

LEARNING FOR LEGISLATION AND A LIFETIME: USING  
UBD, WORKSHOP MODEL, AND TECHNOLOGY TO  
CREATE 21ST CENTURY LEARNERS

A Paper  
Submitted to the Graduate Faculty  
of the  
North Dakota State University  
of Agriculture and Applied Science

By

Codi Lyn Austreim

In Partial Fulfillment of the Requirements  
for the Degree of  
MASTER OF ARTS

Major Department:  
English

November 2011

Fargo, North Dakota

North Dakota State University  
Graduate School

---

Title

LEARNING FOR LEGISLATION AND A LIFETIME: USING UBD, WORKSHOP MODEL,

---

AND TECHNOLOGY TOCREATE 21ST CENTURY LEARNERS

---

By

Codi Lyn Austreim

---

The Supervisory Committee certifies that this *disquisition* complies with North Dakota State University's regulations and meets the accepted standards for the degree of

**MASTER OF ARTS**

---

SUPERVISORY COMMITTEE:

Elizabeth Birmingham

---

Chair

Dr. Kevin Brooks

---

Dr. Amy Rupiper-Taggart

---

Dr. David Silkenat

---

Approved:

10 November 2010

---

Date

Dr. Kevin Brooks

---

Department Chair

## **ABSTRACT**

This paper discusses the issues surrounding *No Child Left Behind* legislation, gives a review of research surrounding best practices, details what educators can do to satisfy the requirements of the law while still engaging their students in the course content and teaching them critical, 21<sup>st</sup> century skills. Further, using Understanding by Design, the Workshop Model, and technology, this project provides a sample 9-week unit that meets multiple standards and benchmarks and emphasizes 21<sup>st</sup> century skills. With a combination of researched pedagogies, this paper argues that educators can prepare their students for state assessments and life beyond their formal education.

## TABLE OF CONTENTS

ABSTRACT.....	iii
LIST OF APPENDIX TABLES.....	vi
LIST OF APPENDIX FIGURES.....	vii
INTRODUCTION.....	1
THE PROBLEM.....	5
THE 21 <sup>ST</sup> CENTURY AND ITS CHALLENGES.....	11
IMPETUS FOR CHANGE.....	14
LITERATURE REVIEW (UBD, WORKSHOP MODEL).....	22
FROM THEORY TO PRACTICE.....	38
PARTING THOUGHTS.....	48
REFERENCES.....	50
APPENDIX A. BLOOM'S REVISED TAXONOMY.....	57
APPENDIX B. 20 <sup>TH</sup> VS. 21 <sup>ST</sup> CENTURY CHART.....	58
APPENDIX C. MINI-LESSON SHEET.....	59
APPENDIX D. WPSD CURRICULUM FOR BOOM OR BUST.....	60
APPENDIX E. OUTLOOK FOR 9-WEEK UNIT.....	62
APPENDIX F. MINI-LESSON BREAKDOWN.....	64
APPENDIX G. BOOM OR BUST ASSIGNMENT SHEET.....	73
APPENDIX H. SOURCES DATABASE.....	74
APPENDIX I. BOOM OR BUST IDEAS.....	79
APPENDIX J. BOOM OR BUST PROPOSAL.....	80
APPENDIX K. EVALUATING SOURCES.....	81

APPENDIX L. ANNOTATED BIBLIOGRAPHY RUBRIC.....	82
APPENDIX M. IN-CLASS ESSAY RUBRIC.....	83
APPENDIX N. BOOM OR BUST LEAFLET.....	84
APPENDIX O. ABSTRACT RUBRIC.....	85
APPENDIX P. BOOM OR BUST JUDGE EVALUATION FORM.....	86
APPENDIX Q. REFLECTIVE ESSAY RUBRIC.....	90

## LIST OF APPENDIX TABLES

<u>Table</u>	<u>Page</u>
1. 20 <sup>th</sup> vs. 21 <sup>st</sup> Century Chart.....	58
2. Outlook for 9-Week Unit.....	62
3. Sources Database.....	74

