Professional Development for Curriculum Creators:

A Case Study Exploring Perceived Connections

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Authorization to Submit Dissertation

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Abstract

Teachers selected to create curriculum should receive specialized professional development. Research identified that teachers were not always academically prepared for the scope of this work, but a gap in research existed in identifying connections between professional development and curriculum creation. With policy makers, school and district leaders, and researchers scrutinizing the work in classrooms for evidence about the effectiveness of teachers, especially in terms of their impact, determining the connections between curriculum creation and professional development was essential. The purpose of this qualitative exploratory case study was to identify perceived connections between programs of professional development and curriculum creation within the "Garnet School District" in Idaho. Interviews with teachers selected to write curricula utilized open-ended questions allowing participants to describe what was meaningful or important. These interviews, supported by documentation and archival records generated from meetings, and observations of teachers involved in the processes provided thick description of these connections.

Results indicated that collaboration, time, and empowerment were important connections that should be taken into consideration when providing professional development for curriculum creators. For school and district leaders, these findings serve as a reminder of the personal nature of education, in contrast to the automated systems inherent in today's focus on consistency and accountability.

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Dedication

I dedicate my dissertation work to my remarkable family who have provided me the time and encouragement to achieve this goal. A special feeling of gratitude to my caring parents, John and Helen Nelson and wife, Debora, whose words of encouragement and push for tenacity ring in my ears. My children, Mari and Knowlton, have never left my side, gave me lots of hugs and encouragements for my "big paper," and have already sacrificed so much to support me. I plan to repay them with lots of park time as they grow into remarkable and impactful humans.

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Chapter I - Introduction

Multiple educational reforms since the advent of public education have prioritized adjustments to curricula (Goertz, Floden, & O'Day, 1995; Pinar, Reynolds, Slattery, & Taubman, 2008). These changes, along with decreased funding to schools, expanded the role of teachers in many districts to include curriculum creation in addition to classroom instruction (Carbone, 1990). The purpose of this qualitative exploratory case study was to identify perceived connections between programs of professional development and curriculum creation.

Broadly speaking, "curriculum is any document that exists in a school that defines the work of teachers by identifying the content to be taught and the methods to be used" (English, 2000, p.2). Curriculum creation was considered an essential function of school or district leadership, confirmed by Wiles, who stated, "Whether the role is carried out by a principal, an assistant principal for curriculum, a team leader, a department head, or by leading classroom teachers, the curriculum defines all other roles in a school" (2009, p.2). Prompted by attempts to meet the ever-changing needs of students, curriculum reform expectations, structural reforms such as site-based management, and other initiatives, teachers were being given greater opportunity to examine and redefine their roles both inside and outside the classroom (Monson & Monson, 1993). In some cases, on top of their specific instructional assignment(s), teachers were now, in effect, the principle players in the creation of these words. However, this new power also had the potential cause tension between administrators and colleagues if students did not perform as well as intended, as it was those same teachers that may have lost pay (Jones, 2011). Although research supported teachers making curricular decisions, they must be supported in this process by administrators (Bordage & Harris, 2011). As the process of assembling curricula involved communication, knowledge of content and pedagogy, and a desire for unanimity, these new functions could only be defined through meaningful professional development (Monson & Monson, 1993).

Professional growth in curriculum creation cannot be earned in a single session (Mooney & Mausbach, 2008). Much of learning could be done "on the job" but there were some components that have been confused. For example, there was a common confusion between *curriculum* and *standards* (Westera, 2001). Rothman (2011) reminded us that standards were a list of skills that students should be able to demonstrate at the end of a year and were usually identified by a state or governing body, such as "Select and use applications effectively and productively" (International Society for Technology in Education, 2007, p. 2). On the other hand, a curriculum defined the combination of lessons—the scope and sequence—that helped students to meet standards. It was usually the responsibility of the local school, district, and teacher to interpret, implement, and evaluate curricula (McKernan & McKernan, 2013).

Most curricular change at the time of this study was a result of the implementation of the Common Core State Standards (CCSS) (Porter, McMaken, Hwang, & Yang, 2011), which were to be fully implemented in Idaho by the start of the 2013-2014 school year, a plan similar to that of 47 American states and territories (Idaho State Department of Education, 2013b). However, a common myth (McTighe, 2014) was that these standards were actually a defined national curriculum, documents that provided uniform guidelines for how students should be taught (Idaho State Department of Education, 2013b). Educators precipitated this falsehood because they were accustomed to curriculum created "elsewhere" and "handed down to them from the top" (Carl, 2009, p. 194). The standards at the time of this study were mired in debate from some politicians and members of the media believed that the standards were an initiative of the Obama administration (Rothman, 2011).

Background of the Problem

The curriculum creation process. In the face of mounting appeals for school reform, educational leaders were looking at the Core Standards to drive instructional programs. In order to do that, a focus needed to be placed on both the curriculum and how it was developed (Squires, 2009). Once applicable standards were adopted, the process of developing curricula began. Usually based on a predefined cycle (Glatthorn, Boschee, & Whitehead, 2008), this process typically began with the formation of teams, possibly comprised of volunteer teachers, administrators, and/or community members. Generally, the teams were not fully aware of the extent of curricular work (Carl, 2009), and they often received only initial instruction rather than continuous support. Glatthorn, Boschee, and Whitehead (2008) found most teams began by identifying how students were currently performing using assessment scores. Then, usually with the help of a rubric (Council of Chief State School Officers, 2013), existing instructional materials were evaluated to support progress of student learning toward the standards. Marzano, Waters, and McNulty (2005) emphasized that essential to this process was the combined knowledge and influence of the team and the school district's guidance in determining what should be written in a curriculum guide. A third stage began with work similar to that of a mechanic. All of the parts (standards, materials, personnel, and resources) were put in alignment to direct the work forward – in this case towards student achievement. The only problem was that this

work could not be done in "30 minutes or less" and all the work could not usually be completed in one "shop" as multiple stakeholders had to be involved. Perhaps the intricate nature of the work was one reason that teachers felt unprepared to fulfill expectations and gaps are identified between standards and instruction. Blank, Porter and Smithson (2001) documented such gaps in a meta-analysis of math and science curricula in 11 states.

In essence, curriculum creation was considered to be a problem-solving process and Riding, Fowell, and Levy (1995) recommended that student and teacher needs and desires be taken into account while addressing standards. Not only did participants experience the typical trials of change, they were also tasked to merge stakeholders' paradigms and produce an assortment of instructional materials, methods, and assessments to satisfy learners' unique needs (Kiguli-Malwadde, Kijjambu, Kiguli, Galukande, Mwanika, Luboga, & Sewankambo, 2006). Because of these elements, Paykoç, Mengi, Kamay, Önkol, Özgür, Pilli, and Şahinkayasi (2004) believed it was important to think about the qualities of current students in order to create dynamic and responsive curricula.

Different types of curriculum. One of the challenges in curriculum creation was that it cannot be isolated into a focus on the written documentation. When Wilson (2014) asked her university students to loosely define "curriculum," nearly all of the respondents discussed written items – textbooks, paperwork. By definition, however, *curriculum* had Latin origins meaning "to run a course." Continuing the running metaphor, there were many variables during a race, all of which could be characterized as the different methodologies that could be employed to ensure that a student becomes proficient in the content – the metaphorical finish line. Wilson (2014) noted that curriculum reflected the models of instructional delivery chosen and used, and depending on the perspective, may be viewed

through a variety of lenses – psychological, philosophical, or pedagogical. Wilson (2014) also identified "11 different types of curricula used in schools today" (p. 1):

- Overt, explicit, or written curriculum refers to curriculum written as part of formal instruction of schooling experiences and could include any curriculum document, texts, films, and supportive teaching materials that were purposively chosen to support the intentional goals of a lesson, school, or district. Thus, the overt curriculum was usually confined to those written understandings and directions formally designated and reviewed by administrators, curriculum directors, and teachers...often collectively.
- Societal curriculum (or social curricula) As defined by Cortés (1981), societal curriculum was [the] massive, ongoing, informal curriculum of family, peer groups, neighborhoods, churches, organizations, occupations, mass media, and other socializing forces that "educate" (p. 24) all of us throughout our lives.
- 3. The hidden or covert curriculum was implied by the very structure and nature of schools, much of what revolved around daily or established routines. Longstreet and Shane (1993) offered a commonly accepted definition for the "hidden curriculum," which referred to the kinds of learnings children derive from the very nature and organizational design of the public school, as well as from the behaviors and attitudes of teachers and administrators " (p. 46). In contrast with a formal framework of lessons and activities, the hidden curriculum consisted of the underlying scholastic, societal, and cultural messages that students received in a variety of methods while they are in school (Abbot, 2014). Some examples of a hidden curriculum may include emphases on room assignments, bell/school

schedules, discipline procedures and competition through athletic and academic competitions. These may have been positive or negative based on the perceptions of the learner (Apple, 1995).

4. The null curriculum referred to what was not being taught, thus implying to students that those elements lacked importance to their educational growth or to the local community. Eisner (1994) offered some major points as he concludes his discussion of the null curriculum:

> The major point I have been trying to make thus far is that schools have consequences not only by virtue of what they do teach, but also by virtue of what they neglect to teach. What students cannot consider, what they don't processes they are unable to use, have consequences for the kinds of lives they lead. (p. 103)

From Eisner's (1994) perspective, the null curriculum was simply that which was not taught in schools. Somehow, somewhere, some people were empowered to make conscious decisions as to what was to be included and what was to be excluded from the overt (written) curriculum. Since it was physically impossible to teach everything in schools, many topics and subject areas must be intentionally excluded from the written curriculum. But Eisner's position on the "null curriculum" was that when certain subjects or topics were left out of the overt curriculum, school personnel were sending messages to students that certain content and processes were not important enough to study. Unfortunately, without some level of awareness that there was also a well-defined implicit agenda in schools, school personnel sent this same type of message via the hidden curriculum. These issues were important to consider when making choices. We taught about wars but not peace, we taught about certain select cultures and histories but not about others. Both our choices and our omissions sent messages to students in our classrooms.

- 5. *The Phantom Curriculum* encompassed the messages prevalent in and through exposure to any type of media. These components and messages played a major part in the enculturation of students into the predominant meta-culture, or in acculturating students into narrower or generational subcultures.
- 6. The Concomitant Curriculum was defined as what was taught, or emphasized at home, or those experiences that were part of a family's experiences, or related experiences sanctioned by the family. This type of curriculum may have been received at church, in the context of religious expression, lessons on values, ethics or morals, molded behaviors, or social experiences based on the family's preferences.
- 7. The Rhetorical Curriculum incorporated elements from the rhetorical curriculum which were comprised from ideas offered by policymakers, school officials, administrators, or politicians. This curriculum may also have come from those professionals involved in concept formation and content changes; or from those educational initiatives resulting from decisions based on national and state reports, public speeches, or from texts critiquing outdated educational practices. The rhetorical curriculum may also have come from the publicized works offering updates in pedagogical knowledge.

- 8. *Curriculum-in-Use* included the formal curriculum (written or overt) comprised of those things in textbooks, and content and concepts in the district curriculum guides. However, those "formal" elements were frequently not taught. The curriculum-in-use was the actual curriculum that was delivered and presented by each teacher.
- 9. *The Received Curriculum* involved those things that students actually took out of classroom; those concepts and content that were truly learned and remembered.
- 10. The Internal Curriculum combined processes, content, and knowledge with the experiences and realities of the learner to create new knowledge. While educators should have been aware of this curriculum, they had little control over the internal curriculum since it was unique to each student. Educators explored this curricula by using instructional assessments like "exit slips," reflective exercises, or debriefing discussions to see what students really remembered from a lesson. It was often very enlightening and surprising to find out what had meaning for learners and what did not.
- 11. The Electronic Curriculum comprised those lessons learned through searching the Internet for information, or through using e-forms of communication (Wilson, 2004). This type of curriculum was either formal or informal, and inherent lessons may have been overt or covert, good or bad, correct or incorrect depending on ones' views. Students who used the Internet on a regular basis, both for recreational purposes (as in blogs, wikis, chatrooms, listserves, through instant messenger, on-line conversations, or through personal e-mails and social media sites like Twitter, Facebook, or YouTube) and from personal online

research and information were bombarded with all types of media and messages. Much of this information may have been factually correct, informative, entertaining, or even inspirational. But there was also a great deal of other information that may have been very incorrect, dated, passé, biased, perverse, or even manipulative. The implications of the electronic curriculum for educational practices are that part of the overt curriculum needs to include lessons on how to be wise consumers of information, how to critically appraise the accuracy and correctness of e-information, as well as the reliability of electronic sources.

Challenges of curriculum creation. Multiple challenges confronted district curriculum creation teams. From limitations with funding and time, to pressures from stakeholders and the politics of change, the resilience of developers was usually tested. But, if a curriculum was to reflect the current and future educational values of a community (Apple, 2004), then it made sense for teachers to create it because they had the closest connection to these objectives (Russell, 2012). But, if asked to write a curriculum, district decision makers were forced to consider how to empower teachers throughout training so that the students eventually flourished. Alonsabe (2009) identified two divergent implementation strategies, the first being the *laissez-faire* (little interference) approach which gave teachers absolute control to determine the best content to teach. Conversely, some districts employed an authoritarian approach to maintain curricula fidelity by restricting teacher creativity and flexibility. No matter the view, planning a well-organized, broad, and insightful curriculum that draws forth desired outcomes from every student when each pupil and every school was different can seem an overwhelming task.

Part of the difficulty, as discovered by Corrigan, Dillon, and Gunstone (2007), was that curricula writers often preferred to maintain a status quo, salvaging elements of current documentation as they may already exemplify their values (and they were already adopted). Yet, developing curricula with a colleague or peer gave teachers the opportunity to have ongoing academic conversations about new instructional methods and materials, new developments in the content area, fresh pedagogical structures, and newly uncovered commonalities in classroom practices (Gross, 2012). Jacobs (2013) and Felner, Jackson, Kasak, Mulhall, Brand, and Flowers (1997) verified a direct link to higher student achievement through this collaboration, regardless of whether it took place during the school year, the summer, or in electronically mediated conversations. However, sharing the work also lead to conflict as Corrigan et al. (2007) stated, "No curriculum is a value-free zone" (p. 2). In other words, it was likely that a curriculum creator would attempt to include their personal ideas of how a topic should be taught. It was up to a district to decide whether those ideas were validated. Connelly and Clandinin (1988) found that nearly all curricula contained personal influences. However, they also reminded that the transference of knowledge was, in itself, a personal effort and that the inclusion of personal values maintains intensity on instructional goals. Ho (2010) reiterated that internal safeguards, such as establishing a focus on teamwork, providing multiple opportunities for review and input, and limited initial oversight by administration usually allowed for teachers to submit curricular documents that were unbiased and polished.

School districts across the nation worked to revise instructional expectations with each new reform or demand to meet student needs and community expectations. Depending on the size of district and resources available, stakeholders determined the scope of needs, how to address them, and ways to combine all standards, feedback and monetary resources into lesson plans, unit plans, guides and maps that make sense to the end user (Mooney & Mausbach, 2008). As this task was often assigned to teacher-leaders, they found themselves at the epicenter of change they may not have wanted nor deserved, and could have had difficulty prioritizing with everyday instructional tasks. Yet, they were charged with full responsibility for the often mandated process (Johnson, 2001). These teachers were neither trained, nor did they have a complete vision of what was expected by leadership for new curricula (Black, 2003). The lack of professional development was often blamed on a lack of funding allocated by administrators or policymakers. Demands for change to meet the needs of a district were challenging, even for the most skilled educators or school districts.

Regardless of the potential benefits, school districts faced myriad difficulties training teachers to write curricula. For instance, the work took many staff and financial resources, sometimes more than schools were able to provide (Dodge, 2000). Because the work involved many decisions and perspectives, it also moved slowly as it progressed from personal beliefs to those aligning an entire system. President Woodrow Wilson summarized the difficulty when he remarked, "It is easier to move a cemetery than to effect a change in curriculum" (quoted in Allen, 1970, p. 29).

Statement of the Problem

Limited empirical evidence existed to show what types of training teachers needed to create curricular materials. With the 2010 implementation of the Common Core State Standards in Idaho, now coined the "Idaho Core" (Idaho State Department of Education, 2015a), the statewide requirement of a local school district to have a curriculum for each course (hopefully aligned to applicable standards) was re-emphasized. However, even if provided with a template, teacher-leaders expressed that they did not have the educational background to write curriculum, nor did they feel adept to do so in a way that gave credibility to their work (Carl, 2009). Hansen (2011) explained what teachers felt about curriculum creation: "In their eyes, it was something undertaken by authorities (e.g., regional advisory committee members or school board writing teams) with years of experience in the school system" (p. 1). Instead, teachers felt that their focus should have been on teaching using the resulting resources. Carl (2009), though, counseled that "teachers must be involved in curriculum creation and that they should have the appropriate skills and knowledge to be able to make a contribution to these works" (p. xi). Classroom teachers expected curricular documents to be accurate and current, but may not have been the ones volunteering to do that work (Hayes-Jacobs & Johnson, 2009).

Without targeted training on the expectations for curricula in a school district, students may be tested on insufficiently discussed material which may cause them to perform below potential on tests (Ravitch, 2011) and may not made Adequate Yearly Progress as mandated by the No Child Left Behind Act (No Child Left Behind [NCLB], 2002). Repeated failures in meeting those same goals could jeopardize funding and possibly lead to a school or district takeover. Therefore, Hayes-Jacobs, and Johnson (2009) noted that school districts should prioritize the revision of curriculum and provide consistent training around instructional changes. Specifically, some viewed this process as a way to increase competency, clarity, confidence, and consistency in the work of teachers. The clear expectation of currency provided a structure for the fairness students wanted and parents expected (Haycock, 2001) as it demonstrated that a school district was continually adapting and preparing students to perform at their best. Without professional development for curricular work and a consistent expectation, districts could have seen an outcry from community patrons (Bowie, 2014). For instance, parents expressed concerns over the Garnet School District's (pseudonym) failure to oversee standards and instructional materials (Board of Trustees, 2010).

An unwanted task. Curricula creation may be viewed by some as an exercise in futility (Hargis, 2006). Sharp (1952) professed, "Traditional teacher(s) are very likely to view curriculum meetings as 'a lot of talk that gets to nowhere'" (p. 440). Mooney and Mausbach (2008) verified that teachers across the United States spent little time formally discussing curricula management in their everyday work. Therefore, curricular teams may have felt reluctant to undertake a revision or adoption merely because of the amount of work required. Nevertheless, teachers were entrusted to make decisions affecting entire classrooms, departments, or organizations (Dirkswager & Farris-Berg, 2012). Even though the effort of Missouri teachers—the careful evaluation and piloting of curriculum—was tedious, this work could provide Idaho teachers with better tools with which to instruct and inspire. Studies like this one showed that teachers valued the autonomy to teach what their experience and judgment told them was necessary, but lack of written guidelines could result in a loss of instructional flow and inconsistency across schools (Stevenson & Baker, 1991). It was important to provide clear direction from the start, to lend lucidity and selfsufficiency to a district's and its teachers' subsequent decisions and actions (Mohr, Rogers, Sanford, Nocerino, MacLean, & Clawson, 2004). In order for teachers to successfully write a curriculum, it was necessary they be guided in the elements of the process, giving them confidence to interpret standards on top of developing a feeling of autonomy around the work (Zeiger, 2011). Zeiger (2011) counselled that the selected guides should be reviewed

by a previous curriculum creator, specialist, or administrator to check for accuracy and completeness and to examine how the selected activities meshed vertically with other courses in sequence.

Different views of curriculum. Even with a clear process, instructions, and expectations, districts needed to resolve one crucial issue – which curricular viewpoint, among many alternatives, should prevail (Mohr et al., 2004). Identifying that viewpoint ensures alignment of curricula to standards which are measured by assessments and eventually become the most visible evidence of a school or district's success (Popham, 1999). Therefore, schools were becoming charters or magnets with diversifying missions resulting in a variety of frameworks to guide their curricula as a way to match student, teacher, or community talents. For some new schools, the starting point was a list of applicable standards. Others relied on changing ideologies to frame the standards for instruction and achievement. The challenge of making curricula acceptable to stakeholders and adaptive for students will need to be resolved before the work can succeed (Eisner, 2004).

These issues underscored the importance of guidance for teachers in the role of curriculum creators. Specific guidelines could have clearly defined what *curriculum* entailed along with how it was to be formed and validated. Both common sense and research agreed: a curriculum needed to be dynamic to engage all students (Wiles, 2009). Properly trained writers sought various forms of input, so the curriculum took on a hint of "abstract expressionism" (Wiles, 2009, p. 255) where many ideas were viewed in a single work. Slattery (2012) described the curriculum creator's work as "one point of a triangular relationship, of which the other two points are the teacher and the students" (p. 180).

Slattery also believed professional development was key in deciding which concepts would be important to teach and assess, emphasizing that students benefitted if their teachers were well-prepared. The notion of outcomes was accentuated by Diez and Moon's (1992) suggestion that collaborative teams worked to answer the question, "What do we want students to know and be able to do?" (p. 38).

Curriculum management in Garnet District. Districts similar to the one to be used in this case study, Garnet School District, had additional reasons to be concerned about developing curricula. The opening paragraph of Garnet's board policy on curriculum adoption read, "The Board requires the development of curricula for all District courses/subjects" (Board of Trustees, 2009, p. 1). Although this policy represented the most up-to-date expectation, many courses were actively being taught without a documented curriculum, or by teachers with limited understanding of the standards associated with the course, or both, due to a lack of governance in the last decade, a problem that was still being addressed at the time of the study (Garnet School District, 2014a). In an initial survey of all classes taught at each grade level, only 40% of high school courses had a written curriculum guide on file with the district office. Nearly three-quarters of courses taught in the middle schools had the necessary documentation whereas, at the elementary level, 80% of courses had a written curriculum (Garnet School District, 2014a). Administrators at underperforming schools commonly found that teachers did not understand the expectations outlined for students in their curriculum guides. Further investigation revealed many teachers did not have a curriculum guide or possessed an outdated version of the units and maps required for each course because of a lack of adherence to a cycle of revision and multiple changes in personnel. Many of the guides were not current since new standards

were approved following the state's most recent 6-year curriculum adoption cycle. In addition, fewer than 20% of all active courses had end-of-course assessments (final exams) on file for each grading term (Garnet School District, 2014) although policy required these to be administered at the end of each academic term. The reliability and validity of these exams and student scores were also not consistently analyzed to reduce error. These lapses indicated a need for consistency and clarity around curriculum. Paradoxically, Garnet had the highest proficiency rate on the statewide assessment of any of the 13 largest school districts in the state (Idaho State Department of Education, 2013d). This was attributed to the (a) lack of ethnic diversity in the district, or (b) greater congruence with standards in those courses tested by state exams, including reading and mathematics. Proficient performance did not diminish the necessity to adhere to written policies regarding curriculum.

Implementing the Idaho Core in Garnet. For the 2013-2014 school year, district administration made the creation of new Idaho Core aligned curricula a priority for all content areas, building off of the work that was completed in English language arts for all grade levels and in elementary mathematics in the previous school year. In the Garnet School District, volunteer teachers from their respective grade levels or academic departments were tasked with writing new curriculum guides, maps, units, and lessons while designing professional development for their content or grade level colleagues, a process replicated in many districts across the country (Golod, 2014). Curriculum creators were offered substitutes during the school day to draft new documents that were presented for review during collaboration sessions held once per month. Additionally, each content or grade-level group was assigned an administrator who led the training with nothing more

than a blank template, past examples posted on the district's intranet, and the experience of the group. With that variety, it was expected that some groups felt better about their training and product than others involved in the same process.

