learning. PD plan reflects an incomplete or limited understanding of job-embedded professional development. Plan does not flow logically from recommendations based on audit and lit review. Plan lacks coherence and goals are not directly aligned with stated needs. PD plan follows principles of effective job-embedded professional learning, e.g. content-focused, sustained, collaborative. Plan provides teachers with time to learn new skills and follows a logical skill progression. Plan is based on clear goals for teacher learning. Plan addresses needs identified by the audit and lit review.

Self-Assessment

Self-assessment is missing, or fails to demonstrate a willingness or capacity to reflect on the quality of one's work. Demonstrates uneven understanding of the Learning Forward and ISLLC Standards, and self-analysis lacks detail or extended discussion. Self-analysis appears rushed. Demonstrates sophisticated understanding of the Learning Forward and ISLLC Standards and uses that understanding to critically and honestly assess one's work.

Writing Quality

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CRITERIA	UNACCEPTABLE
Curriculum Audit	Audit is missing or fails to demonstrate an understanding of the cur
Literature Review	Review is missing, or fails to draw on the research to demonstrate u
Recommenda-tions for Professional Learning	Recommendations are missing, or do not flow logically from the curr
Professional Development Plan	Plan is missing, or fails to demonstrate understanding of the princip
Self-Assessment	Self-assessment is missing, or fails to demonstrate a willingness or ca
Writing Quality	Writing is illogical and incoherent with multiple grammatical and $/o$

Table 1