## LIST OF APPENDIX FIGURES

<u>Figure</u>	<u>Page</u>
1. Bloom’s Revised Taxonomy.....	57
2. Mini-Lesson Sheet.....	59
3. WPSD Curriculum Document for Boom or Bust.....	60

## INTRODUCTION

When I first began my high school teaching career at Williston High School, I was not sure what to expect. I was handed a copy of the state standards that were created as a response to *No Child Left Behind*, and told to “teach this.” After I struggled through my first year, I decided to dive into the textbook the next year, but quickly realized that I could not “cover” the whole book in one year. Year three, I tried to find a way to mix and match the standards and the textbook, but I could tell that my students just were not engaged in the content of the course. Finally, in my fourth year as a high school English teacher, I was given the chance to work with colleagues to look at the way we were educating students. Having students write one essay per year, as was happening up to grade 11, just did not sit well with me. Something needed to change. And for me, the change came in the way I structured my classroom—the difference in focusing on what I taught to focusing on what students learned.

Unfortunately, for many teachers, change is thought of as a four letter word spoken by policymakers who rarely set foot in the classroom. The phrase, “this too shall pass,” is uttered by veteran teachers who have “been there; done that” and who have watched the fads in education come full circle during their careers. Larry Cuban stresses the fact that,

[T]eachers question changes because they have experienced coercive efforts that have been thrust on them. Teachers are seldom consulted for their views, much less participated in designing changes that affect their classrooms. Moreover, the past 30 years of high-profile criticism of failing U.S. schools produced a tsunami of top-down reforms showing little trust in teachers’ professional judgment. (Cuban, “Teacher Resistance” par. 5)

Considering past experiences with school and classroom reform, it becomes clear why teachers seem to be hesitant to jump head-first into a complete overhaul of their practice. However, not making change because of past struggles is an unacceptable alternative in light of the fact that the rapidly-changing 21<sup>st</sup> century is upon us. Using a combination of well-researched strategies to create positive change in the classroom can be done and does not require copious amounts of extra work that lead teachers to view “mandated changes as add-ons to an already complex job” (Cuban, “Teacher Resistance” par. 6). Instead, this shift in focus can lead to renewed energy towards classroom activities on the part of both teachers and students.

My paper will argue that even though *No Child Left Behind* tends to be a 20<sup>th</sup> century education, one that merely takes the first step on Bloom’s Taxonomy and consequently only takes the first step on the ladder of success for students in today’s ever-changing world of technology and collaboration, teachers can still produce students who have a strong grasp on the learning standards and benchmarks provided by *NCLB* and who can tackle higher-order thinking skills as set forth by Bloom’s. Using *NCLB* as the floor instead of the ceiling to bridge the gaps between the 20<sup>th</sup> century style of education and the skills necessary to be successful in the 21<sup>st</sup> century is a must if we hope to prepare students for the world that lies ahead. According to Ron Sofo, “[W]e are foolish to believe that we can test our students to academic excellence. Nineteenth-century thinking will not solve a 21st-century challenge. Instead we must craft a 21st-century system of public education that challenges all students to meet high standards of academic knowledge and skills” (Sofo par. 11). With a shift in beliefs, educators can transform their classroom to a 21<sup>st</sup> century

learning environment that fits with Heidi Hayes Jacobs belief of “standards, not standardization” (Jacobs 9).

Adequate Yearly Progress, or AYP, is a daunting task that comes with *NCLB* legislation. Essentially, AYP requires high-stakes testing for students, and the results determine whether or not the school (district) makes AYP. Combined with graduation rates, this test determines success or failure for the school, and ultimately, its teachers. However, teachers can ensure that students are able to meet AYP requirements and are able to leave the school prepared for the challenges of the future by planning a course with backwards design (UbD), using what Sam Bennett calls the workshop model for daily activities that lead to a final, real world assessment, and incorporating technology/media as set forth in Bloom’s Digital Taxonomy. These elements combined will not only be more effective for both teachers and students but it will meet the standards set forth by *NCLB* and will transform the classroom into a room filled with 21<sup>st</sup> century learners. This shift in practice also raises students’ levels of engagement and intrinsic motivation to not only succeed in the course, but to critically think about how the content relates to their lives and the world around them, essential skills for the workplace.