The district was then at a crossroads; the most recent textbook adoption occurred over seven years ago in English language arts and no adopted materials specifically addressed the Idaho Core. For instance, the Board-approved curriculum guide for United States government ended with the first term election of President Bill Clinton in 1992 (Walters, 2009) and certainly did address literacy, speaking and listing, and academic vocabulary as the standards emphasized. This sense of urgency had increased as, overall, the district was one cycle (6 years) behind on the state's instructional materials adoption schedule (Idaho State Department of Education, 2013a), and many of its documents did not reflect what was being taught in many courses. Nearly all districts in Idaho were in a similar state with over a 19 percent decline in state funding for education since 2008 (Saunders, 2012) and the State of Idaho still had not developed a recommended list of instructional materials in English language arts or mathematics at the time of this study.

Administrators were assigned to different content areas and grade levels by the superintendent or director of elementary/secondary education. In some of the larger groups, two administrators were assigned. There was no common/shared district expectation for how each administrator completed the work, but there were clear expectations as to how documents were expected to look. So, Garnet administrators had to develop their own approach based on the dynamics and needs of each content area or grade level group. Again, the goal of Garnet's district leadership was clear: a new curriculum guide, map, sample unit plans and assessments were obligatory for each course taught in the district. They were to be

fully vetted by peers and the district's instructional coaches and tied to existing standards. But Garnet School District rewrote only English language arts and elementary mathematics curricula received Board approval in August, 2013 (Board of Trustees, 2013). Teachers began to rewrite curricula in other content areas, such as science, social studies, and world languages beginning in the 2014 school year with secondary mathematics pushed to the 2015 school year, which the district hoped to tie to a curricular materials adoption.

In the previous eight years, Garnet district relied on its cadre of nine instructional coaches to write curriculum as these teachers on special assignment represented different content areas and were identified by the district as leaders in their craft. Once or twice a year on average, the district would gather a few lead teachers and the coaches and evaluate the courses taught in the district, review assessment scores and make adjustments for the coming semester or year. Figure 1 illustrates the six-year curriculum adoption cycle employed by the district. This process also aligned with the State of Idaho's seven year



Figure 1. Garnet School District curriculum creation cycle.

standards adoption process which drove much of the "design" of the curricula. This process was typical of the 10 largest districts in Idaho. According to the district's director of secondary education, most of the reason for the lapse in curricular creation stemmed from added responsibilities and reduced resources due to decreased state funding. ("R. Aster," personal communication, August 13, 2013). She reinforced that these same cuts were the reason why current documentation for some courses did not exist as identified in the district's curriculum audit.

State leaders helped develop the Common Core State Standards and the Smarter Balanced Assessments when the Idaho Superintendent of Public Instruction was elected president of the Council of Chief State School Officers (Wells, 2010). With the implementation of the Idaho Core (Idaho State Department of Education, 2013b), district administration decided that the instructional coaches' efforts should be focused on effective classroom instructional practices. This move, paired with reallocations and reductions of financial resources, pushed the work of curricular creation to teachers, although the coaches still validated the work.

Curriculum creation in a time of change. Within the past 15 years, legislative bodies around the country considered the Common Core State Standards, increased attention on test scores, and made changes in instructional practices to make adequate yearly progress mandated by the No Child Left Behind Act (NCLB, 2002). Although recent cuts to public education funding caused districts nationwide to shelve processes for textbook adoptions and curricular training, the need for current curricula still existed (Bryce, 2010). Cutbacks also reduced teaching and specialist positions, such as instructional coaches (Hendry, 2013). Kober and Rentner (2011) recommended that organizations review their course documents to find whether they reflected standards and whether they needed to be adjusted to integrate these new directives into classroom instruction. Without these steps, students may have been asked to demonstrate knowledge on state and national assessments about untaught content,

ultimately causing them to perform poorly and making teachers and administrators appear inadequate.

One major misinterpretation about the Idaho Core was that it was a curriculum. Rather, it was a set of standards adopted by states which then decided who wrote the instructional practices to meet those standards at each grade level and subject. Wiggins and McTighe (2012) identified five ideas for curriculum creators who started using standards, like the Idaho Core, as their entry point:

- 1. Avoid retrofitting the standards to existing instructional and assessment practices as a greater focus needed to be placed on college and career readiness;
- 2. "Standards are not curriculum" (p. 3). In fact, the standards themselves emphasized that "The standards define what all students are expected to know and be able to do, not how teachers should teach" (p. 4);
- These standards should have been "unpacked" (p.4) so that developers could see their place in the litany and how the next level's work prepared students for continued growth;
- 4. Curriculum creators should have backwards mapped from the greatest desired objective for students. Following Tyler's (1949) recommendations over 60 years ago, developers should have thought about how students' maturity and growth in a subject provided opportunity for application and internalization;
- and, Keep in mind the assessments. English (1983) proclaimed that what was taught should be tested. Testing was a point of emphasis in recent years and teachers were evaluated by the scores. Therefore, curriculum coherence should

not have been just accepted by educators as a matter of faith" (Marzano, 2003, p. 23).

Professional Development

Teachers needed to have requisite skills, knowledge, and attitudes to develop a pedagogy that was equitable and culturally relevant (Banks & McGee Banks, 1995). Effective professional development was intended to be ongoing, experiential, collaborative and connected no matter the content (Edutopia Team, 2008), and essential to maintaining high standards for students and mobility in changing times (Garet, Porter, DeSimone, Birman & Yoon, 2001). Education reforms over many years encouraged students to debate and collaborate with a focus on higher cognitive processes and standards. Ironically, districts rarely focused on improving these same characteristics in teachers even though their own performance was increasingly tied to the success of their students (Gulamhussein, 2013).

Professional development for teachers was essential in promoting student achievement and determining preferences for delivering lessons to students (Louis, Leithwood, Wahlstrom, Anderson, Michlin, Mascall, & Moore, 2010). Even with that background, limited empirical research was available on the connections between professional development and curriculum creation, although there was a large body of independent study on those topics (Flinders & Thornton, 2013; Joyce & Showers, 2002). Because of this gap and the specific funding challenges of both in the State of Idaho, potential existed for this study.

Curriculum Creation

Survey of Case Study Research. Multiple case studies revealed consistent themes within the field of curriculum creation. Hipkins, Cowie, Boyd, and McGee (2008) exposed

eight themes in a nationwide curricular implementation project. Each of the themes: (a) aligning vision and values to practice; (b) the importance of administrative leadership; (c) the types of professional learning activities; (d) moving from standards to curriculum; (e) flexibility for school-based curriculum creation; (f) moving to an integrated curriculum with a focus on inquiry learning; (g) time and process for implementation; and (h) communicating with parents and the community, demonstrated the need to add to the body of research. However, using the findings of this summary and other studies as a foundation enabled me to further develop how professional development aides curriculum creators.

Inherent in each of these themes was professional development was also affirmed by the work of Louis (1995) who looked at urban school improvement through professional development in curricular creation. Specifically, he pinpointed three areas that were essential: (1) creating a structure that promotes teacher decision-making; (2) creating structures to promote collaboration; and (3) creating structures to promote professional development. However, would these same findings from over 20 years ago be similar to a suburban district in Idaho?

Preservice Education

In an empirical study of 133 teachers who recently completed preservice education programs, none identified curriculum creation as a point of emphasis (Cohen, Hoz, & Kaplan, 2010). This certainly would not have been surprising due to the substantial number of other areas of instruction for teachers at the beginning of the 21st century – pedagogical to socio-cultural and similar to the KG-12 challenges of the *null curriculum* mentioned earlier. Across the United States, teacher preparatory programs were under scrutiny from policymakers as educators as they continued to adapt to the needs of students and

communities today (Young, Grant, Montbriand, & Therriault, 2001). However, within these foci, it became apparent that teachers had to develop professional knowledge, but also a personal commitment to change and team work, identified as essential soft skills for curriculum creators (National Council for Curriculum and Assessment, 2014).

Purpose of the Study

The purpose of this qualitative exploratory case study was to identify perceived connections between programs of professional development and curriculum creation.

Glatthorn (1999) asserted that districts should have a plan of continual curricular training so faculty members can discuss the effectiveness of their lessons. Furthermore, Bacharach et al. (1990) found that teachers wanted to have a greater say in areas regarding pedagogy and assessment. Combined, Bacharach et. al (1990) and Glatthorn (1999) contended that a district should place consistent and trusted teaching methods into a curriculum guide in order to offer an opportunity to facilitate understanding for each student in a course. Glatthorn (2006) said that a focus of all professional development and trainings should be placed on acquiring common goals which was key to making instructional changes in a classroom, school, or district. The district also should have encouraged collaboration between those teaching the courses. Darling-Hammond, Wei, Andree, Richardson, and Orphanos (2009) summarized that teachers should have the right to participate in curricular and pedagogical decisions for their individual students rather than simply complying with a set of standards. Yet none of these researchers discussed how districts should train and involve teachers in the processes.

Context of the Study

This exploratory case took place in Garnet School District, the fifth largest school district in the State of Idaho. The district enrolled just over 10,500 students to start the 2014-2015 school year and employed 570 teachers, administrators, specialists, and instructional coaches (Garnet School District, 2014). There were 17 school buildings in the district including 10 elementary schools, 3 middle schools, 2 traditional high schools, 1 alternative high school, and 1 consortium-based professional technical high school.

Instructionally, the district was high achieving with eight of the last 14 state teachers of the year selected from the district and the district maintained the highest scores on the statewide achievement test and the SAT (Garnet School District, 2014).

Significance of the Study

Every school district in Idaho was expected to have a process for curriculum creation that adhered to the guidelines of the Idaho State Board of Education (2008). School districts were also mandated to engage a variety of stakeholders, ensuring adopted materials were suitable for students, faculty and the community. It was imperative for districts to have an explicit, repeatable process, for which those school districts provided time and support (Monson & Monson, 1993). This study provided recommendations for educational leaders who were charged with training teachers to write curricula and provide collegial feedback to educators who wanted to perform the task well. Specifically, school and district level administrators could use the results to influence their decisions on time and funding professional development along with recognizing the elements of professional development which allowed writers to create relevant curricula. The results may also be of interest to law
and policy makers who recognized the importance of understanding teacher needs for professional development, especially in a time of change.

Definition of Terms

The Common Core State Standards were a set of clear and consistent academic standards in English language arts and mathematics that were developed by teachers, school administrators and experts to provide a clear and consistent framework across states (Tanner, 2010). As of this study, 44 states, the District of Columbia, and several principalities, adopted the same standards in English language arts and mathematics from Kindergarten through grade 12 (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010).

Curriculum alignment referred to the prescribed evaluation of a course or instructional program to address the changing needs of teachers and students through a review of applicable standards (English, 2000).

Curriculum audit signified "a process to analyze a system's policies, plans, organizational structure, documentation, equity, assessment, facilities, and budget for effective design and delivery of teaching and learning" (English, 2000, p. 48).

Curriculum management represented the process for creating, storing, and communicating curricular materials in an organization. This could include utilizing applicable standards, revising/rewriting, and defining/implementing the roles and responsibilities of those using a curriculum for teaching and learning. English (2000) revealed that an effective program of curricula management had three interwoven components:

- Curriculum warehouse/curricular creation—instructional documentation should be available in digital format and searchable by specific state content standard, subject, and/or grade level. Teachers should be provided with tools and other instructional resources to develop lesson plans for assisting students having trouble meeting applicable content standards or those for whom the standards may be too simple (Dede, 2000).
- 2. Professional development –an array of activities and interactions should be provided for increasing knowledge and skills, improving the practice of teaching, and contributing to personal, social, and emotional growth (Cohen, 1993). Activities can come in the form of workshops, local and national conferences, college courses, or special institutes, and can range from formal, structured seminars on in-service days to everyday, informal hallway discussions with other teachers. Over the past decade, a broad-based view of professional development emerged, treating teacher learning as interactive and social, and an activity based in discourse and community practice (Cochran-Smith & Lytle, 1999).
- Record keeping/reporting—student assessment data must be quickly and easily available to appropriate teachers, administrators, and parents. This information must be organized to facilitate collecting and sharing data.

Curriculum mapping suggested a process originally developed by English (2000) and refined by Hayes-Jacobs and Johnson (2009) to accumulate and organize all of the applicable standards and expectations for a course into an instructional calendar. It was "a technique for recording time on task data and then analyzing this data to determine the 'fit'

to the official adopted curriculum and standards as well as the assessment or testing program" (English, 1983, p. 13).

Curriculum was defined by Sergiovanni and Starratt (1983) as "that which the student is supposed to encounter, study, practice and master" (p. 24). Farrant (1991) defined curriculum as a set of decisions about what is taught in addition to how it was delivered, which determined the general framework for planning lessons and enabling learning to take place.

Formative assessment designated ongoing assessment of a pupil's educational development over the course of an instructional unit where summative assessment meant the use of a standalone exam to measure a student's knowledge of a particular instructional unit, similar to a final exam in a course or a graduation exit exam (Garrison & Ehringhaus, 2007).

Standards identified what students should know or be able to do by a predetermined time (Squires, 2009). They were usually selected by a governmental agency and mandated for each school district.

Benchmark (assessments) represented short tests throughout the academic term to inform teachers as to whether students were on track to master standards by the end of an academic term (Marzano & Kendall, 2000).

Research Questions

Creswell (2007) recommended the use of a few overarching questions to guide research, along with several subquestions, which go into greater detail. He elaborated: "Devising relevant and provocative questions is vital to the success of a case study and deserves significant attention from the researcher" (p. 99). The central questions, according to Creswell, should be broad. Using those standards, the design of this inquiry attempted to answer the following questions:

- 1. To what extent did teachers perceive a relationship between professional development and curriculum creation?
- 2. Which dynamics influenced the process of curriculum creation?
- 3. How could school districts in Idaho serve the professional learning needs of educators asked to create curriculum?

Limitations

All research has strengths and weaknesses inherent in design or execution (Yin, 2014). Specific to this study, the following limitations have been identified:

- Limitations in generalization exist in case study findings (Stake, 1995; Yin, 2014). Yin (2014) argued that case studies are only "generalizable to theoretical propositions and not to populations or universes" (p. 21). Specifically, as the sample size was relatively small, this may affect generalizability to other school districts.
- Second, many variables outside my control may have impacted the research of
 professional development in curricula writing. These variables included
 uncontrollable variations in the administrator-led trainings, quantity of work
 performed by a particular curricular team, the number of volunteers in each team,
 and the depth of knowledge of curriculum creation and alignment of the
 participants.
- Third, as recent case studies revealed that teachers accepted a greater influence on curriculum policy and practice well beyond their classroom (Bascia, Carr-

Harris, Fine-Meyer, & Zurzulo, 2014), district leaders wanted to recognize how professional development best served their needs and fostered camaraderie through professional work.

- A fourth limitation was the organization of professional development in the Garnet District. The district assigned building administrators to different content areas (i.e., secondary mathematics) and asked them to independently plan sessions throughout the year. Therefore, there was a perceived lack of continuity between the goals of each content area. Also, Schafer and Crichlow (1996) found an increase in mistrust of initiatives directed by upper-level administrators. I was mindful of how leaders in buildings and the district office guided the work.
- Fifth, as the charge of curriculum creation and management was under the guise of the researcher, trust may be brought into play.
- Finally, liabilities for the district may have been exposed, especially around the lack of compliance towards state mandates. However, the district expressed confidence that the results would enable continuous improvement.

Delimitations

In a case study, there may be several self-imposed boundaries that a researcher sets on the purpose and scope of the study (Lunenburg & Irby, 2008). The delimitations utilized in this study were determined by a desire to gain a better understanding of the relationship between the practices of teacher professional development and the curricular creation process. They are listed below:

• The first delimitation was that the sample size was drawn from a single district, which may limit transferability and generalizability.

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- Second, I only requested involvement from secondary mathematics teachers
 employed by Garnet Schools who were chosen to be a part of the district's
 curriculum creation process—rather than all math teachers. This use of
 volunteers in a single public school district may not have allowed application to
 teachers in other settings.
- Third, the researcher was employed by Garnet School District as the Director of Curriculum and Assessment. This association was beneficial, as it allowed access to the development process; however, bias may have been introduced because of personal knowledge of participants and process. On the other hand, the nature of the position was neither evaluative nor did I lead content or grade level trainings. Coghlan and Brannick's (2014) advice on how to navigate ethics, politics and management in completing action research in one's own organization was helpful in addressing this delimitation.
- Lastly, as a curriculum director was "professionally responsible for the sorting and development of this work" (Wiles, 2009, p. 1), I felt that it was important to be embedded in the process to ensure that the professional development delivered by administrators reflected the needs of curriculum creators.

Assumptions

This study included the following assumptions: (a) the selected participants responded to the questions accurately and indicated their perceptions regarding the trainings they received during the curricula writing process; (b) the selected participants understood the vocabulary, concepts, and external requirements regarding curricula writing; (c) the findings collected explored the knowledge, skills, and perceptions of the participants' involvement in curricula writing and adoption; and (d) the interpretation of the data accurately reflected the perceptions of the respondents (Barrett, 2000).

Summary

Marzano, Waters, and McNulty, (2005) revealed the enormity of the responsibility toward involving teachers in the learning process. He emphasized that "Each school day more than 53.6 million students (National Center for Education Statistics, 2002) walk into more than 94,000 K-12 schools in the hopes the 13 years of schooling they experience will dramatically enhance their chances of success in the modern world" (p. 1). Teachers, administrators, and practitioners arrived in those same school buildings and used curricula to guide their choices of what to teach, how long to teach it, and how to check if the students incorporated the instruction into their lives.

The process of designing curricula was intended to be dynamic as standards and expectations evolve. Throughout the past century, educators from Dewey (1933) to Tyler (1949), Bruner (1976) to Gardner (1999), and Wiggins and McTighe (2012) to Jacobs (2009) developed a variety of tools for the practitioner and contributed to the research assisting curricula creators. In this involved undertaking, curricula creators must not only incorporate the standards of the day but also gain acceptance from classroom teachers with different ideas of how to guide students' learning, and they must do it all using a district-prescribed structure.

Chapter II - Literature Review

Introduction

The purpose of this qualitative exploratory case study was to identify perceived connections between programs of professional development and curriculum creation. I will now provide a historical overview of the concepts and theories investigated and frame the proposed research questions.

While abundant literature existed on the topics of professional development and curriculum creation – little research merged those topics in preparation of teachers asked to create new instructional documents. The literature related to professional development and curriculum creation could be categorized into the following topics:

- Professional development
 - o Purpose of professional development
 - o Definitions of professional development
 - Professional development delivery
- Curriculum studies
 - Foundations of modern curriculum creation
 - o Common Core State Standards
- Curriculum creation through professional development
 - o Curriculum creation
- Connections that may influence curriculum creation
 - o Time
 - o Standards
 - o Empowerment

- o Status quo
- o Educational background
- o Level of participation
- o Collaboration
- Group dynamics
- o Limited resources
- Curriculum adoption in Idaho
 - o In Garnet School District

Professional Development

Purpose of professional development. From meeting standards to continuous improvement, from discussing innovations in pedagogy to utilizing technology and developing new content and assessments, teachers needed to expand their knowledge and instructional skills (Guskey, 2002). They were required to do all this while maintaining focus on promoting student academic success in their own classrooms. Considering the myriad of responsibilities teachers faced, they needed help to create curriculum materials aligned with standards (Mizell, 2010).

Many schools and districts did not prioritize professional development in the 20th century. The 1983 publication of *A Nation at Risk* found United States schools inadequately met the academic needs of their students. A report five years later from the U.S. Department of Education's National Center for Educational Statistics tied those deficiencies to how districts trained their teachers, finding that only 56% implemented strategies learned through district professional development. This finding reminded administrators that trainings which

did not persuade teachers to refine their practices likely did not benefit students (Guskey, 2002).

Even with the turn of the century, school districts continued to address the essential problems highlighted in those two reports by requiring teacher participation in professional development activities. They agreed with both studies that the quality of teaching and learning improved through meaningful collaborative training, thereby resulting in positive impact on student achievement (Lumpe, Czerniak, Haney, & Beltyukova, 2011). The Goals 2000 Educate America Act encouraged activities to be delivered with the sole aim of better preparing educators to help students achieve high academic standards (United States Congress, 1994).

Another problem focused on preservice instruction whereby teachers only received limited training on curriculum creation and associated theories (Handler, 2010). Handler found that undergraduate courses in a sample of 20 universities in the Midwestern United States generally referred to curriculum in the title but failed to provide the depth of curriculum theory necessary to write documents effectively.

By and large, professional development was considered to be the principle method for schools and districts to help teachers and schools continuously improve (Hidden Curriculum, 2014). In recent decades, the topic had been extensively researched and many strategies and initiatives had been developed to improve the quality and effectiveness of professional development for educators with adjectives such as "sustained, intensive, ongoing, comprehensive, aligned, collaborative, continuous, systemic, or capacity-building" (Hidden Curriculum, 2014, p. 1). However, many theories existed about what professional development was and divergent results from empirical research as to what resonated with teachers.

Definitions of Professional Development. One challenge facing advocates of teacher professional development was the number of definitions of the activity, each with its associated standards. Examples include those proposed by Guskey (2002), LearningForward (2012), Rice (2001), Killion (2002), several state departments of education, and national organizations. A summary of these definitions is provided in Table 1.

Table 1

Definitions of Professional Development

Guskey	"those processes and activities designed to enhance the
	professional knowledge, skills, and attitudes of educators so
	they might, in turn, improve the learning of students" (Guskey,
	2002, p. 382).
LearningForward	Staff development not only includes high-quality, ongoing training
	programs with intensive follow-up and support but also other
	growth-promoting processes such as study groups, action research,
	and peer coaching. (LearningForward, 2012, p. 1)
National Center	"process that increases life-long learning capacity of
on Secondary	community members" (Morningstar, M. & Kleinhammer-Tramill,
Education and	J., 2005, p. 1).
Transition	
Rice	Includes pre-service (teachers prep programs), professional
	development, district sponsored workshops or in-service

programs, school-sponsored workshops or in-service programs, university extension or adult education programs, subject specific college courses, conferences (Rice, 2001)

Killion	"planned, coherent actions and support systems designed and
	implemented to develop knowledge skills, attitudes, aspirations,
	and behaviors to improve student achievement" (Killion, 2002, p.
	11).

Even though the definitions varied, three elements were consistent. First, teacher professional development activities needed to be focused on improving student academic achievement, regardless of the job description (Joyce & Showers, 2002). Second, a successful training program was expected to be aligned with goals and outcomes established at the beginning of the planning process (Borko, 2004). Finally, activities needed to be sustained, intensive, and focused on work occurring in the classroom (Guskey, 2002). Specifically, Yoon, Duncan, Lee, Scarloss, and Shapley (2007) found that focused professional development helped students (1) learn particular subject matter; (2) establish connections between subjects; and (3) strengthen teachers' knowledge of specific subjectmatter content. The authors suggested that "close alignment of professional development with actual classroom conditions also is key." (p. 8)

Characteristics of Professional Development. Teachers charged with planning professional development in a school or district should have also understood and agreed on the constituent parts of a worthwhile professional development program. Guskey (2002) advised:

The three major goals of professional development programs are change in the classroom practices of teachers, change in their attitudes and beliefs, and change in the learning outcomes of students. Of particular importance to efforts to facilitate change, still, is the sequence in which these outcomes most frequently occur. (p. 383)

Guskey (2002) further suggested goals for professional development that specified learning targets and how they should visibly impact behavior or achievement in the classroom. Organizers needed to ensure clear and measurable goals while cautioning that the learning should not seem overwhelming or focus too much on change. Goals 2000 of the Educate America Act of 1994 (United States Congress, 1994) documented professional development program characteristics for planners, including that they:

- focused on teachers as central to student learning, yet included all other members of the school community;
- 2. focused on individual, collegial, and organizational improvement;
- respected and nurtured the intellectual and leadership capacity of teachers, principals, and others in the school community;
- reflected best available research and practice in teaching, learning, and leadership;
- enabled teachers to develop further expertise in subject content, teaching strategies, use of technologies, and other essential elements in teaching to high standards;
- promoted continuous inquiry and improvement embedded in the daily life of schools;

- be planned collaboratively by those who will participate in and facilitate development;
- 8. required substantial time and other resources;
- 9. was driven by a coherent long-term plan; and
- 10. was evaluated ultimately on the basis of its impact on teacher effectiveness and student learning.

The final recommendation was that professional development was intended to be recursive, both evaluative and guiding subsequent professional development events (Guskey, 2002, p. 384).

These contemporary recommendations for professional development were developed on a variety of other strategies that emerged since the mid-1990s. For instance, Corcoran (1995), Kent and Lingman (2000), Loucks-Horsley, Stiles, and Hewson (1996), Maurer (1996), and the United States Department of Education (1997) encouraged a focus on the teacher as a lifelong learner. Corcoran (1995), the Educational Research Service (1998), Kennedy (1998), Loucks-Horsley, Stiles, and Hewson (1996), and Maurer (2000) also endorsed small learning segments paired with support throughout implementation of a mentor or colleague. Furthermore, Corcoran (1995), the Educational Research Service (1998), Hawley and Valli (cited in Maurer, 1996), and The National Partnership for Excellence and Accountability in Teaching (cited in Rice, 2001) recommended programs for teacher professional development be chosen by individual school leadership – not by the district.

After research in the late 1990s, an increase in student performance was shown following 80 teacher hours of focused professional development activities. School districts

then began giving greater recognition to consistently focused time outside of the classroom (Wayne, Yoon, Zhu, Cronen & Garet, 2008). Districts were also beginning to feel the pressure of No Child Left Behind (NCLB, 2002), as required proficiency mandates slowly rose towards 100% (Rindone & McQuarrie, 2010).

According to the *Education Week Databook*, in 2007 activities were delivered faceto-face in over 98% of schools who responded, but video-based, online, and CD/DVD coursework were growing exponentially. An international survey of Teaching and Learning (TALIS) found most countries relied on dialogue for their training activities, although the United States did not participate in the survey (Organisation for Economic Cooperation and Development, 2013).

Professional Development Delivery. After districts began to feel pressured by No Child Left Behind (NCLB, 2002) and its continuously rising required proficiency levels (Rindone & McQuarrie, 2007), schools and districts began to rely increasingly upon different ways to pass along the knowledge, skills, and experience to their own personnel in order to solve problems (Rulke & Galaskiewicz, 2000, p. 623). Professional development could be characterized as informal conversation with a colleague to more formalized coursework. The TALIS survey delivered to teachers around the world (Organisation for Economic Cooperation and Development, 2013) found that informal conversation was the most common delivery method (92%) followed by courses and workshops (81%), and reading professional literature (78%). Participation in education conferences and seminars, professional learning networks, individual collaboration and research, mentoring and peer observation, and visits to other schools and qualification programs were mentioned but were not as common. Although provided in different ways, the study (Organisation for Economic Cooperation and Development, 2013) made it clear that the overall goal was to provide a platform for teachers and educational leaders to share lessons and ideas. Its benefits were considered to be:

- Individuals working in groups might present their colleagues with alternate ideas, solutions, or points of view. Divergent ideas could also prompt educators to reflect upon their own experiences, reassess their viewpoints, and resolve differences between their own perception of a problem and others' (Almasi, 1994);
- 2. Working in groups might give individuals an opportunity to verbalize their thoughts. Providing and receiving explanations of how individuals understand a problem and how they created a possible solution could enhance the process of creating an aligned curriculum. Such reflective explanations permit reorganization of thinking and the internalization of successful strategies, particularly for curricula writers with limited experience (Orlich, 1998);
- Functioning in concert with others could provide a positive affective experience. Specifically, it might cause young educators to become particularly interested in assuming leadership roles (Usdan, McCloud, & Podmostko, 2001). This socialmotivational effect possibly will be important for all educators;
- Curricular group work might provide an opportunity to scrutinize more complex, information-intensive problems, such as working with standards from a variety of different sources (Organisation for Economic Cooperation and Development, 2013);

 Collaborating with a group of diverse educators may optimize differing cognitive strengths and experiences of group members (Organisation for Economic Cooperation and Development, 2013).

Despite the promising benefits of professional development, it also presented the potential of delivering results less than the sum of its constituent individual efforts (Barron, 2003). For example, resource pooling could cause information overload, especially if a group was large. Whereas some group configurations may make work enjoyable, personal disagreements might also lead to negative emotional experiences, disjointed processes, wasted time, and poor products (Brownell, Adams, Sindelar, & Waldron, 2006). Brownell, et al. (2006) claimed teachers may not feel comfortable using group strategies in formal meetings, even though they used them during preservice training.

Curriculum Studies

The topic of curricula studies emerged in the 1920s as a distinct area of academic research. Early on, the domain was strongly impacted by systematic methodologies that transformed education into a science (Null, 2011). Forty years later, some educators, led by Huebner (1966), Klohr (1974), and MacDonald (1971), began questioning the use of scientific metaphors in defining the structure of the American curriculum (Pinar, 1975). Analysis, over and above classroom practices and procedures generated over the subsequent half-century, allowed teachers and administrators to synthesize a series of model practices, many of which are still firmly endorsed.

Contemporary curricular researchers contended that modern education was entombed within a narrowly defined rational organizing methodology. They claim that, as early as 1949, Tyler's *Basic Principles of Curriculum and Instruction* asked educational organizations to look at assessment results and identify the activities allowing students to achieve their goals. Inspired by Tyler's guidebook, the last 50 years saw an increase in professional organizations, states, and federal agencies suggesting scopes and timeframes for topics and how they should to be taught to students (Biggs, 2003). In some cases, these directives provided corresponding activities the teacher merely proctored. With the turn of the millennium, common vocabulary associated with curricula included standards and *benchmarks* (Marzano & Kendall, 2000). Educational values were applied in classrooms to measure students on higher stakes tests so others could see whether students had sufficient skills associated with curricular goals (Noddings, 2004). This practice of standards and benchmarks was used not only to demonstrate the student's knowledge of standards, but also to evaluate the competence of an individual teacher, school, or district. The new concentration on higher standards and standardized testing alarmed seasoned teachers who yearned for autonomy in the classroom (Ravitch, 2014). Critics opposed the full alignment of curricula to examinations as encouraging teachers to simply "teach to the test" (Au, 2007, p. 258) rather than providing fuller discussion of assessed topics. Regardless of their worth, these changes were established for students and educational trends indicate those foci will continue in the coming years (Barrier-Ferreira, 2010). A current and connected curriculum with identified and assessable standards at least gave assurance to educators that their work with students was in line with mandated expectations. There may also have been unexpected leeway in the mandates. Tomlinson (2000) pointed out that clarity in a curriculum also allowed for the creation of personally relevant material to cement learning:

Curriculum tells us what to teach: Differentiation tells us how. Thus, if we elect to teach a standards-based curriculum, differentiation

simply suggests ways in which we can make curricula work best for

varied learners. In other words, differentiation can show us how to

teach the same standard to a range of learners by employing a variety

of teaching and learning modes. (p. 10)

Tyler's *Rationalization of the Curriculum*. Tyler (1949) presented four steps for developing and evaluating curricular objectives and activities to organize the many facets of academic growth.



Figure 2. Tyler's curriculum model. (Denham, 2002, p. 2).

Introduced in 1949, Tyler noted that children's interests must be identified so that

they can serve as the focus of educational attention and lead to selecting objectives

(Denham, 2002). He suggested curricula should be developed after establishing the "educational purposes schools seek to attain" (p. 51). First, Tyler presented a vision for educational objectives as a series of outcomes resulting from the "scientific study" of both the "learner" and "contemporary life" (p. 52). He encouraged curricula to determine the "educational experiences likely to attain these purposes" (p. 52). Second, the "learning situations" (p. 55) identified within the standards must subsequently be scrutinized to identify which are "critical" (p. 54) in helping the learner achieve outcomes selected by teachers, districts, and states. Once identified, the third phase begins with curricular creators "effectively organizing these educational experiences" (p. 59). Tyler surmised that the only way to guarantee students could meet a curricular objective was to place the needed activities in a logical (temporal) sequence. A final step, a "scientific analysis" (p. 52), was added to the sequence to ensure learned concepts and material meet the preselected objectives of the curriculum.

In developing these principles, Tyler (1949) presumed that the sole aim of education was to "change the behavior patterns of people" (p. 52) by providing them the knowledge to make just decisions. A robust curriculum, he argued, could do this only by influencing learners' key practices, thinking patterns, abilities, viewpoints, and interests. However, modifying long-held teaching behaviors required a substantial investment of time, alongside vigilance over numerous classrooms, lessons, and assessments tied to a single outcome. To cope with these challenges, Tyler recommended that society dictate the curriculum: a school district should prescribe programs to meet the expectations of the communities it serves. Even while he advocated ideas for "intelligently" (p. 52) establishing a curriculum through scientific analysis of the differences between learner and society, Tyler suggested community "screeners" should be in place to identify "socially acceptable norms" (p. 53), to both establish and enforce the curriculum.

Although Tyler (1949) viewed the instructional targets and activities written into curricula as a "matter of choice" (p. 52), he stressed selections should be made within a "comprehensive philosophy" (p. 52) that clearly express the values of a school, district, or community. Furthermore, when community norms were allowed to establish the rigor of outcomes, they became the "values . . . aimed at the educational program of the school" (p. 53). Emphasizing these values allows a society's views to screen out "unimportant" or "contradictory" objectives and activities (pp. 52-54). In summary, Tyler's (1949) proposed curriculum creation method involved content and processes that guided teachers in meshing these two elements with a focus on performance-based learning. He pointed out, that the "purpose of a statement of objectives is to indicate the kinds of changes in the student to be brought about..." (p. 492). It was clear that his request for creating objectives was, and continues to be, a satisfactory basis for guiding the further development of the curriculum. However, it would take sixty years until this level of multi-state standardization would be envisioned with the Common Core State Standards (McTighe & Wiggins, 2012).

Foundations of Modern Curriculum Creation

Giroux, Penna and Pinar (1981) were known to be the first to investigate the alignment of standards, defined as identifying how students in a given grade should be held to a common goal within a school, district, or country. From their work, and with the subsequent release of *A Nation at Risk* (National Commission on Excellence in Education, 1983) with its prediction of a dip in the economic potential of the country unless public education received a major overhaul (including increasing student performance), standards were moved to the forefront.

According to Marzano and Kendall (2000), many educators considered the publication of *A Nation at Risk* to be the "initiating event of the modern standards movement" (p. 4). A decade later, with the passage of the Goals 2000: Educate America Act (United States Congress, 1994), U.S. lawmakers acknowledged the importance of high standards in improving education. Since that time, calls for raising the bar have come from all areas: administrators, teachers, teacher unions, state-and national-level educational organizations, business and community leaders, parents, and students (Isaacson, 2009). Giroux, Penna, and Pinar (1981) also referenced American industry's use of "scientific management" methods (p. 8) in validating an educator's work and in providing the foundation for standardization. They observed that, even at the turn of the last century, most school administrators appeared to believe "our schools are, in a sense, factories in which [children] are the raw products to be shaped and fashioned to meet the various demands of life" (p. 21).

When taking the written, taught, and tested curriculum (English, 2000) into consideration, American school leaders sought to establish optimum procedures for successfully coordinating instruction and assessment. Their initial interest in curricular studies was primarily a materials management process. Throughout the remainder of the 20th century, school administrators and curriculum planners searched for strategic techniques to anticipate and disentangle the variety of scholarly and behavioral problems involved in mass schooling. Consequently, they pursued instructional methods ensuring efficient operation of a building or district as a whole. These initiatives eventually gave birth to ideas that included the open classroom concept and walkthrough observations (Ginsberg, 2002). Regardless of its progressive tint, this type of management evolved from the practical benefits scientific management provided business and industry, possibly influenced by burgeoning American interests in progressive German lock-step manufacturing (Callahan, 1962).

Along with these direct management approaches, the field of curricular planning developed as an extension of Taylor's (1911) research into how industry (a category including everything from manufacturing to education) should be managed for greatest efficiency. Under these guidelines, the individual worker became the object of intense investigation, but only "within the context of increased production" (p. 614). Taylor argued that each decision—in any field—could be reduced to its most essential components. Once this was accomplished, both the job and the worker could and should be reorganized to function efficiently. At the time of the study, curriculum was generally viewed more for the sum of its parts than focused on specific content (Hansel, 2013).

From this scientific background, with "its emphasis on sheer practical efficiency" (Callahan, 1962, p. 24), curriculum studies came into view as a distinct field of research near the middle of the 20th century. Callahan also perceived that the value of efficiency became engrained within the "bloodstream of American life" (p. 609), when citizens saw increases in production and decreases in the use of resources as the best way to support the country in times of war. Connecting instruction to the principles of scientific management, administrators began to arrange the school curricula to "successfully" educate students by making the job of teaching "simpler" (Callahan, p. 430).

For over 80 years, curricular research concentrated on the process of design in its sequencing, evaluation, performance, and materials. It generally ignored student experiences

with subjects or how they were taught. A traditional curriculum represented "little more than an arrangement of subjects; a structure of socially prescribed knowledge situated within a prescribed, didactic method" (Green, 2009, p. 237). Today's focus on school reform with an emphasis on standardized test scores (Strauss, 2013a), still educes images of machines and assembly lines. It was still well-believed that formal curriculum should be organized logically, as it had been for a century, from the basics to advanced knowledge (Wiggins, 2012).

The Common Core State Standards

Tyler's (1949) vision of a consistent set of values within society influenced the most current iteration of curricular management. In early June of 2009, the National Governor's Association's Center for Best Practices joined with the Council of Chief State School Officers, representing each state's department of education. Under their aegis, 46 states, along with the District of Columbia and the U.S. Virgin Islands, united with Idaho to adopt the Common Core State Standards Initiative (CCSS). The original goal of this collaboration was to develop common grade-level expectations for students receiving instruction in mathematics and English language arts and literacy in history/social studies, science, and technical subjects (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2009). Over the subsequent 2 years, this decision was celebrated by some and reviled by critics who found it an attempt to overreach and strip states' authority over students. Since initial adoption, a handful of states backed out amid concerns of adherence to a perceived national curriculum, usurped local control, too great an emphasis on standardized testing, among other concerns - although proponents argue that districts and schools write the curriculum to meet standards and have a greater say on

assessments. Critics point to the federal multi-billion dollar Race to the Top grant, which excluded states from participating if they had not adopted a uniform set of curriculum standards (implied to mean the Common Core Standards), as to whether the consortium represented a genuine interest in investigating connections between standards and student learning. The same critics wondered whether it was, instead, a stimulus package for states experiencing massive cuts and budget shortfalls (Duncan, 2009), and point to the example of Missouri's Department of Elementary and Secondary Education which initially opposed joining the CCSS. Only after being confronted with funding reductions that would affect thousands of teaching and administrative positions did the Missouri legislature adopt the Standards, earning a portion of the grant monies (Hunn, 2009).

Opponents of the CCSS effort believed it was similar in effect to the No Child Left Behind Act (NCLB, 2002) that, in their view, caused "irreversible damage to American education" (Zhao, 2009, p. 46). Critics complained the legislation was "precisely what [was] needed to ruin America's capacity for global competitiveness," instead of helping American children "to be prepared to compete globally," (Zhao, p. 46) as promised by its proponents.

Part of the drive in creating the Common Core State Standards was the belief that the expectations will allow American students to perform better on standardized tests and be more competitive in an increasingly global market. The United States was one of only a few countries not to have a nationalized curriculum nor common national standards (Finn Jr. & Meier, 2009). Some critics understandably look to them as a way to close the achievement gap and encourage students to push themselves further in education (National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). Yet, comparisons of students in the U.S. to those in other countries failed to show styles of

curricular management affecting standardized test scores (Van der Vleuten, Verwijnen, & Wijnen, 1996). The Programme for International Student Assessment, or PISA, (2009) composite results showed that almost all of the countries that outperformed the 17th ranked United States had national standards (the exceptions were Canada and Australia, which ranked 6th and 9th, respectively). Conversely, several countries with national curricula and documented standards performed more poorly: the United Kingdom, Russia, Spain, Sweden, and China which established national education standards in 1986 (Bishop, 2007).

The creation of common standards in core academic areas was not a new idea. Many organizational standards, like those from the National Council for Teachers of English, accepted by 33 states for Kindergarten through twelfth grade (National Council of Teachers of English, 2011), were adopted by states for years. Additionally, some organizations' standards were used as a launching pad for states to increase focus in particular areas, reflecting Tyler's (1949) recommendation that states create standards matching their desired identity. But even these standards, and their aligned assessments, resulted in neither improved student achievement nor a notably lessened achievement gap between the U.S. and other countries (Beatty, 2008). The 2010 results from the Nation's Report Card showed greater student growth in the years before No Child Left Behind (NCLB, 2002) than after enactment (Neill, 2009; Rampey, Dion, & Donahue, 2009).

The Common Core Standards' guidelines for mathematics and English language arts and literacy in history, social studies, science, and technical subjects were adopted by the Idaho legislature in 2010. Other organizations, such as the National Science Teachers Association (NSTA), released similar standards available for states to independently adopt, though Idaho was not planning to review other subjects for adoption until at least the 2015 school year (S. Cook, personal communication, September 9, 2013). Whether this process ends in a narrowing of the educational experience and an increase of congruence from classroom to classroom, but concomitantly increasing teacher discouragement, was subject to debate (Beatty, 2011). It appeared, however, that both standards and assessment were to be implemented concurrently for changes to be understood and analyzed (Hamilton, Stecher, & Yuan, 2008).

Standardized testing was promoted as a consistent way of assessing students and teachers (Popham, 1999). With a higher student mobility rate than the United States average (Annie E. Casey Foundation, 2015), Idaho saw the Idaho Standards Achievement Tests (ISAT) as a way to help ensure teacher accountability, consistency of student expectations throughout the state, measure student progress toward college and career readiness, and compel teachers to use standards daily and align instruction to the overall goals of the curriculum (Idaho State Department of Education, 2013c). However, these same expectations also left teachers with feelings of lesser independence (Beatty, 2011).

Even with well-designed standards for Idaho to adopt and a consistent fidelity to alignment in instruction, materials and assessment often took take years to develop. England installed national standards in the early 1990s, with extra breadth in mathematics and included a focus on literacy across the curricula (Vacca, Vacca, & Mraz, 2005). Recently, the *Cambridge Primary Review* published *Children, Their World, Their Education* (Alexander, 2010), which chronicled the changes in British education following the 20th year of adoption, identified the problems that had yet to be resolved. These may be the same for states that have implemented CCSS across the country. Among them, outlined by Alexander (2010), were

- 1. curricula not in line with the aims (context) set at the local level;
- focus on students meeting short-term targets rather than long-term educational goals;
- belief by teachers that too much is required in a particular grade level or content area;
- 4. loss of a broad curriculum in favor of core curricular areas;
- focus on memorization and rote recall rather than higher-level thinking skills such as analysis and synthesis;
- 6. expectation of singular curricular documents representing quality for every student, regardless of ability;
- pressures, including loss of funding, on teaching professionals and school personnel for performance on standalone tests;
- 8. lack of achievement in core curriculum translating to success in other subjects.

In Idaho, the Idaho Core Standards came with no well-defined assessment, which presented a special challenge. Idaho replaced the all-multiple choice Idaho Standards Achievement Tests (ISAT) in 2015 (Idaho State Department of Education, 2015b) as the state joined 22 others in the Smarter Balanced Assessment Consortium (SBAC). The member states primarily identified some core values affecting how tests were to be written, such as expectation for summative assessment at least twice a school year, the inclusion of formative or benchmark examinations, and the inclusion of performance tasks (Smarter Balanced Assessment Consortium, 2015).

Curriculum Creation through Professional Development

In developing new curricula, such as from the adoption of the Core Standards, districts often began with a basic question, "What do we want our students to know?" (Mendler, 2014, p. 1) The standards movement provided its answers to that question, as legislators and leaders have implemented state, and national expectations (Lund & Tannehill, 2014). In many states, those beliefs were tied to high stakes testing, and with that, the work of curriculum creation changed (David, 2011). Though no longer controlling the setting of standards, schools and districts were still in charge of creating a vision of how students were to meet expectations through local control (Gordon, 2012). Mooney and Mausbach (2008) believed "we have shifted from focusing on what to focusing on how" (p. 2).

Ben-Peretz and Schonmann (2000) uncovered that educators were open during trainings that involved discussing their profession and the challenges of working with students. In past professional development models, this kind of activity was termed *communication*, but it was, at the time of the study, reconceptualized as *collaboration* (Bauman, 2010, para. 1). Although collaboration benefits student learning, it could also be noisy, distracting, and detrimental without a focus on academic achievement (Alle-Corliss & Alle-Corliss, 2009, p. 81). School and district administrators used collaboration (also known as job-embedded staff development (Brody and Davidson, 1998) to endorse real-world tasks and share observations from multiple perspectives (Gillies & Ashman, 2003). With a goal of "developing common goals for student learning and a shared vision of excellent teaching" (Bauman, 2010, para. 2), administrators encouraged instructors to be social scientists, using data from assignments and standardized tests to plan experiments with different student

interventions, and report their findings to subject-matter colleagues or to the school or district community. Gillies and Ashman (2003) emphasized that these collaborative problem-solving activities helped teachers develop pedagogical skills more quickly, create new knowledge, and improve their capacity to unravel future problems - processes that also helped instructors feel more connected to what and whom they teach (Presseisen, 2008).

Bereiter and Scardamalia (2006) claimed that academic success in 21st century classrooms would demand that teachers work across content areas to design lessons which comingle content literacy (through the selected curriculum), technical literacy, and "people knowledge" (p. 10). Cross training was intended not only to enhance professional learning and communication, but also to foster collaborative problem solving, as well as reflection on goals and how they were achieved.

Farmer et al. (2003) also provided a model for the ways professional development interrelated with teacher growth, as they applied learned concepts to their own experiences and paradigms. In their work, Farmer et al. conducted three case studies involving mathematics teachers with varying levels of experience. They noted three different levels at which teachers appropriated newly absorbed wisdom; levels they labeled practitioner, professional, and inquiry. They identified them by their characteristics:

- "Practitioners" (p. 334) took the information to their classrooms and, without much adaptation, used their own experiences to apply the learning;
- Those in the "professional" (p. 341) category usually relied upon their experiences. During trainings, they took a stance on the newly presented knowledge and applied it to areas they felt appropriate, if any;

3. Teachers at the "inquiry" (p. 342) level adapted and extended activities to suit the needs of their students and the context of their classrooms. Typically, they viewed themselves "as learning from and in the process of teaching" and tried to apply some of the elements of their training, though on a trial basis to review results before full implementation.