Essentially, creating a 21<sup>st</sup> century classroom will ultimately lead to more learning for all participants. This can be done with using the well-researched strategies I present in conjunction with one another. While each strategy is valuable on its own merit, combined they are invaluable. Elena Silva thinks that a “combination of teaching a rich body of knowledge and providing engaging opportunities to apply this knowledge” is what “all students deserve and that public education must work toward” (Silva 632). Further, according to Allan Collins and Richard Halverson, in their book *Rethinking Education in*

*the Age of Technology: The Digital Revolution and Schooling in America*, two main arguments are made for transforming schools: “one is that the world is changing and we will need to adapt schooling to prepare students for the changing world they are entering” (Collins and Halverson 9). The other, related to the importance of integrating technology into the classroom, argues that “technology gives us enhanced capabilities for educating learners, and that schools should embrace these capabilities to reshape education” (9). In a world of smart phones and smart cars, education must follow suit and produce smart, 21<sup>st</sup> century citizens.

My paper will discuss the short-comings of *NCLB* as well as the need for a change in the way educators deal with the fall-out from the legislation. I will discuss research surrounding best practices in education that can be obtained by structuring a course’s curriculum using Understanding by Design, the Workshop Model, which focuses on the daily rituals and routines in the classroom to make the efficient use of teacher-student interaction time, and technology. Further, I will provide a detailed unit plan for a senior English classroom that demonstrates the usefulness and effectiveness of combining these pedagogies for educators who are hesitant to take the first step in changing the way their classrooms are structured.

## THE PROBLEM

The *No Child Left Behind* act, a bipartisan effort to reform public education, was signed into law in 2002 by President George W. Bush, pushing for higher standards for all students. According to Rod Paige, former Secretary of Education, “*No Child Left Behind* ensures accountability and flexibility as well as increased federal support for education. *No Child Left Behind* continues the legacy of the *Brown v. Board* decision by creating an education system that is more inclusive, responsive, and fair” (United States 13). *NCLB* uses state assessments that test Adequate Yearly Progress (AYP) and graduation rates as the two driving factors in measuring the success of schools. By the end of the 2013-2014 school year, all schools are expected to have 100% of students proficient in mathematics and reading on state assessments for AYP. However, states are given the flexibility to create their own standards, assessments, and cut scores, allowing for some major discrepancy of just what a failing school is (Maleyko and Gawlik 600). Those states with higher cut scores and more challenging standards and assessments are setting themselves up for higher levels of scrutiny and possibly more “failing schools.” In contrast, states with lower cut scores and standards run the risk of failing their students.

When lawmakers passed *No Child Left Behind* (*NCLB*), their intentions were, among other things, to increase accountability amongst educators and return American public education to the top of the worldwide charts. According to the article, “*No Child Left Behind: What We Know and What We Need to Know*,” the law “aims to hold educational agencies and states accountable for improving the quality of education for all students,” to “identify and transform low-performing schools that have failed to provide a high quality education to their students into successful schools,” and “to close the

achievement gap between high and low achieving students” (Maleyko and Gawlik 600). However, while the reform seems spot-on in theory, the practice that has resulted from *NCLB* has many students losing interest in their education. In fact, according to Gayle Thompson in her article “Reaching the Reluctant Learner: Beneath Student Apathy,” students’ motivation to do well in school was affected by, among other things, curriculum, testing practices and policies, and instructional practices (Thompson 50-2). Results showed that students felt “that most of their classes weren't preparing them for the real world,” that “current testing practices contribute to student apathy” and that teachers’ and students’ views of teacher efficacy were very different (50-2). This study suggests that the chasm between educational theory and practice may be as big as the gap between teacher and student perceptions of what learning really is.