Inquiries differed from those noted in Cochran-Smith and Lytle (1999, 2001) in Farmer et al. (2003). The latter focused their stance on individual teachers rather than on the community and did not appear to identify interest in other educational issues, policies, and contexts, similar to Cochran-Smith and Lytle. Even so, these stances offer equally valuable insight into the similarities and differences in the ways teachers appropriate the concepts of curriculum creation in their work.

While teachers worked within the contexts of their classrooms, they gained confidence in their abilities to choose instructional methods to match students' needs (Ball, 1990; Lizzio, Stokes, & Wilson, 2005). Hatch, White, and Capitelli (2005) posited "mind shifts" (p. 326), which occurred over the school year, during which teachers became more aware of their tacit abilities and began to "think differently" (p. 326) about teaching. Consequently, they provided themselves more flexibility to allowing themselves to fail in order to learn and grow. Hatch et al. (2005) described four key influences on teachers' learning and development: teachers' prior knowledge and experiences, interactions with colleagues, representations of thinking they have and are able to access, and contexts for learning. When district leaders guided writers through their expectations, these four components should provide a background for discussion and analysis. In Cochran-Smith and Lytle's (2001) study, each teacher participating in trainings developed different learning outcomes. Cochran-Smith and Lytle categorized these learned concepts as "knowledge for, in, and of practice" (p. 48), providing an additional lens for examining how teachers may develop understanding during professional development. Embedded in Cochran-Smith and Lytle's (1999, 2001) conceptual frameworks are other stances toward learning during coaching, specifically around "knowledge for practice, knowledge in practice and knowledge of practice" (p. 49):

- Knowledge *for* practice was information teachers gleaned from experts, usually in the form of "best practices" (p. 94). In this type of knowledge, teachers were encouraged to put the learnings into action immediately; it was usually tied to pedagogy, content or subject knowledge (Kennedy, 2006; Shulman, 2005). Teachers saw change intrinsically, as they built their repertoire of abilities and used them to improve the practice of teaching (Cochran-Smith & Lytle, 1999);
- 2. Knowledge *in* practice (Cochran-Smith & Lytle, 1999) was for the teacher who preferred action research or a "teacher's narrative accounts of practice" (p. 62). These teachers simply needed to view and apply the talents of other "exemplary teachers" in order to improve (p. 63). This view was congruent with Schön's (1983) reflective practitioner and Shulman's (2005) wisdom of practice, in which formal research findings by themselves may have had little influence on the study of curricula creation. Teachers who relied on "in practice" (p. 97) knowledge built upon their own experiences and reflections to impact the decisions they made in their classroom, especially if they were granted autonomy. These teachers drew on their experiences and reflections to make

immediate instructional decisions in the classroom. Some teachers may not have been able to elaborate about why they are considered quality teachers, since most of their knowledge was embedded in their practice and was not always regarded as scientific (Cochran-Smith & Lytle, 1999). The researchers noted this type of reflective learning may catalyze a district's use of coaches or mentors;

3. The final approach, knowledge *of* practice, involved teachers taking an inquiry approach to learning – either around students' questions or their own. Teachers using inquiry self-associated with a community to generate knowledge and develop questioning that rarely ended. Usually attracted to an "essential question" (Marzano, Pickering, & Pollack, 2001, p. 59), teachers identified problems and sought collaborators in finding resolution – even if it challenged their own beliefs. "Knowledge of practice" (p. 52) teachers relied on the belief students would learn curricular standards not because of what was given to them, but what they may find. In other words, "to teach well emanates from systematic inquiries about teaching, learners and learning, subject matter and curriculum, and schools and schooling" (Cochran-Smith & Lytle, 1999, p. 74).

Unfortunately, little was known about how teachers employed their new collaborative training (specifically in learning about the curriculum creation process) including how differences in delivery or models affected their feeling of effectiveness in their intended work, or how they influenced student achievement.

Curriculum Creation. Seventy percent of courses taught in American universities to teacher candidates included at least one course containing instruction on curricula writing. Yet, no more than a few days were spent on this process due to the many other topics

involved in education. (Handler, 2010). According to Osborne and Freyberg (2001), teachers generally did not feel their teacher candidacy instruction prepared them to write a curriculum and that they expected to learn those skills while working in the field. Research on how teachers made decisions regarding curricula was varied. Several studies focused on engaging teachers and administrative professionals in curricular work (Martin-Kniep & Uhrmacher, 1992; Sneider, Bar, & Kavanagh, 2011; Tay, 2013), there was a lack exploration on how preservice instruction and district-led professional development assisted writers to understand its importance. Although administrators' several decades-long focus on site-based decisions built a body of knowledge concerning empowering teachers in taking active roles in curricular determination, the effectiveness of measures to do so was not yet known (Cochran-Smith & Zeichner, 2005; York-Barr & Duke, 2004).

Some foundational findings on curricula writers existed, for instance the work of Weiss (1993), who noted individual teacher involvement did not always mean active engagement in the process or product. Ryan (1999) found teachers did perceive their work in this leadership role to be "significant" (p. 24). Weiss (1993) also discovered, when it came to curricular decision-making, that new ideas were developed more rapidly and implemented more successfully when a supervisor such as the superintendent mandated the initial task. Weiss (1993) concluded that teachers were not always motivated by curricula writing, nor was there a noticeable difference in motivation according to the depth or breadth of their involvement in those documents. Similarly, two large studies in Leithwood (1999) and Jantzi (2000) provided no evidence of significant change in student outcomes or student engagement from teacher involvement in the curricular creation process.

According to Jobrack (2011):

There is no way teachers have time to devote to researching a subject, identifying how children learn the subject, and develop rich lessons to develop the concepts in a coherent and comprehensive way throughout a year and from year to year. (p. xix)

Jobrack (2011) also emphasized, "It's more than a full-time job" (p. 191) and argued that curriculum work involved a set of skills and knowledge teachers did not receive in preservice or inservice training, and that they should not have been expected to have them, an argument established by Searle (1972) and corroborated by Russell (2012). These researchers also contended that teachers did not even get an adequate education in evaluating curricula, since "many of the curriculum decisions schools are based on teacher recommendations, superficial design impressions, or superfluous features, rather than the quality of the instruction or the coherent development of the concepts" (Jobrack, 2011, p. 292). The work of curricula writing involved a different set of skills and knowledge not always afforded to teachers (Jobrack, 2011). To complete the job effectively, writers should have received training around design strategies, specifically with planning a scope and sequence as well as knowledge of effective strategies and methods.

Background on Conceptual Frameworks

Miles, Huberman, and Saldaña (2014) defined a conceptual framework as a visual or written product, one that "explains, either graphically or in narrative form, the main things to be studied—the key factors, variables, or concepts—and the presumed relationships among them" (p. 20). Through their professional development experiences in Garnet district, administrators trained the teachers on the preferred curricular expectations. However, the assigned administrator chose how the professional development was delivered. This understanding of the district's written curricula served as their primary basis for how documents were written and to what extent they were developed. Numerous drafts with administrator and collegial feedback were reviewed before presenting for possible board adoption. The conceptual framework, in conjunction with the goals, rigor and methodology connected to the research questions (Miles, Huberman, & Saldaña, 2014), used the body of literature for professional development and curriculum creation while highlighting the connections that might have prepared teachers to create curriculum.

Conceptual Framework

The conceptual framework for this investigation was in two parts – basic concepts and perceived connections informed by the literature. In examining the concepts of professional development and curriculum creation, I synthesized the body of knowledge in order to better understand their interdependence. From that point, I examined the processes of professional development and curriculum creation in Garnet School District, specifically around the connections and how training was designed for curriculum creators. After the data are collected, outcomes were generated. This vertical process was demonstrated in Figure 4.


Figure 3. Conceptual framework.

Framework for Exploring Professional Development and Curriculum Creation

I observed professional development sessions led by administrators in Garnet during the normal cycle of curricular creation. These observations showed how teachers learned from these trainings, and how they then interpreted what they've absorbed to write curricula. Combined with observations, interviews probed teachers' motivation and beliefs about the training they received and how they were supported during the process. These beliefs may have influenced the ways in which teachers actually applied their acquired skills to curricula creation. Investigating teacher learning of curricula using a similar combination were modeled after Sherin (2002), Farmer, Gerretson, and Lassak (2003), and Cochran-Smith and Lytle (1999, 2001). The conceptual framework, paired with methodology, rigor and goals helped to define the research questions for this study. Through the collection of documentation, archival records, participant observation and interviews, the dynamics that influence curriculum creation were accentuated through the indicators.

Evaluating the Proposed Conceptual Framework. These frameworks provided a lens to scrutinize a district's stance toward professional development for curricula creators and how it was perceived as effective. For instance, if practices appeared to be grounded in knowledge *for* practice, the goal of increasing student achievement may have been a matter of building individual teachers' knowledge base (Cochran-Smith & Lytle, 1999). Britzman (1986) documented that professional development presented in this individualistic fashion tended to provide a 'recipe' for achieving a goal.

Connections that May Influence Curriculum Creation. When examining the concepts of professional development and curriculum creation, several perceived connections arose. They included:

Collaboration – Learning science research had continually extolled the benefits of student collaboration in meaningful assignments (Mallon, 2013). Educational administrators had synthesized those same findings for teacher learning around curriculum creation. Voogt and Roblin (2012) discussed how intelligent activities, such as teaching, contributed to a "knowledge society" (p. 17) and how continuous and collaborative education for teachers had adapted from individualized plans to community approaches where the unique talents of each teacher are intended to be emphasized (McCaleb, 2013). Using 15 years of action research from López-Pastor, Monjas, and Manrique (2011), teachers who engaged in

curricular work with another coworker showed greater collegiality while more materials are also developed.

Pukkila, DeCosmo, Swick, and Arnold (2007) indicated findings in higher education where lessons gained creativity and interaction when built collaboratively – whether involving students or different colleagues. Collaborative practices, regardless of who initiated them, were accentuated if the organization had a clear structure for curriculum creation and agreed upon roles and norms (Garmston & Wellman (2013).

Time - In almost any discussion about school reform and restructuring, time was mentioned as one of the greatest inhibiters to the change process, from the individual, classroom, or school level (Clark, Wiens, & Thompson, 2014). Mooney and Mausbach (2008) found that teachers did not spend much time discussing curricular work in their work day and few were willing to take on additional leadership roles unless there was a perceived benefit (Angelle & DeHart, 2011). Additional time pressures were also linked to burnout for rural school teachers, a situation that represented a great portion of Idaho's educators (Abel and Sewell, 2010). It is believed, however, that educators are most efficient when given time during their work day to collaborate and learn with colleagues towards accomplishing a school or district's goals. (National Staff Development Council, 2008). The problem is that many educators, however, are uncertain how to find time for any additional tasks during the work day given the sometimes seemingly overwhelming tasks they face already.

Providing consistent blocks of time had been identified, however, as essential for exploring knowledge about the nature of (new) learning and how it might be implemented in different domains. Specifically, there needed to be support time for learning and time for doing, specifically for curriculum creators so that the work felt supported and collegial (Darling-Hammond & McLauglin, 1995). The work of Sparks (2006) emphasized that teachers and administrators will often search out time to meet goals when they feel that their work is valued and has a benefit to their own learning and to their classrooms.

Empowerment – Research extolled teachers as the greatest influence on student success (Alderman, 2013). However, similar research often described teachers as resistant to working in the schools which needed the most help (Thornburg & Mungai, 2011). In the same study, Thornburg and Mungai (2011) found that a combination of time/role constraints, lacking leadership, conflicts between accountability and student needs, challenges from diverse populations, lack of student choice, teacher isolation, repeating previously tried strategies, and the impact of political/economic forces triggered a feeling of dependence instead of autonomy.

Bogler and Somech (2004) identified empowerment as "a process whereby school participants develop the competence to take charge of their own growth and resolve their own problems" (p. 278). A desired result of this process was an individuals' belief that they possessed the skills and information to improve a situation or the environment at which they work. Teacher empowerment had become a focus among educational practitioners and researchers due to the positive impacts on teaching quality, innovation, teacher leadership, job satisfaction, loyalty to the school, district, and their own professional growth, all of which have demonstrated connections to student and district achievement on standardized assessments (e.g., Bogler & Somech, 2004; Dee, Henkin, & Duemer, 2003; Erawan, 2008; Ghani, Hussin, & Jusoff, 2009; Lee, Yin, Zhang, & Jin, 2011; Muijs & Harris, 2003; Short & Rinehart, 1993; Wan, 2005; Zembylas & Papanastasiou, 2005). By definition, empowerment reinforced the precept that teachers were professionals who did their best

when they felt that their work was validated and beneficial to those with whom they worked (Dee et al., 2003; Gagne & Deci, 2005; Wan, 2005).

Officials felt more of a need to facilitate teacher empowerment effectively (e.g., Blase & Blase, 1996; Blase & Blase, 1997; Rinehart, Short, Short, & Eckley, 1998; Vecchio, Justin, & Pearce, 2010). Specifically, school administrators knew teacher empowerment may have been a way to immediately increase student performance (McCaleb, 2013). The idea, copied from the business sector, stressed confidence in the workforce to make quality decisions in the best interests of the organization, similar to Tyler's (1949) early views of curricular management. When empowerment occurred, both the provider and recipient had a greater self-image, overcame stigmas, and felt open to change (Chamberlin, 2013). In turn, sales or prestige (i.e. achievement in education) accrued to the organization (Lim, 2007). The teacher empowerment stemming from this protocol over the last 20 years worldwide was considered a dimension of teacher autonomy (Klecker & Loadman, 1996; Short & Rinehart, 1992). Nevertheless, American administrators did not generally structure public schools with the intent of empowering teachers (Corwin & Borman, 1988; Hanson 1991), though research overwhelmingly touted the need for both empowerment and autonomy as an intrinsic motivator for teachers to do their best work, involve themselves with the processes of school improvement, and stay in the profession (Shor, 2012). Results from a nationwide survey from the National Center for Educational Statistics showed that teachers perceive that their own influence over colleagues and students remained steady in recent years (Hooks, 2014). Teachers felt empowered in making classroom-based decisions, such as selecting appropriate teaching strategies. Teachers felt more of a collaborative attitude when making decisions about curricula, assessment, and scheduling (Moore, 2012).

Educational Background – Early theorists established the importance of involving the classroom teacher in curricular creation (Searle, 1972; Ornstein & Hunkins, 2004). Danielson's Framework for Professional Practice (2007) also encouraged teachers to take a central role in curriculum committees as one of their "professional responsibilities" (Danielson, 2007, p. 111). However, the literature identified that teachers have little professional knowledge of curriculum theory and practical experiences (Handler, 2010). Both of these can be viewed as reasons for potential failure of teachers to successfully fulfill curricular responsibilities.

One of the challenges identified by Handler (2010) was that a full understanding of curriculum creation usually included competence in standards, assessment, instructional planning and other areas. Ben-Peretz and Schonmann (1990) asserted that these can only be learned through experience.

Change – Changes in societal values impact education (Reigeluth, 1994). As emphasized in the "information age," organizations that fail to adapt will usually fail to adequately serve their communities. (Castells, 2011). Ironically, education is looked at to prepare students for quantum change and unimaginable future careers when many feel that that system, itself is rooted in traditional methods (Reigeluth, 1994). In addition, there is a publically-held belief that teachers themselves do not appreciate change, even to the point of being recalcitrant or obstinate (Duffy & Roehler, 1986; Fullan, 1991). Specifically, Richardson (1998, p. 1) stated, "Teachers don't change. They resist change. They just get in a groove of doing what they have always done and what they are comfortable with"

However this notion of teachers not willing to adapt is not always reinforced by research. There are studies which identify resistance to specific initiatives, such as with the

Common Core State Standards (Kober & Rentner, 2012), but evidence also exists that demonstrates eagerness to adapt when they are specifically involved or initiate changes, sometimes called "voluntary change" (Richardson, 1998, p. 1). In these types of challenges, teachers were found to be very responsive, reliant on their colleagues in a collaborative way, and focused on working through the change to completion.

Change makes people feel uncomfortable (Miller & Rollnick, 2012) and educators have been viewed as reluctant to change by those outside of the profession. Wasley (1992) and Morimoto (1973, p. 255) commented on this dymanic:

> When change is advocated or demanded by another person, we feel threatened, defensive, and perhaps rushed. We are then without the freedom and the time to understand and to affirm the new learning as something desirable, and as something of our own choosing. Pressure to change, without an opportunity for exploration and choice, seldom results in experiences of joy and excitement in learning.

When involved in specific processes, teachers often do try out new methodologies, strategies, or pedagogies. In a long-term collaborative study of teacher change, Richardson (1994) found that when a teacher tries new activities, a series of mental checks are initiated to see whether there is a connection to held beliefs about student learning and whether there are enough resources to support this effort. If doubts existed as to the efficacy of the change, the strategy is usually dropped or radically altered.

However, many of the changes initiated in a school or district are not voluntary and may be rooted in law, such as with No Child Left Behind (NCLB, 2002). The current body of research found that most teachers will attempt to make major changes when mandated to

do so by a building or district administrator (DeSimone, 2013). Still, teachers feel empowered to make decisions on the spur-of-the-moment and based on unwarranted assumptions. However, this has shifted in recent years with reforms that focus on consistency and attention to results. This is in line to the transference from an industrial model, such as with Tyler, to a "complex, dynamic, interactive, intellectual activity" (Smylie & Conyers, 1991, p. 13). This shift has seen attention remain on data but asking the teachers and administrators to diversify, differentiate, and personalize learning.

It is in these elements that professional development is identified as essential. Kaser, Mundry, Stiles, and Loucks-Horsley (2013) identified components that combat the negative effects of change within teacher professional development: 1) replicating behaviors that have been shown as effective in local classrooms and 2) a willingness for teachers to experiment with their own behaviors so that they can be adapted to meet their own unique needs. Such efforts have been able to improve teacher growth and implementation by 15 percent (Finkelstein, Hemenway, Preston, Wetzel, Meyer, & Rood, 2014).

On the other hand, not all professional development will result in positive change. Several studies found that a lack of interest, limited resources, and lack of experience were found to decrease the efficacy of change. (Creemers, Kyriakides, & Antoniou, 2012).

Standards – School reform efforts had led to increased emphasis on academic standards throughout content and grade levels (Hauck, 2012). However, reform efforts had also resulted in a paradigm shift in instruction as teachers felt they must tailor lessons to target specific details – many of which were aligned with standardized tests (National Research Council, 2007). This was in contrast to years of leaving teachers to their own devices to develop lessons appropriate for their student population (Strauss, 2013a).

Those that embraced standards reminded that students, teachers, and stakeholders should have clear expectations for achievement (Lund & Tannehill, 2014). This move towards standards-based education was an attempt to clarify what students should know and ensure that these components were taught before a summative assessment, despite critiques that they restrained a teacher's ability to provide scope and context during lessons (Gruenewald & Smith, 2014). The Idaho Common Core Standards were promoted as essential to preparing students for success in school, work, and life while being targeted as a way to decrease the number of students who must take remedial courses once matriculating to a college or university (Coffman, 2011). Additional statewide promotion from the State Department of Education and J.A. and Kathryn Albertson Foundation, the largest private benefactor to Idaho schools (Groff, 2014), focused on the Idaho Core's design to raise expectations for what Idaho's kids learned in math and English, specifically around critical thinking, information processing, drawing conclusions and communicating orally and in writing (Idahoans for Excellence in Education Coalition, 2015). The State Department's website (Idaho State Department of Education, 2015a) also promised that the standards would give students the skills to be "life-long learners" (p. 1) and provide "parents peace of mind to know that their children are well-prepared for college and career" (p. 1).

Limited Resources – Compared to other states, Idaho spent the least on public education per student than any other state and had reduced funding nearly 20 percent in the past eight years (Carlson, 2014). But, other states were not immune in meeting the needs of students and educators with limited resources – at the time of this study 35 states spent less on public education today than they did 10 years ago (Leachman & Mai, 2014). In the curriculum creation process, a district may have had to adjust the amount of professional

development time, the number of participants involved, the amount of support available to curriculum creators, or the various supplies needed to complete the work, such as paper, technology, and instructional materials (Slattery, 2012).

In research of other systems that had not allocated adequate financial and human resources to curriculum creation, Spierenberg and Wels (2006) and Zhang, Yan, and Zhang (2014) found that there were significant obstructions in several committees' ability to write curricula, lack of experience and ability to develop, and a lack of corresponding resources. To a certain extent, lack of budget and teachers' heavy workloads affected development and utilization of curriculum. Meanwhile, Zhang, Yan, and Zhang (2014) noted that teachers lacked the social support and external contacts to identify colleagues from other districts who may be doing similar work. This countered the argument of Kridel (2010) who found that one of the primary motives for developing curriculum was the ability to share resources across systems.

Level of Participation – In some districts, the development of curriculum was centralized at the district office in order to maintain consistency and accountability (Slattery, 2012). Other districts, however, distributed the responsibility to educators, typically with parameters on a common template (Fogarty & Pete, 2009). Overall, the process used by an organization reflected its priorities and allocation of resources (Lunenburg & Ornstein, 2011).

Tied to the areas of experience and status quo, levels of involvement were impacted by the qualities of instructional staff in a district. Lambert (2003) encouraged districts to seek "meaningful participation involving numerous participants" (p. 32) and promoted this work as an opportunity develop connections, work directly with leadership, and drive the direction of the district – all of which Lambert (2003) thought would increase participation.

Status Quo – Curriculum leaders and school administrators have long debated whether curriculum changes should be built on shared power and consensus or individualization. Some believed that a focus on the teacher actually reinforced the status quo rather than educational improvement (Apple, 1995). Apple (1995), among others (Brunner & Schumaker, 1998; Pounder, 1997), stressed that there should be an approach where all voices can be heard, whether present or absent during curricular creation. But, some theorists (Merton, 1968), argued that too many voices actually can reinforce the current state of curriculum as it may appear futile to find mutual agreement. Fundamentally, these dualistic distinctions about curriculum creation connected a preference for the status quo and personal conflict with change...both extensions of study within power dynamics. Brunner (2000) concurred that the act of curriculum creation was essentially about building consensus, where an individual's voice had power and leaders avoided conflict through a distribution of power and tasks.

"Every field of study has its standard way of teaching it to students" (Camplin, 2014, p. 1). However, teachers are typically not hired to maintain traditions (Hopkins, 2012); instead they are asked to "make a difference and make an impact in the lives of kids" (J. Tarte, personal communication, July 18, 2014). The differentiation movement, where teachers were intended to structure lessons to meet the needs of individual students, had targeted these long-held practices, but internal pressures may have existed to comply with expectations established before a teacher was hired. *Group Dynamics* - As demonstrated in the works of Ben-Peretz and Schonmann (2000), educators were very sociable when discussing their profession and the challenges of working with students. It was common to see them clustering around friends and colleagues working in similar subjects and grade levels at meetings and other gatherings. While working together had been shown to be a powerful motivator able to produce real benefits for student learning, group work could also be noisy, distracting, and detrimental if groups did not function well (Alle-Corliss & Alle-Corliss, 2009, p. 81).

Unfortunately, most of the literature on this topic revolved around the challenges departments face as they began curriculum creation, instead of how peers individually could work effectively within the process. Chin, May, Sullivan-Chin, and Woodrick (2014) found four structural barriers within groups that arose during 30 visits to various curriculum creation sessions. They included (a) lack of agreement on how to teach content; (b) the perceived popularity of teachers and subjects; (c) excessive focus on teacher autonomy; and (d) disregard for others opinions/lack of desire to work together. Chin et al. (2014) equated many of these barriers to a focus on individualism in education: "We often don't do a very good job of working together: we are evaluated and ultimately rewarded on the basis of individual scholarship, individual excellence in teaching, and individual participation in service" (p. 89).

Curriculum Adoption in Idaho

Curricula adoption in Idaho was governed by legislative statute, matching Robinson's (2011) recommendation. Idaho's Code 33-118 (Courses of Study – Curricular Materials, 2008) states, in part, that: The state board shall prescribe the minimum courses to be taught in all public elementary and secondary schools, and shall cause to be prepared and issued, such syllabi, study guides and other instructional aids as the board shall from time to time deem necessary. The board shall also determine how and under what rules curricular materials shall be adopted for the public schools. (p. 1)

Within the statute's framework, the Idaho state legislature maintained a 6-year evaluation cycle whereby instructional materials were to be reviewed statewide by content area(s) in order to gain the best value for local school districts by purchasing texts and materials in bulk. In concert with these rules, the State Department of Education (SDE) maintained a listing of textbooks and instructional materials recommended by a committee and permitted by the State Board of Education. The SDE prescreened and scored all materials, listing them as acceptable for district adoption if they receive enough points in content, organization, presentation, and quality. However, it was the individual district's responsibility to choose materials to fit the needs of local educators and school communities – even if it was not on the statewide list. This same local control allowed districts to direct their own process of curricular adoption (Courses of Study – Curricular Materials, 2008).

Curriculum Adoption in Garnet District. Within Garnet School District, the process of curricular adoption incorporated a series of analyses from classroom teachers, building and district administrators, students, and community members (Figure 4). These inquiries involved not only the curricular materials but also the course content. School board policy 2340 mandated the District's requirement of a "performance-based curriculum" (p. 1), with the graduation requirements of the district and State of Idaho as the starting point. At each level, from grade 12 to Kindergarten, goals and standards were created including the

abilities taught or expected. The curriculum must also be "planned in conjunction to and congruent with the state instructional materials adoption cycle" (p. 3), since realignment would mandate a reallocation of texts and resources, such as manipulatives in a primary school. Because the district superintendent (or designee) was identified in policy as the curriculum controller according to district policy, he or she was expected to train instructors, monitor the strategies for best practices, and ensure subject-specific teachers have the necessary materials. Once the district decided a curriculum adoption was in order, the defined procedures of board policy were to be followed. The board of trustees was responsible for selecting all primary instructional materials after receiving recommendations from teachers and community members. Board policy 2440 (Garnet School District, 2014) specified, once again, that materials must be in alignment with the state adoption cycle to "support and enrich the curriculum, taking into consideration the varied instructional needs, abilities, interests and maturity levels of the students served" (p. 1). It was important to note that Garnet had different expectations for "primary" instructional materials and "supplemental" instructional materials (p. 1), stemming from parents' concerns (Kramer, 2008). Primary instructional materials were defined in policy as "purchased by the District and used in whole group instruction by staff to teach the written curriculum aligned with state standards" where supplemental instructional materials were considered those "purchased to supplement and enhance the taught curriculum aligned with the state standards" (p. 1). In adopting curricula or materials in Garnet School District (Figure 4), a content committee was first formed, composed of certified staff only. Committee members reviewed materials and narrowed down possible options. A criteria sheet developed by the school district administration (and included in Board policy) was completed, allowing each

team member to analyze instructional materials independently and confer with the rest of the group for selecting finalists.



May adopt or redirect to committee

Figure 4. Garnet District curriculum adoption process – Board policy 2440 Top scoring materials were previewed and evaluated by teachers in the relative

content area, who piloted units and lessons throughout the district. The content committee reviewed evaluation forms and written input from those piloted lessons. The committee then informed the board of trustees in a public meeting of the possible options for adoption. The proposed materials and guides were then made available to the public for a 30-day review (Board of Trustees of Garnet School District 11, 2014). Once public comment was received, the trustees appointed an ad hoc committee comprised of community patrons (no more than 25%) and representatives from the content committee to review the suggested options and formally requested public input. This committee formulated a recommendation to the board of trustees, as well as a minority report, if necessary.

This version of policy originated in 2010, after being completely revamped in 2007 when a group of community patrons criticized the district for the content of novels and curricular materials (Boggs, 2008). The current process included opportunities for parental input and an opt-out policy for primary instructional materials on top of requiring "rationales" (p. 2) for all texts taught in whole-group instruction in district classrooms (Board of Trustees, 2010) with exclusions for Advanced Placement and International Baccalaureate courses which had respective prescribed titles from their parent organizations and related institutions of higher education.

The curricula creation process in Garnet School District (Appendix B) closely followed a model in a chapter of *Getting Results from Curriculum Mapping* by Hayes-Jacobs (2004). In the document, procedures for curriculum creation, including the specific components of the curriculum guide and curriculum maps for Board approval, were listed as well as the parameters for when those works had to be presented to the trustees for possible adoption (Board of Trustees of Garnet School District, 2014).

Tyler (1949) emphasized that a good curriculum design should be evident and constantly reviewed for its contribution to educational goals. Gunckel and Moore (2005) found that when teachers were simply asked to create their own curriculum, or when standards were provided but not collaboratively turned into units or lessons of instruction, chaos could result. Yet teachers rarely had time to create curricula for the common good and tended to focus on their own lessons, rarely sharing (Russell, 2012). Compounded with the dynamics that affected curriculum creation, it left teachers on their own to interpret curricular concepts, apply appropriate methods, and conscientiously reflect on how instruction was received—usually through some sort of assessment. The classroom teacher was thus solely responsible for student achievement. Still, student achievement depended upon quality curricula creation in school districts—of which there was usually a dearth. Curricular materials written to support ongoing teacher development were an important tool in teachers continuing to learn both their content and about students' thinking (Chingos & Whitehurst, 2012).

Teacher learning was a complex process, influenced by many factors. Teacher involvement with the work of curricular creation provided insight into how teachers learn and lead (Hattie, 2013). This study included a program evaluation of Garnet district's curricular creation practices. With that work, I questioned teachers involved in their district's revision process about how their trainings allowed them to complete the work and lead professional development for their grade-alike or content area colleagues.

Summary

The review of relevant literature provided grounding in the current knowledge in the field of professional development around curricula writing. In order to understand how writers were instructed within the process, it was necessary to demonstrate why standards and curricular creation and other planning tools became a major focus of today's professional literature.

The standards movement was examined closely, grasping the current climate for school accountability and the standards movement. Works by Berry, Turchi, Johnson, Hare,

Owens, and Clements (2003), Hoyle, English, and Steffy (1998), Jennings (1998), Lewis (1995), Ravitch (1995), Reeves (2004), Sagor (2003), Stecher and Kirby (2004), and Strong, Silver, and Perini (2001) provided a historical perspective of the standards movement, but all stressed that students were as important as standards. Ravitch (1995) specifically strongly opposed the Common Core and standardized testing after being an early proponent.

Curricula creation related to the work of creating meaning out of standards through the selection of activities, instructional materials, and assessments. Material by Leithwood, Louis, Anderson, and Wahlstrom (2004), Anderson (2003), Danielson (2002), English (2000), English and Steffy (2001), Erickson, Gray, Wesley, and Dunagan (2012), Leithwood and Riehl (2003), and Porter-Magee (2004) helped demonstrate how a comprehensive approach to teaching and testing affects instruction.

Finally, the dearth of curriculum practice in preservice instruction was highlighted along with background on how development looks in many of Idaho's schools. Multiple sources showed how teachers, though trained for their craft, received little direction on the development of curricula. This lack of knowledge, combined with lacks of leadership and financial flexibility for districts in Idaho, demonstrated how teachers felt once charged with this task.

There was consensus among researchers that professional development was essential in enhancing student achievement. Yet, connections were unclear about which practices allowed writers to feel positive about their work. Because school districts relied upon groups of teachers and collaborators to prepare documents reflecting not only the consistent values of a community but also changing standards, this research was essential and useful.

Chapter III - Methodology

The purpose of this qualitative exploratory case study was to identify perceived connections between programs of professional development and curriculum creation. The research, conducted in a suburban school district, was intended add to the body of research regarding training given to teachers asked to create curricular documentation. It identified characteristics of the activities participants perceive as effective, and described the degrees to which a particular program of professional development satisfied those characteristics. Specifically, four areas are addressed in Chapter II: study design, data collection, data analysis, and how I established rigor through triangulation, trustworthiness, and member checks.

Design

The research base established that a curriculum was a crucial component of the educational process. Especially in the 21st century, education systems were facing the challenges of numerous governmental and social changes in expectations for students, not to mention the relative economic challenges of being in Idaho. In developing this case, the identification of teacher supports for developing curricula in spite of these challenges was paramount.

For those reasons, this research employed a qualitative exploratory methodology to examine the effectiveness of professional development with teachers during a curricula writing process. The 17 buildings of Garnet School District, including the District Office and Central Center (a community meeting room used for school board meetings and large group discussions) were the sites of the work. Observations took place in classrooms and smaller meeting areas in the district during times when small teams of teachers where designing new curricula.

At the time of the study, the subject district had a population of 10,500 students, spread across 10 elementary schools, three middle schools, two comprehensive high schools, a dropout retrieval program, and a professional-technical high school where students could apprentice in a trade and earn credits towards graduation. Eight of the district's schools provided magnet programs, attracting 150 students from outside the attendance boundaries via open enrollment. The district was sixth largest in the state of Idaho.

The exploratory case study in qualitative research. This study used an exploratory case study design (Yin, 2014). Qualitative research was selected as the most appropriate to explain participants' perceptions of effectiveness during district-led professional development sessions around curricular creation. Merriam (2009) explained, "A qualitative case study is an intensive, holistic description, and analysis of a bounded phenomenon such as a program, an institution, a person, a process, or a social unit" (p. x). Case studies were helpful when: (a) the research questions focused on how or why a phenomenon occurs; (b) the researcher was following the natural course of events; and, (c) the spotlight of the work was focused on real-life context (Yin, 2014). This sort of exploration allowed a researcher to observe simple or complex organizations or individuals. Yin (2014) promoted this methodology's flexibility and rigor in helping to develop theory, direct interventions, and evaluate programs. An instance of directed professional development in a single K-12 school district constituted the "phenomenon…occurring in a bounded context" described by Miles, Huberman, and Saldaña (2014, p. 11).

An exploratory case study was chosen because there was limited empirical research around professional development for curriculum creators. Streb (2010) certified that this smaller base was a benefit as exploratory research was a first step when identifying deeper connections between topics – in this case, identifying the training components necessary to support teachers in curriculum creation. Additionally, an exploratory methodology was chosen to provide "a high degree of flexibility and independence with regard to the research design in addition to data collection" (Mills, Durepos, & Wiebe, 2010, p. 368). This exploratory case study was designed to be a springboard to further explanatory research and to gain insight into teachers' participation in professional development and their perceptions of its effectiveness.

It was also important to note that several grade levels and subject areas met at the same time in the district during collaboration time. Using different sites merged approaches of case study research, the interpretative approach, and traditional qualitative research (Mills, et al., 2010). Stake (1995) (although referring to "collective case studies" [p. 156]), defended the use of multiple sites when a phenomenon was occurring in two natural settings so that a wider understanding was produced.

Constructivist Underpinnings. Both Stake (1995) and Yin (2014) used a constructivist paradigm in case studies. Constructivism was viewed as a powerful theory for explaining the production of knowledge (Gordon, 2009). By theory, social and historical construction, multi-participant meanings and understanding (Creswell, 2013), for instance, this perspective favored "interpretation, multiplicity, context, depth, and local knowledge" (Ramey and Grubb, 2009; p. 80). Therefore, human interactions were not considered "directed reflections of the real" but "constructed frameworks" (Raskin, 2008, p. 16).

Constructivists stressed that reality was both relative and dependent on local personal perspectives, settings, and persons. A case study recognized the importance of subjectivity, but "doesn't reject outright some notion of objectivity" (Crabtree & Miller, 1999, p. 10). Because of the intended close collaboration between the researcher and the participants, it was believed that participants would be willing to tell their stories (Crabtree & Miller, 1999), that it was possible to construct a sense of their lived reality, and from that built a valid assessment of effectiveness of district-driven professional development. In fact, it was expected that there would also be a sense of safety with the participant to provide answers that were heartfelt and without fears of retribution.

However, it must be noted that the case study methodology often drew criticism. Flyvbjerg (2006) pointed out five caveats for the prospective researcher:

- 1. Theoretical knowledge was more valuable than practical knowledge;
- One could not generalize from a single case, therefore the single case cannot contribute to scientific development;
- 3. The case study was most useful for generating hypotheses, while other methods were more suitable for hypotheses testing and theory building;
- 4. The case study contained a bias toward verification; and,
- 5. It was often difficult to summarize specific case studies" (p. 302).

For this investigation, data collection via documentation, archival records,

observation, and participant interviews allowed the perceived needs for professional development to emerge. However, as with many case studies, the primary goal was to add to the body of literature (Yin, 2014), and identify ways to solve a problem or, in this case, provide possible directives to district staff. Schwandt (2007) remarked that "cases are

generally characterized on the one hand by their concreteness and circumstantial specificity and on the other hand by their theoretical interest or generalizability" (p. 27). Hence, generalizability was built on recognizability and a challenge to practice (Delmar, 2010) and was intended to answer "what is this a case of?" (p. 27) in accordance with Stake (1995) and Yin's (2014) argument for using case studies in theoretical elaboration.

Researcher Background

After achieving degrees in other content areas and accepting an emergency certification to teach high school Spanish, I was employed as a teacher without taking any education coursework. The certification, though, was issued contingent upon the pursuit of a degree and state certification within one calendar year. Therefore, as I enrolled at the same time as my first teaching job, I had the opportunity to put my pedagogical studies to work via action research – taking classes in the morning and applying strategies in the afternoon. However, I immediately fell in love with the processes of teaching and learning, earning two masters' degrees in curriculum and instruction and educational technology, and certifications in Spanish, journalism, administration, and the superintendency while still in the classroom. Upon achieving my educational specialist degree, I became a high school assistant principal for four years at my alma mater where I also taught. In 2010, I was called to the district office in the middle of the school year to strengthen the assessment practices of the district, working with our curriculum directors during that time to merge the two, at times, disparate practices. At the beginning of the 2014-2015 school year, I absorbed the district's curricular management responsibilities. At the time of this study, my role was to collaborate with our district's Instructional Core team comprised of the directors of technology, elementary education, secondary education, special education, Title 1 and

federal programs, and the superintendent to ensure that the district's curricular and assessment practices remain current, challenging to students, and relevant to meeting our district's goals, but also those of the individual student and family.

Researcher Bias

Because of my background as a student in our district, an educator and administrator, and because of my responsibilities in curricular and assessment management, I admitted a bias towards how a curriculum should be managed within the district. I believed that a viable and relevant curriculum was a pathway to school and district improvement which, if implemented with communication and fidelity, had the potential to develop students into informed leaders. In this research, I tried to identify which elements of professional development prepared teachers to create a curriculum to meet those goals.

However, I was not limited to my experiences as an educator. My background also influenced me as a researcher. Scheurich (2002) remarked that:

one's historical position, one's class (which may or may not include changes over the course of a lifetime), one's race, one's gender, one's religion, and so on - all of these interact and influence, limit and constrain production of knowledge. In other words, who I am determines, to a large extent, what I want to study (p. 17).

In my role as a researcher, I am a representation of my own personal values and educational experiences learned by listening and by doing. I considered these two perspectives of myself as a composition of my teaching abilities before and during the collection of data. Even with this predisposition, Harding (1987) noted that it was impossible to extract pieces of either or elevate one over another in importance. My research perspectives, passions about learning and choices in this study's design were built upon my experiences, coursework, and the environment in which I worked and lived. As Denzin (1989) explained, "Interpretive research begins and ends with the biography and self of the researcher" (p. 12).

Therefore, I acknowledge that it was difficult to extricate my personal beliefs from those as a researcher. In addition, as this brings bias, I placed controls in this case study to control my predilections so as not to interfere with the processes of data collection and analysis. These controls included the methodology itself as an exploratory case study does not concern itself with hypotheses, random selection of participants, a neutral research environment, and a focus on non-leading questions, each of which have been identified as strategies to reduce bias by Taylor (2009).

As I believe that the goal of this research was to add to the bodies of knowledge in both curriculum and professional development, it was impossible to be completely independent. Creswell (2013) explained, "Qualitative researchers approach their studies with a certain paradigm or worldview, a basic set of assumptions that guide their inquiries." (2013, p. 74) Working in a dynamic time of change with over 500 active courses of study, many of them with no curriculum or assessments on file, led me to this research, especially as I observed the delivery of professional development in such divergent ways. I recognized that the findings from this study could benefit me personally, but may also assist other districts who have similar goals and models of delivering professional development for curriculum creators.

With that connection, another bias was exposed – my knowledge of the participants. I worked on a personal level with many of the nearly 600 teachers in Garnet District, and most likely would have worked with the participants at some level due to my experiences as a student, teacher, and a building or district administrator. I was recognized as a member of our district community in addition to my connections to the communities served.

Procedures. This case study integrated four sources of evidence: (a) documentation, (b) interviews, (c) direct observation, and (d) archival records. These sources were collected to assure data saturation.

Participants. This investigation used the purposive sampling method, which, according to Cohen, Manion, and Morrison (2008), involved selecting a case based on how typical they were with the population so as to develop a sample that met the needs of the study. Therefore, with the variety of teachers and administrators involved in this ongoing process, Garnet District provided many opportunities to involve curriculum creators. As a reminder, the target district asked experienced curricula creators to volunteer for continued work first, rather than involving every content teacher in the process. Afterwards, the team was finalized with volunteers who were less-experienced teachers or community members. Only after the team compiled a draft did colleagues see it and the team requested feedback for further refinement - a process that often repeated itself multiple times.

Heterogeneous, purposive samples were chosen to paint an illustrative profile that was considered representative of curriculum creators in Garnet District. Care was given to choose a balance of experienced and novice teachers as well. Sometimes referred to as "taking a diagonal slice" (Saunders, 2012, p. 6), Patton (2002) argued that this strengthened the ability to find patterns after data collection.

I am aware that the results of this study may only be generalizable to Garnet as purposeful samples "do not pretend to represent the wider population." (Cohen, Manion, &

Morrison, 2008, p 115) However, Slattery (2012) identified that team curriculum creation was gaining commonality in the post-modern era and other school districts organizing their curricular work in a similar fashion may have interest in the results.

In Garnet District, selected subject areas and grade levels worked throughout the academic year to create and refine curricula. However, one specific combination, secondary mathematics, was starting the work two years later than other areas as the Idaho Core Standards in middle and high school mathematics had not changed as much as other content areas. In this target cadre, a minimum of 12 willing participants was expected. Each of them were teaching in a middle or high school within the district or involved as an administrator overseeing the process. Therefore, there were varied years of experience with curriculum creation. The group was overseen by a former math teacher and middle school principal with 12 years of service. The large group met monthly with all middle and high school mathematics teachers, but subgroups worked each Monday to align curriculum to standards, develop shared instructional units and common formative assessments, and select instructional resources.

Per the university's institutional review board requirements, each participant in the study was provided a copy of an informed consent statement before being selected. The consent form stated that reports resulting from the study would not contain any information that could be used to identify them. Participants had the opportunity to remove themselves from the study at any time and for any reason.

Professional Development

As presented in Chapter II, teacher professional development has been studied and presented in literature in multiple ways. Central to these efforts is the transformation of their newly learned knowledge into practice for the benefit of their students' growth. Teacher professional learning is complex (Avalos, 2011) and requires cognitive and emotional buyin from teachers individually and the school or district community.

Professional Development in Garnet. In the Garnet School District, professional development was defined broadly in policy as "opportunities to develop and improve job performance and competency" (Board of Trustees, 2003, p. 1). The policy did not specify the breadth of these opportunities nor how they were to be delivered. However, in practice, and essential to this study, the district facilitated professional development in small and large group settings led by an in-district content expert, usually an instructional coach or administrator. Most of the professional development was driven by building or district goals and occurred on Monday mornings when the teachers participated in job embedded cross-district collaboration. Activities usually occurred adjacent to the contractual day although full day trainings were made available around 10 percent of the time when the work involved multiple stakeholders or was more extensive. Usually, one or two people in each department or grade level were tabbed by an administrator to lead the activities and were overseen by the district's Director of Elementary or Secondary Education.

The activities chosen for professional development in Garnet district depended on the objectives identified by teachers and administrators and were intended to be in alignment with the district's mission, vision, strategic direction, and annual goals. During sessions, these objectives were reviewed at the beginning of each session. Afterwards, activities centralized on curricula creation, the analysis of data, or a sharing of instructional strategies that have been identified as effective. Based on the district's professional development plan (Garnet School District, 2013), it was expected that a variety of individual development, workshops, inservice and external delivery systems would be employed, including:

- Action research Teachers were asked to employ new ideas in their classrooms and share results at Monday collaboration sessions
- Book studies As part of the district's focus on grading practices, teachers and administrators were reading and implementing elements of O'Connor's "How to Grade for Learning." Participants were asked to read certain chapters and discuss impressions during regularly scheduled meetings.
- Curriculum creation Led by a district administrator and/or instructional coach, participants reviewed standards and then created curricula, maps, or unit plans to guide instruction. This work was then provided to all teachers of that subject or grade for review and feedback and later revised before being presented to the school board for adoption. This process was repeated on a six-year cycle in concert with the state's curriculum adoption cycle (Idaho State Department of Education, 2013a).
- Focused conversation An administrator guided conversation with instructors and support staff on an area of specific need, usually connected to building or district goals or initiatives. The intent of this work was to promote deep understanding and teacher growth on that topic that may trigger improvement.
- Lead teachers In these activities, an instructional coach was asked to guide a group of teachers on a project that had potential for improvement and, if possible,

try to replicate it districtwide. Some of these activities merged with action research, curriculum creation, and focused conversation.

- Peer observation Teachers were paired with grade-level colleagues in their own buildings or within the district and asked to observe a minimum of a 30-minute lesson and provide feedback.
- School and district leadership teams Through the district's strategic planning
 process, administrators, teachers, paraprofessionals, and support staff attempted
 to reach consensus on how to complete goals. These meetings usually took place
 outside of the contract day.

In summary, the professional development activities were significant to the Garnet School District and potentially to the state and nation because teachers and administrators revised their curriculum guides and engaged in activities with a focus on student learning specifically in English language arts and mathematics, to meet the Idaho Core Standards. English (2000) noted, "Current and future instructional leaders in school buildings and district offices need to understand how to lead curricular development" (p. 28). Although the Idaho Core and Smarter-Balanced assessments were connected, additional consideration had to be given to other content areas including history, humanities, and science, especially as they could influence a student's ability to read and write – which is embedded within the standards (Council of Chief State School Officers, 2010). The importance of the professional development activities employed to assist in this transition cannot be understated.