What seemed to be the answer to the educational slide in America has become a source of major contention. Across the country, educators and lawmakers are asking whether *NCLB* really measures the success of schools, especially considering recent results that indicate the United States is continuing to struggle when compared to other countries. According to *USA Today*, students were tested on their ability to “to apply their knowledge in math, reading and science to real-life situations” (Associated Press par. 4), and, unfortunately, “[O]ut of 34 countries, the U.S. ranked 14th in reading, 17th in science and 25th in math” (Associated Press par. 2). By comparison, U.S. students scored 19<sup>th</sup> in math, 15<sup>th</sup> in reading, and 14<sup>th</sup> in science in 2000, before *NCLB* was signed into law (Organisation for Economic Co-Operation and Development). By creating an environment that only asks students to learn material to pass a standardized test, which falls in the lower levels of Bloom’s Taxonomy (Fig. 1), at the expense of taking time for students to create,

synthesize, and apply information to the “real world,” which are upper tiers of Bloom’s Taxonomy, the practice of teaching to the test because of *No Child Left Behind* seemingly does nothing to stop the country from falling behind.

Sadly, in a time when the stakes are high and the morale is low, the game of ‘pass the buck’ is played often. Students blame their teachers for not teaching them well enough, teachers blame administrators for not supporting them through purposeful professional development, administrators blame teachers for failing to teach the appropriate content, parents blame administrators for not recruiting better teachers, etc. This blame game, unfortunately, does nothing to help students pass the test or help schools make AYP. In essence, *NCLB* and its testing policies are simply a mirror image of how schools used to look. According to Theoni Soubli Smyth, “[S]ince World War I and the creation of the U.S. Army Alpha assessment test, educators have been using standardized testing instruments to assess student performance in K-12 public schools” (Smyth 133). For the past one hundred years, schools have used many of the same practices as *NCLB* mandates. However, in the 21<sup>st</sup> century, if AYP testing is the problem, teaching to the test is not the answer.

Today’s reality is a world of standards and benchmarks created by educators to respond to the requirements of *NCLB*. These standards oftentimes dominate teachers’ lesson plans and lead to a series of unconnected activities that make up the content of a course, marching from one standard and its benchmarks to the next like a band in a parade, hoping to avoid falling into the category of a “failing school.” Consequently, this generation of students struggle to keep their motivation for learning and slide into passive mode while the teachers struggle to engage students in the content and slide into “drill and

kill” mode to ensure passing scores on state assessments. According to the article “The Education and Skills Gap: A Global Crisis,” the current concept of education is severely lacking. It states, “the global achievement gap between what industry expects and what education delivers is not caused by a lack of content” but rather by “a failure to provide opportunity for creativity, collaboration, context and practical application” (Cornelius 50). Even though *NCLB* seems to handcuff educators, realistically it only creates a minimum set of standards to ensure that all students are learning the essentials to graduate from high school. Using *NCLB*’s standards and benchmarks as the ground level, the sky is the limit for 21<sup>st</sup> century teachers, who have the ability to change the face of education and make it more congruous with the world we live in and close the gap between what schools measure and what the “real world” demands.

At my former high school, state testing is not taken lightly. I taught English/Language Arts to juniors, who are the only group of students to test at the high school level. Eleventh-graders are tested in the fall on sophomore standards. So, for the two weeks before the test, junior instructors abandon their standards and benchmarks and review the previous year’s standards and benchmarks. Students are drilled on the importance of the test, the literary terms thought to be important, and test-taking tips. The promise of pizza parties, bonus points, and a few extra dollars in their operation graduation fund are offered as a reward for passing. For the students who take things seriously, a real sense of urgency develops. But, according to Smyth, “when students are drilled every day about testing procedures and consequences, the fear of failure prevails” (Smyth 134). Further, because the test is not tied to curriculum and does not affect students’ grades, it becomes a practice in futility. According to Judith Mitchell and D. Ray Reutzel’s article

“Looking in the Rearview Mirror: the Best of the Worst Times or the Worst of the Best Times,” many schools and districts are focusing solely on “‘passing the test.’ Some of the consequences from such an emphasis are an increase in time spent on test-taking practices, an increase in pressure on children and teachers to do well, the narrowing of the curriculum as a result of the focus on those subjects that are tested (reading and math), and the erosion of time for instruction” (Mitchell and Reutzel 715). To be effective, districts must reprioritize their efforts to focus on 21<sup>st</sup> century skills; passing AYP scores will follow suit.