Data Collection

Accurate data collection and analysis was ensured through the attention given to this particular case. All participants were employed by the same district, a requirement for this method of study to be considered suitable (Creswell, 1998). In addition, every effort was made to collect data from this group of teachers in order to help gain a fuller understanding of the relationship between professional development and curriculum creation (Creswell, 2003). I gave care to maintaining the natural setting as the source of data and attempted to observe, describe, and interpret settings as they were. This choice established what Patton called "empathic neutrality" (2002, p. 55) by choosing the setting for this research along with the method of data collection/analysis in order to fully examine professional development and curriculum creation and investigate the connections that may influence both. By using the foundational background on curriculum creation and professional development found in the literature review and examining the trainings through the connections between professional development and curriculum creation identified within the conceptual framework, I expected a data rich case.

Documentation. Forms such as meeting minutes, agendas, and the several drafts of the developing curricula guides generated basic information about the professional development and curriculum creation practices of the district. These documents were analyzed for structure, tone, and/or content, and were used to provide background for decisions in a manner similar to an anthropologist's examination (Glaser & Strauss, 1967). According to Merriam (2009), the collection of documentation should be guided by research questions, which may have also influenced semi-structured interviews. These papers provided feedback and helped identify connections between the trainings and curriculum

creation activities to further inform the research questions. Some of these included expectations for curriculum creators and agendas which included specific topics of emphasis.

Interviews. Inquiry into the curricular professional development participants' experiences provided deeper understanding of curriculum creation (Seidman, 1991). I approached 12 participants at the beginning of the study and ten willing agreed to be interviewed for this case study using a series of open-ended questions. Seidman suggested two types of interviews: "unstructured and semi-structured" (p. 3). The semi-structured interview was viewed as a worthwhile tool for educational reform since it allowed participants to "open their eyes by turning the interview in familiar and unfamiliar directions in order to prompt the respondent to think in alternative terms" (Gubrium & Holstein, 2002, p. 457).

I employed a semi-structured approach with open-ended interview questions derived from the interview guide and approved from the Institutional Review Board. The informants had the freedom to express their views about the curriculum creation process and conversations were diverged in order to pursue an idea or to stimulate thick responses (Suter, 2011). I audio recorded face-to-face interviews and curriculum creation sessions which provided background to the project, provided background on the project (if needed), and took time during the session to develop rapport and encourage dialogue, which King and Horrocks (2012) believed were essential. Kvale and Brinkmann (2009) also recommend follow-up interviews during the process to clarify or elaborate upon participants' perceptions which may have been helpful during this expectedly long process. As Stainback and Stainback (1988) noted, this type of interview was considered to be the best method to learn about the perceptions of others. Semi-structured interviews were also be used to gain clarification in a nonthreatening environment, endorsed by Kvale and Brinkman (2009). Copies of the semi-structured interview guide letter of informed consent are included in Appendices A and C.

The interview guide. Russell (2013) recommended choosing semi-structured interviews when participants demanded efficient use of their time, a dynamic of curriculum creation in the conceptual framework. An interview guide was recommended as part of that process to provide a clear set of questions and topics to be covered, which assisted in guiding conversations and provided consistency helpful to coding and evaluation. Although the guide included structured questions, hypothetical situations were included to dig deeper into a participant's responses about curriculum professional development and identify the elements of perceived effectiveness. The development of an interview guide was also important, according to Kennedy (2006), because the resultant appearance of preparation and competence during discussions assisted participants in recounting their experiences in a coherent manner. Informants expressed their own perceptions about the process with limited controls. Questions and answers identified new ways of seeing and understanding a district's curriculum creation process.

In preparation for this research, I presented a series of preliminary questions to direct the semi-structured interview (Appendix A). Each included in the sample were developed to gain background information about the participant, especially around their years of experience and involvement in the process. Additionally, the proposed research questions were used to frame the semi-structured interview with an emphasis on the perceived connections between professional development and curriculum creation, the dynamics that influenced the process and supported teachers who were part of it. The semi-structured interview contained questions such as:

- 1. What professional development have you received to create curriculum?
- 2. In what ways did you feel prepared/ready to do this work?
 - a. What were some areas you did not feel confident about?
 - b. Was the training structured to provide you necessary instruction?
- 3. What happened at the professional development session(s)?
- 4. What elements of the training were key to beginning this process?
 - a. What kind of training do you think is appropriate for this work?
- 5. How does professional development connect to curriculum creation?
- 6. What are common challenges that you have experienced in developing curriculum?

Based on how the research developed, additional inquiries could include:

- 1. personal perceptions about the pace, scope and focus of discussions;
- 2. insight into how the work may have been perceived upon implementation;
- 3. how the teacher was responding to the challenge of the work;
- 4. whether the participants felt the work were able to impact student performance; and
- 5. how the process helped the participants' professional growth.

These questions were selected to identify the specific components of training that prepared teachers to create curricula, but was also be important for me to gain additional insight by using explanatory questioning techniques ("How" and "why") in order to identify future areas of deeper study – a focus of this exploratory case study (Maxwell & Mittapalli,

2007). Again, these questions also were built from the basic elements of the conceptual framework, navigating the connections between professional development for curriculum creators that impeded or supported their work (i.e. standards and resources), and provided emergent themes and findings.

After themes began to emerge, I held follow-up interviews with each of the 10 participants. In these interviews, I presented the transcription of each of the primary interviews and asked a few follow-up questions. This was to both act as a member check and establish rigor, but also to deepen understanding of each participant's thoughts on the perceived connections between professional development and curriculum creation.

Role of the Researcher – Participant Observer. Upon receiving institutional authorization, I observed six trainings and curriculum creation sessions held throughout the district in secondary mathematics. It was expected that "observational evidence" (Yin, 2014, p. 110) would be profound as I observed what was happening, interacted with the participants, and participated in activities. It was important that I "participate in the lives of the people being studied with maintenance of a professional distance allowing adequate observation and recording of data" (Fetterman, 1998, pp. 34-35). Detailed field notes, participation in small groups, and prolonged involvement played a part in opening dialogue and developing rapport with participants, allowing for a rich in-depth understanding of the training and process of curricula creation.

Because the depth of information revealed have been lessened by lack of comfort with the researcher's role, it was important early in the process for me to gain entrance as a colleague. This research adopted Merriam's (2009) model of employing a "collaborative partner" (p. 125), a known participant in the process who reminded other participants of their roles "so that the investigator and participants are equal partners in the research process" (p. 125). Using this role, I reminded participants that they were equal partners in the research process and encouraged them to communicate with me as if they did not know me. This overt communication and stance during observations and interviews was beneficial in avoiding disruption in the natural flow of knowledge and allowed interviewees, especially, to be open and honest, especially as I reminded them that the focus of this research was to help districts throughout the state. As I expected to enter the participants' world of "meaning and action" (Jorgensen, 1989, p. 36), and collect multiple indicators about the process, strong validity was expected. Participant observation did not prejudge issues and events (in the way a questionnaire may, for example). For these reasons it was possible to argue that such a method provided data that had a high level of validity (Bryant, 2014).

A variety of assumptions fortified most qualitative research. Merriam (2009) argued that, with an emergent design – one that was responsible to the changing conditions of the case - the sample selected should have been nonrandom, purposeful and small. Schutz (1962) celebrated this method because it allowed the observer to view verbal and nonverbal communication while monitoring a natural environment. Curricula creation sessions in Garnet School District were held in public, and often include district administrators, directors, teachers, aides, and assistants, as well as community members. Focusing on the training for teachers, I observed meetings with secondary math teachers, and then requested interviews with teachers who recently received professional development for the purpose of curriculum creation. Because of the present state of curricula in the district and changes in standards at the state and national levels, multiple meetings occurred, making this a data-rich
case. Interaction with the writers in Garnet as a participant-observer led to an understanding of the dynamics involved in coordinating a wide range of materials and standards.

Archival Records. "Archival records are an invaluable tool of data gathering for case study research that is focused on the past and its impact on the present" (Mills, Durepos, & Wiebe, 2010). Through the collection of personal and/or public written documentation, curricular documents, audio and videotapes, and district-created materials posted on the district's intranet and Internet sites, these records provided valuable context to the training practices used by the district to create curriculum. I worked with colleagues to request and examine documents that may not have been immediately available, such as a PowerPoint presentation developed by the administrator/facilitator, and used them as a standard of comparison and elaboration.

Data Analysis

With a goal of better understanding the perceived professional development needs of teachers preparing to do curricular work, I organized, classified, categorized, searched, and synthesized evidence in order to identify patterns in the data. I also collected documentation, including agendas and handouts, during the scope of the observations and analyzed them for intertextual links between and among events (Aarts, Verplanken, & van Knippenberg, 1998). Afterwards, I combined these documents with archival records, observations, or interviews to present a richer study. Merriam's (2009) suggestion of using content analysis allowed me to create inferences about the findings within the documentation, interviews, archival records and the professional development sessions themselves, based on relationship and connections identified. By understanding these connections more deeply, the results of this exploratory case study could be used to identify future areas of study.

Bernard and Ryan (2003) encouraged researchers to look for repetitions, metaphors and analogies, similarities and differences, and missing data and theory-related material when examining qualitative findings. Lincoln and Guba (1981) specified that this work should maintain a clear preference for primary sources.

In addition, I stored and archived each source of paper evidence in a locked cabinet during the research to which I had the only key to ensure authenticity and anonymity. Personal identifiers on electronic files were removed to create a "clean data set" (Howe, Lake, & Shen, 2007, p. 598). There were no specifically identifiable fields collected about respondents such as a name or address. These safeguards built confidence in coding and future analyses and interpretation.

Data was obtained from the following sources: (1) interviews, (2) observations, and (3) documents. Specific to these components, I will elaborate upon how each was analyzed and was used to inform the findings.

Interview and Observation Analysis. Following the research, I transcribed the words and visible reactions from interviews and observations to assist with coding and retrieving, connection-building, and the identification of connections. Participants were sent a summary of their own interview(s) to review and validate the content and credibility of the findings, as recommended by Creswell (2007).

A majority of this work was be completed with ATLAS.ti software, "the software of choice by professionals for productive data analysis" (Cleverbridge, 2014). I was solely responsible for entering findings into the software and generated a matrix that emphasized associations among the data, the conceptual framework, and the research questions (Miles, Huberman, & Saldaña, 2014). Miles, Huberman, and Saldaña (2014) called this process of

early analysis "an active, lively enterprise that contributes to the energizing process of fieldwork" (p. 70). They reminded researchers that this ameliorated the overwhelming task of collecting and coding and believed this concurrent work allows the researcher to create interim reports, complete member checks, and reflect on the purpose of the study.

I advocated creating categories aligned with strong connections emerging from the data. As defined by Morse (2008), categories were similar chunks of text that were ordered or placed in similar locations to become the basis for connections - the general statements used for analysis. These categories were recursively guided by careful reading of text for pattern and meaning, the review of linguistic features such as metaphors and connectors, and the extraction of findings into a visual representation. In this research, techniques of pattern-matching, explanation-building, time-series analysis, logic models, or cross-case synthesis were employed to organize experiences. This provided the greatest opportunity to paint a coherent picture of the connections between professional development and curriculum creation. Since it was not a tenant of the exploratory case study, there were limited hypotheses generated.

Questions in the interview guide were developed to identify connections from professional development that influence curriculum creation. An example was question 2: "What are common challenges that you have experienced in developing curriculum?" I expected to compare the findings to those highlighted in the literature review (e.g., the rising use of computer-based or collaborative learning; *Education Week*, 2011). This task was also be completed in ATLAS.ti. Many case studies looked at the general effectiveness of professional development and these were intended to strengthen the findings of this study, especially as many do not specifically mention curriculum creation. As this research evolved, I expected to use a variety of techniques to identify the relevant connections and patterns that developed, both through the use of ATLAS.ti and hand categorizing. Both Yin (2014) and Ryan and Bernard (2013) pointed out that there was no magic formula for this work and a danger existed in becoming content with the preliminary connections identified. Fully examining the topic and presenting a thick description of how teachers feel about district-provided professional development for curriculum creators required a variety of methods.

Qualitative research must also emphasize procedures to ensure confidentiality. (Creswell & Miller, 2000). The next two sections intend to provide assurances of how I used findings in a responsible manner.

Document Analysis. Document analysis was particularly important in case studies, since rich descriptions of a single phenomenon, event, organization, or program were created (Stake, 1995; Yin, 2014). Riley (1963) noted two possible problematic situations, critical to any investigation, which applied to this case: (a) historical events that can no longer be observed and that informants may not entirely recall, and (b) studies that rely on technical expertise. To combat this, all documents were scanned and imported into ATLAS.ti soon after collection, read closely, and coded in the same way as interviews and other artifacts in order to uncover possible themes and provide opportunity for deeper understanding in subsequent meetings, observations, or interviews.

Many districts, including Garnet, implemented Tyler's (1949) recommendation that curricular design, implementation, and analysis be ongoing. Even with this continued work, terms and decisions from previous work may have been unfamiliar to the fluctuating team members. As Wiles (2009) maintained, curriculum leadership was a complex and dynamic practice that involved numerous terms and people. Therefore, depending on the qualities of professional development delivered by the district, novice curriculum creators may have been hindered by limited technical experiences and vocabulary.

This study centered on the context of the documents. Since the types of training may vary on the contexts of the teachers who could teach in a traditional, magnet, or public charter school in the district, it was expected that each individual had their own cultural paradigm based on their institutional goals and expectations. In such a varied environment, "available materials may not afford a continuity of unfolding events in the kind of detail that the theorist requires" (Glaser & Strauss, 1967, p. 182), and it may have been difficult to fully incorporate those experiences into practice preceding the documentation of evidence. In this particular instance, data triangulation elicited a depth of complementary knowledge. Merriam (2009) stated that some discoveries "may not be in a form that is useful (or understandable) to the investigator...or may be incongruent with emergent findings" (p. 154). A follow-up meeting was scheduled with participants to discuss how a document was used or incorporated into their curricular work. Finally, I carefully coded and attributed the documentation as the research developed so that it was not easy to verify the author or authenticity of documents, whether in participant anecdotal notes or presenter handouts.

Establishing Rigor

Trustworthiness. As suggested by Merriam (2009), triangulation of data (documentation, archival records, interviews, and direct observation), member checking, time in field, reflection of personal biases, an audit trail of the research, and detailed understanding of teachers as curriculum creators, increased trustworthiness in this study.

This qualitative case study included multiple informants and several sources of data to strengthen the research's usefulness for other settings.

Time in Field. This work was bound in time since the district started and ended curricular work at differing times of the year based on its needs and the curriculum adoption and alignment calendar. However, in the role of an observer, it was expected that the researcher would experience a rich, "thick" (Ponterroto, 2006, p. 538) understanding of the district and participant's works and how trainings for this purpose were viewed. To ensure this expectation, I participated in the work of curriculum creation from initial phases through the training process and as documents were developed.

Member Checks. Of particular concern was that participants may not demonstrate honesty in their responses. In order to encourage earnest discussion, I was always truthful about the focus of the study, why the participants' involvement was valued and what would happen with the results. Lincoln and Guba (1985) pointed out that responsible researchers take their data and elucidation back to participants to confirm its trustworthiness. In this way, the eyes of the researcher remained on the participants, not only maintaining rapport but also establishing confidence that the results have validity.

Creswell (2013) emphasized that "polished" (p. 191) interpretations should have been presented to participants with possible connections identified. Doyle (2007) and Lincoln and Guba (1985) also recommended that member checking be a continual rather than singular process. With this in mind, I performed formal and informal checks, each documented at regular intervals, so that all participants had ample opportunity to review and rebut or clarify, if desired. A combination of direct quotes and paraphrasing ensured the reports conveyed the respondents' main points as well as representing their actual words. **Triangulation**. I used multiple sources of data to ensure validity of the processes. Using these observations, reviewing the same interactions repeatedly, and using varying methods of analysis accomplished redundant understanding of data and methods. Within those safeguards, however, there were four specific threats to validity (Maxwell, 2013):

- Researcher Bias Miles, Huberman, and Saldaña (2014) cautioned qualitative
 researchers that it may have been tempting to select data that fit a preconceived
 goal or felt compelled to identify something that "stands out" (p. 124) without
 validation. As Hess considered (in Maxwell, 2013), bias was reduced when there
 was open dialogue about ideas with participants and the research organization.
 Integrity of the research was a top priority and collaborative communication
 during debriefing sessions with participants was emphasized to reduce bias as
 recommended by Shenton (2004).
- 2. Perspective Denzin (1989) encouraged triangulation by comparing multiple perspectives with participants as to identify emerging categories and connections. It was also recommended that researchers share the eventual analyses and conclusions at the end of the study to ensure that differing perspectives can be fully explained. I accepted those recommendations and was glad to ask questions in semistructured interviews and follow-up discussions regarding participant perceptions about the possible trends identified within the study.
- Position and Positionality. "All researchers were positioned...by age, gender, race, class, nationality, institutional affiliation, historical-personal circumstance, and intellectual predisposition" (Chiseri-Strater, 1996, p. 115). With that knowledge, I intended to be open with each respondent about my own

professional background and my status with the research project. Stanley (1993) specified about this type of openness, "It cannot be left behind, [and] cannot be left out" (p. 161).

Events in Data Collection

The first activity was to attend one of secondary math content committee meetings held during the school year in order to get a baseline of knowledge about where participants were in the curriculum creation process and better familiarize myself with the team. During subsequent meetings, selected teachers, principals, and district personnel discussed the needs of specific content areas and their plans during the creation process. Once the scope of work was agreed upon, the committee set the standards for revisions and assisted the participants through the process by modeling and answering questions. At that time, training was delivered and curricular work began. I gathered observation data at these meetings taken from detailed field notes, which ranged from preplanning to the actual analysis of standards and the curricular creation process and, thereafter, to the implementation of new expectations. Additionally, I attended different schools' weekly collaborative sessions, (such as the selected Monday morning meetings involving content teachers throughout the district), where participants discussed their perceptions about the new documents. Interviews, specifically around the dynamics identified, as well as the collection of documentation, occurred throughout the curricular writing process.

Summary

In summary, it was imperative to design a study that was rigorous and well-reasoned. Qualitative case study methodology was employed to fully uncover the professional development provided to curriculum creators. The purposive participant sample included ten experienced and novice secondary mathematics curriculum creators. Four data collection methods were employed including individual interviews, observations, and a review of documentation and artifacts. The data were reviewed against literature as well as emergent connections using ATLAS.ti software. Credibility, rigor, and dependability were assured through triangulation.

Additionally, informed by the literature, a conceptual framework for the design and analysis of the study was presented, allowing the connections that influence curriculum creation and professional development to be isolated. Concatenated to existing research, interpretations and conclusions were drawn that offer promise to building and district administrators in support of their instructional staff. The study results and their analysis follow in the next chapter.

Chapter IV – Research Findings

This qualitative study endeavored to identify perceived connections between programs of professional development and curriculum creation. Results concatenated from interviews, observations, and artifacts were categorized into connections and sub-themes connected to the research questions with explanations presented for each grouping.

Respondent Demographics

During data collection, ten volunteer middle school and high school mathematics teachers, instructional coaches, and building/district administrators from the target district granted interviews. Demographics were collected at the time of interviews and organized into the tables that follow.

First, respondents were asked to verify their gender and their job assignment (Table 2). 70.0% of the respondents were male and 30.0% were female where districtwide, 58% of the district's secondary math teachers were male and 42% were female.

Table 2

Respondents by Gender and Job Assignment

	Building	District	Instruct.	Teacher	Teacher	Percent	Count
Gender	Admin.	Admin.	Coach	(0-5 yrs.)	(6 + years)	(%)	(n)
Male	1	0	1	2	3	70.0%	7
Female	0	1	0	1	1	30.0%	3
Total	1	1	1	3	4	100%	10

Participants were also asked to identify their teaching assignment/role and the type of school at which they work (Table 3). Particularly relevant is the experience of the secondary mathematics teachers which averages 14 years in Garnet School District and ranges from 39 years to one year of teaching.

Table 3

		Instruct.	Teacher	Teacher	Percent	Count
Building Type	Admin.	Coach	(0-5 yrs.)	(6 + years)	(%)	<i>(n)</i>
District Office	1	1			20%	2
High School			2	2	40%	4
Middle School	1		1	2	40%	4
District	2	1	3	4	100%	10

Responden	ts by	Building	Туре

I worked to ensure a balance of feedback between building types before approaching participants and requesting their time to inform this study. Overall, 16, or 40%, of Garnet School District's secondary mathematics teachers worked at middle schools where the other 60% worked at the district's three comprehensive high schools.

Third, largest group of the respondents indicated their highest level of education as a Master's Degree (50.0%) followed by a Bachelor's Degree (40.0%), and Ph.D./Ed.D. (10.0%). None of the respondents listed a high school diploma, Associate's Degree or became educators through alternative paths to certification (Table 4) Compared to districtwide statistics for secondary mathematics teachers, 39% held a Bachelor's Degree and 59% earned a Master's Degree. 2% hold an Educational Specialist Degree.

Table 4

Highest Degree	Res	sponses
Earned	п	%
High School Diploma	0	0.0%
Associate's Degree	0	0.0%
Alternative Path to Certification	0	0.0%
Bachelor's Degree	4	40.0%
Master's Degree	5	50.0%
Educational Specialist	0	0.0%
Ph.D./Ed.D.	1	10.0%
Total	10	100%

Highest Degree Earned by Respondents

Data Collection Practices

Open-ended interview questions (Appendix A) were asked which allowed for indepth responses. At times, conversation led to additional questions which enabled the respondents to elaborate further, adding to the richness of the descriptions contained in this analysis. A uniform protocol (Appendix A) was followed to adequately address the research questions while encouraging dialogue and discussion.

Professional development that prepared teachers to create curriculum was the focus of this study. The team of math teachers, supported by one of Garnet District's instructional coaches and a secondary school administrator, began working on curriculum creation for the district in the fall of the 2011-2012 school year after the Common Core State Standards were adopted by the state. Since that time, the team critically analyzed the current state of documentation to support instruction, began a process to adopt instructional materials, and, at the time of this study, were continuing to work together to plan how to improve instruction, courses, and assessments each year. The majority of curriculum creation meetings took place during the district's job embedded staff development days on Mondays, however, some meetings occurred when substitutes were provided to allow teachers intentional work time.

The respondents each presented different personal and educational backgrounds, personal predispositions, and pedagogical foci. When assembled, it was evident that the teachers worked as a united group when tracking the needs and successes of their students. The administrator and instructional coach focused on teamwork and, in observation of their interactions with each other, asserted teachers' work through supportive and common messages. Each respondent's philosophies about the desired goals for students, although somewhat different, appeared to be focused on supporting students at their level of need and growth.

In order to begin identifying connections, the researcher followed the process outlined by both Creswell (2013) and Patton (2002) for data analysis using ATLAS.ti. The software aided in highlighting key words and phrases, arranging information thematically, elucidating commonly used phrases, and analyzing the combination of all to present a holistic view of the practices. Using this practice assisted in uncovering the connections between professional development and curriculum creation in a systematic way using themes or clusters of data.