Whether legislation changes in the future or not, educators must find a way to ensure that their students will be successful on a standardized test and in the “real world” that requires communication, collaboration, and critical thinking. According to the article “Accountability under *NCLB*,”

Abundant evidence indicates that schools and systems have the potential to make significant progress in raising achievement and closing gaps. By focusing attention on the goal of holding all students to the same high standards of achievement and bringing urgent attention to achievement gaps between different groups of students, *NCLB* and AYP can be powerful tools in this process. But let us be clear: AYP is not a reform strategy. Anyone who says that AYP alone will raise achievement or close gaps is overselling it. But AYP will tell us a lot about how public schools are doing in meeting the challenge of excellence for all students. (Wiener and Hall 20)

Preparing students for success in the future and meeting the requirements of AYP must be one in the same. In a world where "college-ready" and "work-ready" mean virtually the same thing (Wiener and Hall 18), failure to do so is not an option. Further, while

assessments to measure students' abilities and schools' performances are not going anywhere, lawmakers like Arne Duncan, Secretary of Education, are pushing for more options in assessment. According to *Built for Teachers: How the Blueprint for Reform Empowers Teachers*, "the Department is investing \$350 million in support for states to develop better assessments that measure complex skills, ensuring that students are gaining the knowledge and skills they need in the real world—not just filling in bubbles. New assessments may include performance items, such as portfolios and projects" (United States, *Built for Teachers* 5). Accountability and assessment have been around for decades and likely will remain a constant, but with the changing times, new methods of assessing student learning will be created, and teachers need to focus their energies on preparing students for the real-world of critical thinking, problem solving, and collaboration.

## THE 21<sup>st</sup> CENTURY AND ITS CHALLENGES

Today's rapidly-changing technology means that students are faced with a future that will have jobs that do not even exist currently. In order to better prepare students for this uncertain future ahead of them, educators need to avoid the practice of teaching to the test and make sure that their curriculum meets the needs of the 21<sup>st</sup> century and moves up Andrew Churches' Bloom's Digital Revised Taxonomy. Churches argues that "much of the knowledge we teach may be obsolete within a few years," but the "thinking skills once acquired will remain with our students for their entire lives" (Churches 9). While 20<sup>th</sup> Century educators focused mainly on lower level Bloom's, "21<sup>st</sup> Century pedagogy and learning focuses on moving students from Lower Order Thinking Skills (LOTS) to Higher Order Thinking Skills (HOTS)" (9). In essence, *NCLB*'s standards and benchmarks are the foundation to which teachers must scaffold their students' learning to build towards creating and evaluating and to better prepare students for life beyond their formal education.

Maurice Ghysels agrees. In his article "Will Students Make the Grade in an Education for the World Ahead: The Erroneous Dilemma Between Testing and Creativity," he states that classrooms that focus on 21<sup>st</sup> century skills will "necessitate strong learning and innovation skills, involving creativity and innovation, critical thinking and problem solving, and communication" (Ghysels 22). Further, the College Work Readiness Assessment (CWRA) is just one way to see if students are prepared for life after high school. This assessment is "intended as a tool for school improvement, not necessarily to measure individual student gains" (Silva 632), and it "consists of a single 90-minute task to which students must respond using a library of online documents" (632). The prompt asks

students to “grapple with real-world dilemmas; make judgments that have economic, social, and environmental implications; and articulate a solution in writing” (632). In order to ensure success for students when faced with such a problem, we, as educators, must change the way we look at teaching and learning.