Overview of major connections and ties to research questions

This research aimed to explore the connections between professional development and curriculum creation. To that extent, three primary research questions were proposed:

- To what extent do teachers perceive a relationship between professional development and curriculum creation?
- 2. Which dynamics influence the process of curriculum creation?
- 3. How can school districts in Idaho serve the professional learning needs of educators asked to create curriculum?

During the study, perceived connections between professional development and curriculum creation began to emerge: (1) collaboration, (2) time, (3) empowerment (4) educational background, (5) change, (6) standards, (7) limited resources, (8) level of participation, (9) status quo, and (10) group dynamics. In addition, the concept of change was added as a factor as it was mentioned or observed in over two-thirds of interviews or observations (Table 2). The number of mentions have been arranged into three tiers based on proximity to other connections and using a cluster analysis produced in ATLAs.ti:

Table	5
I UUIU	~

Number of							
	Mentions						
Connections	/Observations	Tier					
Collaboration	125	First Tier					
Time	115						
Empowerment	98						
Educational Background	92	Second Tion					
Change	89	Second The					
Standards	89						
Limited Resources	49						
Level of Participation	34	Third Tior					
Status Quo	32	Third Tier					
Group Dynamics	20						

Table of Codes

Connections Detailed in Findings

Throughout the ten interviews, specific connections emerged in relationship to the research questions. These connections also referred to the curriculum creation process within Garnet School District and the professional development needs of the team members. The following nine connections were described in order of prevalence of responses:

Collaboration (n=125). Most mentions of collaboration were positive in nature and was identified as a connection between professional development and curriculum creation. From Garnet School District's activities on Monday mornings to casual conversation, participants mostly agreed with the self-reliance of receiving and enacting decisions made with colleagues.

Specifically mentioned as important was how the district's leadership selected appropriate activities and knowledgeable leaders to facilitate sharing among team members. The district's secondary math coach, "Greg," was lauded frequently as a reason for the teachers' confidence in creating curriculum based on his delivery of professional development over the last three years. However, it appeared that the district also distributed leadership, as mentioned by "Olivia," (personal communication, March 11, 2015) when asked if she had received anything of value from cross-district collaboration, she replied:

> Olivia: [Greg] was mostly the facilitator in the high schools, but everyone... everyone wanted to work with him more, so that would have been nice. However, I got to facilitate some of the sessions which worked because I got to hear the instructions twice and lead other discussions which was effective. So, yes, the times have been well done.

Time (n=115). The second most-identified factor was time, which most respondents valued to do curricular work. Each respondent identified that true curricular work was not simple nor easily completed in a singular day, with one participant mentioning it 19 times. "Greg," the district's instructional coach for secondary mathematics summed up what many thought: "It's a very slow and exhausting process." Compounding the desire for more time were the time demands of their normal day where teachers could work with up to 160 students a day, grade their work, and provide individual interventions.

Additionally, others mentioned that there are many time demands for an Idaho teacher or administrator. "I think that a lot of it is time. Truly, you only have so many hours in the day and if you focus on too much you can't focus on anything," said "Cathy," a district office administrator (personal communication, February 25, 2015). No respondents spoke negatively about employing substitutes to provide teachers additional time out of the classroom to create curriculum or rate textbooks for possible adoption – both common during the study.

Respondents repeatedly praised the district's decision to implement job-embedded staff collaboration nearly a decade before the study. Even with the dedicated two hours per week for professional development, seven said that they would enjoy more time to create shared units and lessons. "Cathy" offered her opinion that teachers should actually be yearround employees rather than compensated for nine months of direct contact with students. In her vision, teachers would spend more common planning time rather than pushing for most of the intensive work to be done during summer months when some teachers prefer to be away from their classrooms: [Cathy]: Truly, you only have so many hours in the day and if you focus on too much you can't focus on anything. At the beginning of the school year, the focus of the teacher needs to be the students in the classroom and if we try to pull them out for different purposes, we lose focus and then a lot of times we rush and hurry. So, it sounds terrible, but we use the school calendar - based on the agrarian cycle it doesn't make sense and it's an old model. So, I think what we need to do is re-look at our calendar. Does it make sense to add contract days to the contract where teachers can work on curriculum? We do that with some of our professional-technical teachers. Now, teachers are exhausted in June because we push so much into the school year. It would be nice if teachers were year-round employees. I really like -I think that we need to explore a different calendar so, that way, teachers aren't burning out and you have periodic time just dedicated to working on curriculum. When you do provide that time, you need to make sure that it is valuable or teachers will think that it's waste. I like a year-round school model where teachers would have regular time to work on curriculum and now we have to wait until the end of the year or before school begins in August when people come back to do that work. Everyone needs a break, so it helps to have that natural break - you could use the time to evaluate end of course assessments, you'd have time to use the data to make changes for the following semester (personal communication, February 25, 2015).

Empowerment (n=98). Beginning the second tier of mentions and observations, teachers commented many times about their desires to make decisions based on the unique needs of their students. Respondents used words such as "meaningful," "impactful," and "autonomy" to describe their desires to make decisions for others which was often paired with comments on their years of service or experience in a particular class or concept. In one interview, "Greg" pointed out one of the district's goal of professional development for curriculum creators: "It's an extremely valuable process for a teacher to create a product that other people can use in their own classrooms. It brings them confidence in their own skills and trust in their abilities to serve students well."

Teachers often praised professional development for curriculum creators that was flexible and personalized in contrast to a one-size fits all approach. During observations of the secondary and middle school teachers' collaborative sessions, the district administrator and coach made strategic choices about how to present information and how to involve participants – even those who chose to learn about mathematics even though it wasn't their assigned content (i.e. two science teachers who were regular attendees). An example of this was during a middle school meeting where "Ben," the district administrator assigned to that group, led discussions of choosing a new textbook while focusing on the needs and desires stated by the content committee instead of the district's rigid process (observation, March 02, 2015).

Six respondents also linked their feeling of empowerment to a lack of resources. As the district had re-written curriculum over the past three years but had not funded new curricular materials, it forced teachers to focus on the standards and their instructional practices that were emphasized during job-embedded collaboration sessions. "Ben," (personal communication, March 18, 2015) the principal charged with facilitating the Monday meetings, actually encouraged the district to follow the same practice with other grade levels and subjects who will be looking at new curricular materials:

> [Ben]: We've now been [teaching without new instructional materials] for two years and they know that they can survive without it so they're willing to take chances. It's nice to have them talk and be informed about the different grade levels of what they're looking at.

Educational background (n=92). Only one of the respondents identified confidence in their skills as a curriculum creator based on pre-service studies although each achieved teacher certification through a collegiate program. One even had very negative feelings about his teacher preparation program, especially around curriculum creation. In response to a question about his pre-service education, "Mike" responded, "It was actually a waste of time. Student teaching was incredibly valuable but I can't think back in my 201 class. It was ridiculous I just wanted to get it over with. But nothing around any of those topics" (personal communication, March 26, 2015)

Instead, the other nine relied upon their previous experiences working with their colleagues to create curricular guides, calendars, or choosing texts. "Will," a high school mathematics teacher, believed that relying on those experiences allowed the ongoing work of curriculum creation to flow from session to session. He stated, "When you are a listening to opinions from people who are way more experienced than me, they have a good handle on what needs to happen in the math curriculum. The district does a good job to allow senior members from the math department to have their voices heard." This tie-in to empowerment

was mentioned as a recommendation to districts who rely upon teaching staff to revise and create curricula.

Half of the participants also mentioned that their initial experiences with curriculum were negative either from asking for curriculum for a course that they were hired to teach or fumbling through their district's curriculum creation process without training. "Ben" (personal communication, March 18, 2015) underscored how changes in accountability have heightened the need for professional development for curriculum creators:

One time we had to put together a curriculum guide and I had no training. We stole work from somewhere else and made it work for us. I remember putting a letter "I" next to a unit showing that he would introduce this year, an "E" for what is being exposed and an "M" for what is to be mastered, but I really didn't have any idea what I was doing. Back then it worked out okay because he didn't have the same accountability level that we have today...there was no standardized testing and I didn't have to look at the results and compare them to others because there was no other school where I was teaching.

Overwhelmingly, years of experience was equated with confidence in curriculum creation. Each of the participants talked about their own personal growth in the district's job-embedded collaboration sessions and especially over the first three years of implementation of the Idaho Core Standards. "Cortez" (personal communication, March 17, 2015) summed up what most thought when reflecting on the work: [Cortez]: To be honest I kind of learned on the go. I worked with a team with a couple of teachers. There were a few sessions that we got together and talked about how to align Algebra 2 and teach the mathematics properly. You get people together that are great and have great experience in their content areas, they are "masters of their own domain" and you get them together to talk about - "Hey, what's important and what should we include and what do we need to exclude because we can include everything.

Change (n=89-tie). Although not listed on the initial connections between professional development and curriculum creation, each respondent mentioned the implementation of the Idaho Core as having an impact on their teaching but nine implied that they were handing the change without major difficulties. Therefore, this was added to the conceptual framework. Specifically, only two looked at the changes negatively and recognized that new standards and updated expectations were a regular occurrence in education. A leader in that implementation was "Patty," a secondary math teacher who was Idaho's Teacher of the Year and a winner of the Presidential Award for Excellence in Mathematics and Science. She said:

[Patty]: How we approach those standards gives creativity. So, there's a focus on students now they have multiple ways to approach a topic, different strategies to use and strong goals. It's allowed for greater communication amongst students and strong strategies that we can use year after year. Even though there has been a huge change, most teachers see the benefit of this type of instruction (personal

communication, March 05, 2015)

The high school teachers in the group also have had lively discussion about whether the district should go towards an integrated mathematics pathway or stay on the traditional pathway of algebra, geometry, and Algebra II. Most of the respondents were intrigued by the integrated pathway which would connect to instruction in Kindergarten through Eighth grade, but also showed concern that it would be a large shift for many and would require additional professional development, community engagement, and a multi-year commitment to the strategy. "Will" synthesized his opinion as well as that of his high school's department at one school by stating, "It's not a mountain anyone wants to die on and if going integrated makes us better, it will be worth it" (personal communication, March 11, 2015).

Finally, "Greg" (personal communication, February 20, 2015) mentioned another change, echoed by "Ben" (personal communication, March 18, 2015) earlier – the change in curriculum creation itself. In the past, curriculum could be written as a single-paged scope-and-sequence before the accountability movement forced districts to become more regimented. This resulted, for instance, in course curriculum guides in Garnet District to be regularly over 30 pages in length. He reminisced:

[Greg]: Curriculum at that time was pretty easy to write. To write curriculum today it is so much more complex because of the new focus, but new teachers almost have a better shot of doing this because their classroom experience with the new standards and training them to be more open minded. They may not be able to create it as efficiently, but they realize a quality product when they see it. I think that it is difficult right now because of the amount of influences that we have for classroom teachers.

Standards (*n*=89-*tie*). Tied with change and closely aligned in discussion of change was the integration of new standards. While the adoption of the Idaho Core was identified as a major reason for professional development, much of the discussion with interviewees focused around how transformative they are in secondary mathematics, emphasizing conceptual understanding, procedural fluency, and real-world application ("Greg," personal communication, 21-February, 2015). "Cortez" indicated that in his opinion, the new standards were now going to impact high school teachers more as students matriculate: Full Common Core should have been implemented in elementary schools and middle schools first and then transitioned to the high school. Now we're gonna be the last ones changing with the times. It's going to take its time to work up to our level but I've already had to change some of the ways that I do things in some of my classes because some of the students just weren't ready. For the record but it's a good transition and that's the way it needs to be.

"Cathy," who oversaw the secondary mathematics teachers' work had seen the adaptations of standards over the previous 20 years as she worked on the original national standards movement – the Goals 2000: Educate America Act in 1994. Even at that time she had minimal training to create curriculum. She summed up that work as well as the district's efforts to construct a "blueprint" on how to meet the new goals. She added that "the standards provide the "what" and our district's philosophy is the "why". Then, the curriculum is really a roadmap on how you do that. And that includes, what materials you need to support" (personal communication, February 25, 2015).

Limited resources (n=49). Learning that the district had few instructional materials aligned to the Idaho Core Standards during the first three years of formalized instruction, it was surprising that that lack was not mentioned more often in interviews or observations. However most respondents said or implied that having limited resources was just part of teaching in Idaho. Of course, they did advocate for more and, at the time of this study, the district was reviewing titles for possible adoption but the State Department of Education had delayed recommending titles until 2016.

"Ben" (personal communication, March 18, 2015) indicated that the textbook adoption delay may have been a blessing in disguise as it forced teachers to learn the standards and develop a more critical eye to the types of activities assigned:

> I don't think that we would be looking at some of the titles that we're looking at now a few years ago because having something so different, like not having a traditional textbook, would have scared people. We've now been that way for two years and they know that they can survive without it so they're willing to take chances.

Level of participation (n=35). Beginning the third tier of connections identified was the level of participation involved in professional development and curriculum creation. In observations of meetings with middle and high school teachers, the instructional coaches, and administrators, it was obvious that some participants were more involved than others in making decisions – whether for a possible textbook or when discussing common formative assessments or scope-andsequence. For example, in a meeting held on March 2, 2015, some teachers were visibly disinterested in the work for a new textbook and made it clear that they were "comfortable" with what was selected by the content committee.

"David," a novice high school math teacher, discussed his insights about experienced staff and those new to the building or profession. He mentioned "within our math instructors community...we have the old guard and we have a young guard that are more new and open to change in trying something different" (personal communication, March 20, 2015). This was also reinforced by "Patty" when she talked openly about some of her middle school colleagues, saying that they were "polar opposites" of the continuum of curriculum creation (personal communication, March 05, 2015). She hoped that an impending decision to purchase new curricular materials may help to bring colleagues together. "Greg" and "Cathy" (personal communication, February 25, 2015) also discussed their plans to involve other faculty in the process, especially those who have several years of experience, which tended to be the least interested in the current work of the district.

Status quo (n=32). Similar to the divergent thoughts in the department, some respondents advocated for maintaining older standards and methodologies. In discussion with teachers and administrators, there was still a belief that the Idaho Core may be repealed or scaled back due to political pressures. In combination with those possibilities, some teachers thought that the shift to new focus areas in conceptual understanding, procedural fluency and real-world application may alienate experienced teachers whose focus on fact fluency and repetition was common in previous instructional strategies "Patty" tried to rationalize this: "We also need to validate that the old way of doing things was not bad. We can still use some of those skills today" (personal communication, March 05, 2015).

"Greg" thought that maintaining a status quo could be tied to experience:

A teacher's confidence is partly based on how they have done things routinely for years and so I do have to spend some time convincing that different ways are not only acceptable, but impactful. With new teachers it's more about giving them the feeling that they can make decisions in the classroom based on the needs of their students end feel okay if it doesn't go as planned (personal communication, February 20, 2015).

Though, "Mike" believed that that validation may not be enough:

[Mike]: Some teachers are going to want to just teach 20 questions out of the textbook but there is so much more conceptual understanding and problem-solving going on right now. We'll need to make sure that teachers have what they need to do it the way that they would like and still meet the standards (personal communication, March 26, 2015).

As these two responses were divergent – that curriculum creation will create changes in instructional practices while allowing teachers the autonomy to do what they see fit to meet student needs, further study will be needed to identify how district leaders can meet both demands.

Group dynamics (n=20). Observations, interviews, and the collection of documentation showed the district's emphasis on uniting different visions and providing clear expectations, such as with "Greg's" use of a quotation from George Polya during the March 2^{nd} cross-district collaboration sessions for middle school and high school math

teachers. The quote advised teachers to work together to "challenge the curiosity of the students by setting them to solve problems with stimulating questions, he may give them a taste for, and some means of, independent thinking."

It was obvious that most of the district's work had been well received and was praised by a few of the interviewees for its methodical and slow approach to the change. "Cathy," a district administrator, reinforced that idea when she mentioned "when we do provide the opportunities, then for people to get involved, it had to be collaborative. When we work collaboratively on a project a teacher doesn't feel alone" (personal communication, February 25, 2015). There were few sightings of malicious or discontenting attitudes towards the work of curriculum creation or professional development during the seven observation periods.

Summary of Findings

The connections between professional development and curriculum creation were identified and coded in each of the interviews and observations and in evaluation of artifacts and documents over a three month period. In addition, one additional factor, "change" was added as it was identified in each interviewed and a constant discussion in professional development delivered by teachers, coaches, and administrators.

Table 6 identifies the number of codes for each participant:

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Review of Research Questions

For policymakers, educators, and administrators seeking clear answers to how professional development connects to curriculum creation, this research used existing literature o and a variety of information strategies to inform the overall questions.

1. To what extent do teachers perceive a relationship between professional development and curriculum creation?

Participants identified several connections between the two distinct processes in school district leadership. Specifically, the concepts of collaboration and time were frequently mentioned as essential. This validates previous citations from Clark, Wiens, and Thompson (2014) and Mooney and Mausbach (2008) that informed the conceptual framework.

The target district appears to have bridged the concepts well with praise for the implementation of cross-district job embedded staff development on regular intervals as well as offering special seminars connected to continuing education credit. Also, the district took its time to develop the instructional shifts inherent in the Core Standards. Even though they weren't to be taught until 2013, the district began to implement a plan to phase in professional development and expectations towards the practices that were intended to assist students with the transition. Vital to these connections, it was emphasized by participants that both practices be ongoing and timely – where a culture of continuous improvement over time can be developed.

Essentially, the respondents shared unified frustration in the financial challenges of school funding in Idaho. These challenges had created an environment where schools and districts have to make difficult choices in choosing to funding salaries, facilities, and

benefits first and then on whatever fits the mission and vision of the district. In Garnet District's circumstance, curricular work and the purchase of needed curricular materials were not funded in the midst of grand change. Instead, they relied on the classroom teachers and their levels of expertise, many of whom had limited experience in creating curricular documents or selecting curricular materials. Therefore, providing collaborative professional development in regular and sustained intervals was elevated in importance.

2. Which dynamics influence the process of curriculum creation?

The researcher found that each of the perceived connections had influence, in addition to the factor of *change* which was identified multiple times and added as an additional factor in evaluation.

The findings demonstrated that there was not a singular factor that a school district needs to master but an amalgamation which are highly dependent on the participants involved in the process. An example of this was the factor of empowerment which was identified numerous times as a motivator for teachers and administrators in the process. The literature extolled that the teacher was the single greatest factor that influenced student achievement (Alderman, 2013). The teachers who mentioned empowerment and autonomy in their responses, or demonstrated it in leading sessions with their colleagues, were open that it was an important motivator to their involvement.

The findings were divided into three tiers based on the frequency of codes. Although collaboration and time were identified most frequently, the connections of teacher empowerment, educational background, change, and the standards themselves should also be kept in mind by administrators who direct professional development activities. A focus on the limited resources, levels of participation, the status quo, and group dynamics were mentioned but less frequently.

3. How can school districts in Idaho serve the professional learning needs of educators asked to create curriculum?

Mooney and Mausbach (2008) accentuated that powerful professional development needs to be embedded in the curriculum creation process. The findings of this study would encourage districts to take a methodical approach to their professional development practices and doing so in a matter that provides for collaborative work rather than coming from a single source.

Certainly, "Greg" was recognized by many of his peers for keeping stakeholders informed and involved. However, some districts may not have the luxury of a dedicated staff member to these efforts. No matter the level of participation or organization, these findings would indicate that teachers want to be involved, desire the role to lead the curricular work of the district, and demand the time to manage and create changes that meet the needs of each student, school, and district.

Additionally, using the strengths identified in Garnet District, administrators should select a point of contact for each content area as "Greg" was identified positively for his attention to detail, knowledge of standards, and for his demeanor in working collaboratively with colleagues.

Discussion of Findings

Professional development provided teachers an opportunity to reflect on their practice, especially for those asked to create a curriculum, in whichever form it may take. Sessions provided by the Garnet School District and interviews with faculty, along with current research extolled this practice. Conversations revealed the importance of collaboration throughout the process with those deeply involved in the process along with those more reticent to take a role but have experiences that could be of value.

One of the challenges around curriculum creation was that few teachers could define it – opting for relying on a textbook or a way of instruction (Wong & Wong, 2009). As the literature (Wilson, 2014) informed, curriculum was a list of activities and prompts taught by a teacher in any given school year to any given group of students. Because fluidity was one of the intentions of the written curriculum, the district believed that it should be monitored and adjusted, influenced by the reaction and performance of the students. However, there was still some uncertainty about how *curriculum* should be defined. When discussing the district's written documents, some found the open-ended nature of the curriculum guides, informed by the standards, which are now more flexible in English language arts and mathematics to be ambiguous and always needing to be improved (Blair, 2014). English (1980) detailed that "Developers of curriculum decide the problem must be ambiguity because they assume that teachers are following the curriculum guide. But what if that is not the case?" (p. 558).

The researcher discovered that, in Garnet School District, this was not the case. With the implementation of job-embedded staff development in 2009, the district began a cycle of review and renewal with curricular materials although they were not able to maintain it in the lean budget years that followed. Although materials adoptions were in short supply and personnel funding was not as available, the district recruited teachers to create curriculum guides and maps that were intended to be used in conjunction with, not in place of, the standards and benchmarks provided by the state and/or school district. Another point of discussion evident was that teachers who responded to the call from the district didn't always feel prepared to take on the role of curriculum creator. Nearly every participant interviewed stated that their preservice instruction did not provide adequate coursework nor experience to give them comfort with curriculum creation. Therefore, it was more imperative that the district have clear guidelines and provide ongoing instructional support to teachers so that the documents were clear, utilitarian, and consistent.

A written curriculum placed value on specific standards and was usually informed by the desires of the community and standardized assessments. Scott Cook, Content Director from the Idaho State Department of Education refers to curriculum as a place to start in the evaluation process of student learning:

> Standards serve as beginning points for teachers when they make decisions about what to teach and at what cognitive level to approach instruction. Because we hold students accountable for what they have learned each year, it is important to monitor their progress throughout the year. (S. Cook, personal communication, February 13, 2015)

Questions were often raised about the value of flexible curriculum within a class, especially in a state that had a pay-for-performance model. As the documents did not provide citations of every activity that students should complete throughout the school year. Some teachers and administrators felt that they should not collaborate as they would be giving away their advantages of creativity or experience to another who may use it to their own advantage to earn extra pay. This focus on teacher accountability and the newness of the second iteration of the ISAT (Smarter Balanced assessment) tended to dissuade teachers from being a part of curriculum creation – even though they received the professional development to do so through the district's whole-group instruction model. Instead, some teachers did not argue against teacher accountability, but preferred a balanced approach where decisions of effectiveness could be made through multiple assessments. Though the No Child Left Behind Act (NCLB, 2002) of 2002 contained a provision to increase accountability for student performance, participants felt that this level of high stakes accountability where schools, districts, and states could be labeled as excelling or failing was past its time.

Documenting the processes of district curriculum creation and professional development was not new. Looking at the connections between both topics was unique to the nature of this study. As teachers rely upon their own lesson plans to focus teaching to their combination of students and needs, an awareness of the interconnectedness and a plan to ensure relevance reduced the numbers of binders containing curricular materials sitting on dusty shelves in classrooms.

Chapter V – Conclusions and Recommendations for Further Study

The curriculum creation process in the Garnet School District clearly relies on quality professional development. Although it provided a real-time map of what was to be taught throughout the year, it also was used as an evaluative structure for the teacher, the administration, and the school district. With those stakes in mind along with widespread change in Idaho education, ensuring teacher training and involvement with the process was essential for curriculum creation quality and success. Minkel (2014) outlined the notion that many teachers have in receiving quality professional development, especially for those in curricular leadership: "The best curricula I have experienced was developed by teachers. The best professional development I have experienced was designed and delivered by teachers, too" (p. 1).

Consultants often had slicker PowerPoints, with snazzy transitions between slides. Textbook companies produced glossy materials with impressive graphics. But the quality of these materials and workshop was widely variable. Some of it was user-friendly and developmentally appropriate, with a coherent progression of concepts. Much of it was so dismal it seemed to have been developed by people who had never even met a child, let alone worked with children closely enough to understand their needs.

By contrast, the teacher-developed curricula and professional development I've experienced was sometimes a little rougher around the edges. But because it was developed by practitioners, it tended to be like sorcery lessons to work in practice. These teachers had thought through the details: the wide variety of student needs; elements of classroom management like transitions and guidelines for group work; the line between frustration when the work is too hard and boredom when it's too easy. They built in relatively short "teacher talk" time, and they made sure that what the students did, said, wrote, read, and built related directly to the concept they were learning.

Jobrack (2011) accentuated that teachers have a full time job already managing the role as a classroom leader - not to mention the many "other duties as assigned" (Burgess & Bates, 2009, p. 1). With that workload, time was a factor and one that some managed more easily than others. In this study, time was cited 115 times, the second-most identified, as a factor that influenced curriculum creation. Specifically, Garnet School District respondents urged that a curriculum both takes time to create and it should also be reviewed and updated continuously, providing a consistent focus with timeliness to meet available materials and student needs. This feedback also contrasted with the 89 mentions of change as a factor which indicated that, despite 4 teachers' desires for consistency in curriculum, there was a desire for updates which demonstrated relevant instructional methods and expectations. However, when the challenge of time was paired with the other top connections between professional development and curriculum creation - collaboration and empowerment, Garnet District's creators provided insight into the perceived connections between curriculum creation and professional development as well as provide insight into future areas of research.

Linking the connections

The researcher discovered that both a collaborative attitude and schedule were essential to curriculum creation. Participants rejoiced in the regular meeting times that they had with grade and subject-alike colleagues and that they were structured in a way that was
worthy of their time. Certainly, the Garnet School District had put structures in place for several years, such as a job-embedded staff development calendar, the hiring of instructional coaches, and a perception of autonomy that was both desired and felt in each interview or observation. Each of those decisions may have troubled administrators initially and evidence existed that each wasn't received well at the onset. However, it appeared that the district had found ways to rely on each of the systems individually to maintain impactful and relevant work.

The importance of collaboration. Idaho's Governor C. W. "Butch" Otter pursued funding for job-embedded staff development for teachers in his omnibus budget request in FY2015 as a result of recommendations from a statewide task force. As the group equated, "Teacher effectiveness is paramount to student success, and professional development is paramount to teacher effectiveness. Professional development must be regularly scheduled and ongoing." (Office of the Idaho State Board of Education, 2013, p. 8). Unfortunately, that budget request was not appropriated by the state legislature, compelling individual districts to do what they believed was impactful for their own teachers.

For Garnet District, the district's successes in student achievement over the past years could be traced to its collaborative model which occurred regularly and, at least in secondary math, focused on application of standards, a sharing of successes and challenges, and a mutual reliance on the members to improve. Additionally, the district had contextualized mathematics into other content areas so that it was not only the secondary math teacher who maintained the responsibility for moving a student towards meeting standards. Although not every participant desired to lead or involve themselves in that work or decision making, there were few negative or cynical interactions noted, indicating a belief in the process and the abilities of their peers to improve.

However, even with a collaborative structure in place, participants consistently mentioned the need of a point person to lead professional development. Many participants complimented instructional coach "Greg" on his knowledge of standards, demonstration of concepts, and willingness to listen. This indicated that having a lead teacher at each session was a valuable practice. Furthermore, as the district had an assigned building administrator for each subject or grade level, there was consistency in messages and expectations delivered to teachers from the district administration. Even having an administrative presence at every meeting, participants were open with their comments, even some scathing of the district's decision last year to write new assessments worth 15 percent of the students' grades in the first year of the Idaho Core's implementation. Participant responses had indicated that teachers had an open forum to address concerns without fear and make decisions that they feel will work well for their students with the district's support. "Ben," (personal communication, March 18, 2015) the district administrator assigned to this group, summarized:

> Without trust amongst ourselves and the vision of the district, none of this would have happened. Collaboration gave us the reason to come together and hopefully we'll make informed decisions. We've never heard "This works for me now make work for you." It's always been "What is going work well for our district?" For our department it's been pretty cool.

Collaborative sessions were well-planned and demonstrated methods that were desired in each classroom. Strong use of instructional technologies, questioning techniques, and demonstrations of mathematical practices within the Core Standards, such as tasks, were consistently on display. By demonstrating these practices in reoccurring meetings, the district and coaches had an open forum to showcase best practices which had led a few teachers to try them out in their own classrooms – a practice that Rayford (2010) calls – "the teacher in the mirror" (p. 1).

Finally, it was recognized that the district's model for collaborative sessions had scheduled meetings with their colleagues in their building, with all elementary/secondary teachers in one location, or only with their grade or subject-alike colleagues. In that format, the message of the district could be heard from different people, in different locales, and applied in different ways. For the teachers who were involved in this study, there were no concerns with this variance and administrators were afforded an opportunity to foster a cohesive approach through pedagogic and structural supports.

Time. Closely connected by participants to the importance of collaboration was a focus on providing consistent and sustained periods of time to do so. A recent statewide study of Massachusetts teachers found that teachers did not feel that there was sufficient non-instructional time in the contract day to complete their requirements – including collaborative decisions (Rennie Center for Education Research and Policy, 2014). However, participants in the Garnet School District relished the consistent time spent working on curriculum creation and its assorted tasks as part of job-embedded staff collaboration. In fact, most respondents encouraged the researcher to lobby the district to embed as much

curriculum work as possible into these established meetings and practices instead of release time, stipends, or employing a substitute teacher.

"Curriculum planning is continuous and dynamic—don't ever forget that" (Mills, 2003). It was clear that the district's past curriculum work was not considered poor practice. However, with the implementation of the Core Standards and new assessments, it became clear that changes in teaching trends, staff turnover, and standards created new expectations for educational leaders that should not result in stagnant documents. Participants advocated consistently that the curriculum creation process should be ongoing and not just opened on the years of scheduled materials adoptions as the district had arranged in previous years. Instead, they would prefer that documents were posted similar to a Wikipedia entry where there are opportunities for enhancements throughout the year. In addition, if developing a new course or completing a full rewrite, participants encouraged the administration to take their time in developing a scope and sequence and use the existing collaborative structures to request feedback. If using the analogy from Mooney and Mausbach (2008), the faculty of Garnet District would agree a written curriculum should take as long as it would take to build a home with the greatest focus placed on the foundation and structure.

Participants implored that collaboration time needed to be on methods for teaching math that equated to student success. Collaborative curriculum creation allowed each member of the faculty to focus on what had provided for successes in their own classrooms, listen to how others have delivered similar lessons and then jointly develop it across the curriculum and grade levels. "Cathy," the Director of Secondary Education, indicated, "To ensure success for all students, we have to be committed to regular collaboration that should include reflection of what is taught" (personal communication, February 25, 2015). Overall, in a review of this district's plan, providing sufficient and consistent collaborative time did result in student successes.

A final recommendation from the participants had to do with providing just in time service for curricular creation and materials adoption. Specifically, curriculum, no matter the format, essentially became a product of the teacher as each delivered the materials in their own way. Ferguson (1981) foresaw over 30 years ago that, "there is always a normal gap between the ideals of the curriculum and the realities of teaching. However, the bigger the gap, the more likely the curriculum will not be used" (Ferguson, 1981, p. 116). This challenge could be met if teacher leaders were to be provided adequate time to prepare a curriculum that was both timely and relevant to student needs.

Through the district's mathematics materials adoption process, participants mentioned that textbook publishers have attempted to align their current products to new standards in their layout, but with textbook adoptions falling further and further behind due to budget cuts, it became next to impossible to keep up. However, the district's overall goal for a curricular resource was to ensure that it were to be valuable to a classroom teacher. The curricular creation process, along with its time commitment, provided a roadmap for any classroom educator to see how standards can be incorporated into lessons. Even with limited resources and constraints on time, teachers should be able to use their district's work to support student growth. Plus, once created, the time required to review and renew curricular materials should be lessened (Williamson & Payton, 2009).

But the district may have had a concern embedded in the vocabulary as five teachers struggled to define curriculum and, instead, usually referred to a textbook. The district's policy specified that textbooks are adopted based on adherence to the required standards and relevance to student needs (Board of Trustees of Garnet School District 11, 2014). If a great number of teachers thought that the textbook was the curriculum, it may have limited creativity, collaboration, and vision as they simply relied upon what they received and delivered it without flexibility to student needs, in converse to what was observed during the collaboration sessions.

Several respondents mentioned that the existing structures for curriculum creation and material adoptions were antiquated. Some equated the decision to the rapid change of information via the Internet and the convenience of the drive-up window. Teachers specifically recommended that the district become more nimble to respond and adapt to needs identified during collaboration sessions instead of waiting for an artificial window to open, recommending annual reviews of curricular documents. This mirrored a foundational strategy of the Idaho Core where students at the time of the study were being asked to create with content using application, analysis, and synthesis along with several depths of knowledge. The practice also disputed previous standards and curricula that were based upon individual skills and driven by standardized assessments (Cole, Hulley & Quarles, 2009).

Empowerment. Garnet teachers and administrators were confident in their abilities in the classroom, as collaborators, and curriculum creators. Many thanked building and district leaders for allowing teachers autonomy to make instructional decisions that they felt would resonate with their students. Many, including "Mike" (personal communication, March 26, 2015) felt that the collaboration sessions provided instructional ideas and discussions of best practices from colleagues. Additionally, he felt that he had the flexibility on whether he wanted to try them out on his own students. As an example, "Mike" was part of the curriculum adoption team representing other middle school math teachers. With the information from the vendor showcase presentations, he piloted print and online materials and then led a discussion with his colleagues about his experiences as well as his perceived strengths and weaknesses at a cross-district collaboration session (observation, March 02, 2015).

A perceptive tie to empowerment, administrators reported that teachers were accepting more leadership roles as a result of their collaboration experiences. Five of the 12 participants mentioned that they had assumed additional leadership responsibilities in curriculum creation as part of collaboration. Again referencing the recommendations from the Idaho Task Force (2014) as well as Harrison and Killion (2007) that teacher leaders should receive higher pay in exchange for mentoring colleagues and becoming resource providers, instructional specialists, curriculum specialists, classroom supporters, learning facilitators, mentors, school team leaders, and data coaches.

Results from this study implied that teachers were an essential part of the professional development and curriculum creation processes. Along with their continued involvement along the continuum, an allocation of time and empowerment was considered essential. These findings connected to the literature review where Bogler et al. (2004), Dee, et al. (2003), Erawan (2008), Ghani et al. (2009), Lee et al. (2011), Muijs and Harris (2003), Short and Rinehart (1993), Wan (2005), and Zembylas and Papanastasiou (2005) found that districts that put a focus on teacher empowerment received positive impacts on teaching quality, innovation, teacher leadership, job satisfaction, loyalty to the school, district, and an educator's own professional growth. This focus also demonstrated connections to student and district achievement on standardized assessments.

Synthesizing Findings

Each of the 10 perceived connections between professional development and curriculum creation was mentioned or observed and each added value to the findings. Some participants did express more interest in specific connections more than others – such as "Greg" who mentioned empowerment five times more than the next closest participant. Thematic analysis was employed after the categorization of data in order to help me look at the findings through patterns. With the goal of identifying connections between these broad topics, these themes materialized:

• Theme 1 – "Change:" Including Change, status quo, and standards

Certainly, a desire or mandate for change and an adherence to the status quo are going to in opposition. As discussed in Chapter I, the publication of *A Nation at Risk* prompted numerous education reforms. Whether focused on accountability, school choice, or standards, there have been numerous laws and initiatives for changes to the educational system in our country – which have been debated by teacher unions, parent organizations, and the general public more than ever.

While no participant specifically mentioned a union and most had a favorable view of the change in standards and district professional development, there were undercurrents of frustration with the number, and magnitude of changes. "Mike" (personal communication, March 26, 2015) emphasized: "(Teachers) may not change on their own. We'll need to make sure that that have what they need to do it the way that they would like and still meet the standards."

• Theme 2 – "Collaboration:" Including Collaboration, empowerment, group dynamics, and level of participation

The results demonstrated a strong desire for collaboration between colleagues, building and district administrators. Participants expressed a desire to continue their focus on curricular creation and maintaining normal times for professional development. It was evident that this spirit of teamwork was a foundation of the district's work to provide consistent time and a framework for discussion around specific goals, such as the creation of common units in middle school mathematics.

The connection of empowerment could also be seen as an undercurrent of the district's work where teachers demonstrated a connection to the goals of the day, had flexibility to explore ways to solve problems, possessed reasonable resources to complete their jobs, maintained clear routes of vertical and horizontal communication, and were proactive in the processes observed. With this culture in place during the time of study, initiatives associated with change had a greater opportunity to be implemented successfully.

Although not as prevalent, there were definitely different levels of participation and some group dynamics noticed. But, tied back to empowerment, teachers had the flexibility to be involved when they wanted and appeared to have the ability to lead or follow.

 Theme 3 – "Resources:" Including Time, educational background, and limited resources

An American teacher will often comment that they would like more resources to do their job regardless of their years of teaching or subject area (Adler, 2000). Although time was demanded most during interviews and observations, a combination of time, background, and limited resources was evident. Each of the participants expressed not only their desire for consistent time, but encouraged the school district and facilitators to provide time to complete their work in the most collaborative and comprehensive way. There were several instances when questions of time and the need for physical resources such as books were mentioned in the formal sessions on Monday morning collaboration sessions.

While the educational background wasn't identified as a specific hindrance, there were two incidents where curricular theories were mentioned and had to be discussed. In both cases, the teachers were provided additional background information – specific to the focus on collaboration during these sessions.

Recommendations for Future Research

One of the tenants of the exploratory case study w to identify areas of future research. As a reminder, the purpose of this qualitative exploratory case study was to identify perceived connections between programs of professional development and curriculum creation. This research found that three areas, specifically had strong connections – the needs for collaboration, time, and empowerment.

These three areas can be an area of continued improvement for nearly any district and require nominal resources of a district, no matter the size. Structured professional development for teachers that focuses on a rich curriculum promised improved instruction for both teachers and students. Also, the collaborative environment provided a feeling of empowerment for teachers, using their experiences from their academic and professional work inside and outside of the classroom to grow and distribute to others. If building or district administrators want to create that type of atmosphere, they should be aware that results from this study and supported by the literature review inform that the implementation, itself, will take time. Additionally, in an environment of empowerment, teachers and building leaders will take more time to review and reconcile the collective feelings of stakeholders rather than being made by an individual.

Even with the encouraged focus on collaboration, time, and empowerment, there are several questions that have been generated and could spur future areas of study, including:

- 1. How can a district implement collaborative practices that promote shared decision making?
- 2. When should job embedded staff collaboration sessions be held for greatest teacher productivity? (some participants did not prefer Monday mornings)
- 3. How does collaboration foster teacher empowerment or autonomy?
- 4. When is job-embedded staff development most effective?
- 5. What is the value of an instructional coach?
- 6. What professional development is desired in standards-based schooling?
- 7. What are the best ways to maintain a fluid district curriculum?
- 8. When should professional development or curriculum creation take place after an instructional materials adoption?

Summary

Idaho is a geographically diverse state which can be tough to traverse with its acres of forests, parks, and natural beauties. Most of the state is quite rural with nearly 50 school districts student enrollments under 250 students (Idaho State Department of Education, 2015c). However, even in small schools and districts, teachers want to share ideas and educators around Idaho have made special efforts to connect with one another around

resources and professional development opportunities (Johnson, 2011). In this study, a focus on teacher collaboration not only had a focus on sharing ideas, but was inspiring when the work was tough working with students. The Internet isn't the only way to look for ideas, moreover district leaders should use establish a collaborative environment to support the tough work of a classroom teacher who experiments with teaching strategies that challenge both learners and educators.

Legislation and accountability will probably not go away soon. Instead, concentration should be on connecting faculty with other educators within the building or outside of the schools' walls in order to create curricula and provide professional development that pushes pedagogy and the educational professional forward. Even a small group focused on a single topic can make multiple connections and use them to ameliorate the challenges of the state's current education system and empower teachers to implement their dreams.

"Greg" mentioned that collaboration "has to be built upon a shared interest and focused on making, producing, or creating improvement" (personal communication, February 20, 2015). This dichotomy could be equated to simply surfing the Internet and not creating with the newer Web 2.0 tools. The leaders and teachers in Garnet School District were able to use the collaborative platform to invest in teachers and their ideas, but also to ensure that those ideas were shared. In result, teachers felt innovative and that their work had value for students.

Zhao (2009) forebode five years ago that "our students have been often rendered as consumers of information, rather than collaborators and creators of information. We want students to create genuine, authentic products for each other" (p. 178). If there was such a focus on how students learn, the same should be applied to educators. Through a simple

algorithm, appropriate for the participants of this study, Collaboration + Empowerment + Time = Success, teachers and administrators can create the same types of expectations for learning as they do for students. Some schools and districts do it well, such as what was seen in this study, and it can be replicated.

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Appendix A

Interv	view Gi	iide		
Name	:		Job Title	
Date:				
Intervi	iew Sta	rt Time:	Interview Stop Time:	
Interview Location:		cation:	Interview Context:	
Before	e we sta	rt, remind me (in order to j	provide context):	
•	When	did you begin teaching?		
•	In which grades and subject areas do you teach?			
	• Have you always taught at that grade level?			
•	Tell me about the school at which you teach.			
•	Can y	ou tell me about how your	collegiate instruction prepared you to create	
	curric	ula?		
Prima	ry Inter	view Questions:		
•	What	professional development	have you received to create curriculum?	
•	In what ways did you feel prepared/ready to do this work?			
	0	What were some areas yo	ou did not feel confident about?	
	0	Was the training structure	ed to provide you necessary instruction?	
•	What happened at the professional development session(s)?			
•	What	elements of the training we	ere key to beginning this process?	
	0	What kind of training do	you think is appropriate for this work?	
•	How o	loes professional developn	nent connect to curriculum creation?	
•	What	are common challenges that	at you have experienced in developing curriculum?	

- Tell me about the amount of time spent preparing you.
- How much emphasis on alignment to standards was given?
- How much autonomy was given to you to do this work?
- How did the process of change influence decisions made in developing curriculum?
- How did your level of education or experience help you or hinder you during this process?
- To what extent did you and your colleagues participate in this work?
- How did you collaborate in this process?
- Tell me about how you and your colleagues worked together as a team.
- What could have assisted you more in developing curriculum?

Secondary Interview Questions (for follow-up)

- Did you have other sources of knowledge about writing curricula?
- Which parts of the training did you find most and least helpful?
- What value did the training have, in retrospect?
- What is your general response to the training you received?
 - What features of it led you to feel that way?
 - Did you find it helpful in your own work on curriculum?
 - Do you think it will help in your classroom teaching?
 - Did you find the training relevant to the kinds of things you face day-to-day in teaching?
- What are the qualities of an effective professional development session?
 - Which elements were emphasized by the district's work?

- In what ways is professional development essential for curricular work?
- In what ways could training be expanded over the use of a curriculum?

Appendix B

Curriculum Revision Practices of Garnet School District

PROCEDURES

CURRICULUM DEVELOPMENT

Subject-area written *curriculum* guides shall be developed for all grade levels or interdisciplinary subjects in the District. These guides are designed to ensure consistent instruction across the District. The revision of the guides shall be re-adopted by the Board. The components of the written curriculum guides shall include:

- **Objective** Clearly state objective for the desired knowledge, skills, concepts or dispositions;
- **Time** -Indication of course of study aligned with District/State assessments
- **Materials** -List resources, including text and other supplementary materials, for each objective
- Validation -Align objectives with district, state and national standards and assessments
- **Propositions**-Delineate accountability measures
- **Cues** Provide examples of teaching strategies, methods, or activities, when appropriate

Curriculum maps shall be developed to ensure aligned instruction throughout the District. The curriculum maps will ensure:

- quarter/semester content objectives to be taught are consistent in meeting assessment timelines
- instructional implementation guidelines. when appropriate

CURRICULUM REVISION/REWRITES

Curriculum revision/ rewrites will take place based on the evaluation of assessment, data, and alignment of the State Standards.

Curriculum Rewrites (requires Board approval):

- Reallocation of specific grade- level or course of study objectives from one grade/course to another that substantially changes (more than 50%) of the scope and sequence of the written curriculum in any two consecutive years.
- Eliminating a substantial number of objectives (more than 25%) in the specific grade level.
- Adding a substantial number of objectives (more than 25%) in that specific grade level.

<u>Curriculum Revision that not require Board approval.</u> Examples include:

- Typographical corrections
- Objectives being made more specific clarified

- Adjustments in the lime estimates for objectives
- Material citation changes that tie to objectives
- Placement of objectives in the year or semester sequence
- Refinement of the (strategies) that are suggested
- Movement of objectives from one grade level to another (a,; long as changes do not constitute more that 50% of any collrse), in any two consecutive years
- Renumbering or re-sequencing the codes of objectives
- Refining assessment citations and other validation sources

Appendix C

Informed Consent Form

Professional Development for Curriculum Developers Case Study

The University of Idaho Institutional Review Board has certified this project as Exempt. The purpose of this study is to explore perceived connections between professional development and curriculum creation. Participation will involve taking part in an interview with open-ended questions about your beliefs, values, and experience/meanings in regards to your work in developing curriculum and the professional development received to do so. The interview should take about 45-60 minutes and consists of approximately ten (10) questions. The interview will be audiotaped and transcribed <u>with your permission</u>.

You could benefit from this project as it will provide an opportunity to share your experience in this process and provide an opportunity for you to contribute ideas for ensuring a comprehensive program of professional development to support curriculum developers using the strengths and experiences of all participants. Others may benefit from the project as this study could provide in-depth, qualitative data to administrators, group leaders, and other interested parties. We believe this information will enable these individuals to be further informed about effective professional development practices.

Your participation in the interview is completely voluntary and the interview will be scheduled at your convenience. Identities of participants may be identified during discussions / presentations and analysis of the data within the context of a doctoral study. However, pseudonyms will be assigned for any formal presentation of the study to a larger community. All data and audiotapes will be placed in a locked file cabinet with access only available to the researchers involved in this study.

There are no foreseeable risks associated with this project. However, you are free to refuse to answer any of the questions or stop the interview at any point. If you have questions about the study or interview, you can ask the researcher during the interview, when the interview is complete or at a time you feel is appropriate.

If you have further questions regarding this research project please feel free to contact any of the researchers listed or the Institutional Review Board at University of Idaho at (208) 885-6162.

Researcher: Michael S. Nelson (<u>msnelson@uidaho.edu</u>) Major Professor: Allison Touchstone, Ph.D. (<u>atouchstone@uidaho.edu</u> or (208) 364-4543) University of Idaho, Department of Agricultural and Extension Education Boise, ID 83702

I have reviewed this consent form and understand and agree to its contents.

Researcher Name	Date