Changing times have led to changing expectations for the job market. Skills expected in the workforce have morphed into a mix of collaboration, communication, and technology (Shaw 12). According to Anne Shaw, author of “Education in the 21<sup>st</sup> Century,” these skills fall into the following categories and are addressed in the following ways through a 21<sup>st</sup> century curriculum:

- Collaboration – the ability to work in teams;
- Critical thinking – taking on complex problems;
- Oral communications – presenting;
- Written communications – writing;
- Technology – using technology;
- Citizenship – taking on civic and global issues; service learning;
- Learn about careers – through internships;
- Content – conducting research and doing all of the above. (Shaw 12)

In order for American education to stay relevant, it must be flexible and shift with the changing society. To do this, schools must not only re-prioritize what they teach, but they must look at how they teach. Peter Higgins argues that teachers need to facilitate the “four capacities” that are set forth in the “Curriculum for Excellence,” an educational reform movement in Scotland, in which “much less emphasis will be placed on a subject-oriented curriculum in the future,” and “personal skills and attitudes of young people are to be the

central theme” (Higgins 51-2). In keeping with the notion of 21<sup>st</sup> century learning, these capacities are emphasized “so that they [students] can become successful learners, confident individuals, responsible citizens, and effective contributors” (52). These four capacities are key elements in being effective members of society, as Shaw argues comes with learning for the 21<sup>st</sup> century; therefore, they should be key elements in the teaching and learning process in schools. These capacities are also indicative of placing a priority on long-term, lifelong learning rather than focusing solely on short-term learning, which seems to be the way that most schools and educators have chosen to respond to *NCLB*’s AYP assessments. Language Arts standards set forth in *NCLB* focus on six major skills: researching, writing, reading, speaking and listening, understanding media, and using language correctly. These skills are not far from those required of the 21<sup>st</sup> century work place. Simply put, teachers must find a way to mesh these two sets of expectations into an education for their students.

## IMPETUS FOR CHANGE

Motivating students to become engaged in a course's content is a challenge that frequently faces educators. All too often, we, as teachers, throw our hands in the air and profess that students "just don't care." In an attempt to pull any amount of enthusiasm out of our students, we often look to extrinsic motivation to get students to engage in the course and its content. However, according to Richard F. Bowman, Jr., "when teachers and students perceive daily class work as a source of points, grades, and treats—as opposed to a source of learning and deep fulfillment—they are blinded to the other reasons students may want to excel, including an internal desire to create meaning and significance" (82-3). Teaching to the test to pass AYP tests, which have no effect on the students, and offering bonus points and pizza parties for passing scores naturally lead to unmotivated students.

Conversely, students can become intrinsically motivated by a teacher who provides a 21<sup>st</sup> century classroom that involves real-world problems to be solved and authentic assessments with audiences other than just the teacher. Bowman further suggests that "intrinsic rewards in the classroom speak to the human thirst for a coherent purpose in daily classroom activities and school events. When students sense that their work is not trivial, they become reenergized in discovering what is worthy of their shared attention" (84). The shift away from the trivial towards the meaningful is a key element in a 21<sup>st</sup> century classroom. Going from "covering" standards to "uncovering" knowledge and skills is not only a change in the way the teacher focuses, but it is a change in how students view their education. No longer is schooling just about getting a grade. It becomes a means to prepare for the future. Rather than the typical question of "when will I have to do this in the real world," students begin digging in to the content and asking questions that help them solve

the problems posed to them by their 21<sup>st</sup> century education. Stephanie Bell concurs, in her article “Problem-Based Learning for the 21<sup>st</sup> Century: Skills for the Future,” arguing that “motivation is sustained through meaningful, real-world problems and projects” (Bell 42). The 21<sup>st</sup> Century classroom grabs students’ interests and holds that interest more than worksheets and tests can or do. Because students “must enter a workforce in which they will be judged on their performance” and “their collaborative, negotiating, planning, and organizational skills” (Bell 43), the 21<sup>st</sup> Century classroom is the only option for moving forward with students’ best interests in mind. And as Daniel J. Bergman argues in his article, “Why Do We Have To Learn This? Teaching Goals Beyond Content,” the “long-term goals should not compete with standards, but rather complement what is already taught. Even as students learn content and prepare for standards-based assessments, they can also develop the life skills and traits that you know will help them succeed in school and beyond” (Bergman 131). Bridging the gap between the standards-based curriculum and a 21<sup>st</sup> century curriculum can and must be done.

For example, an assignment that requires research can take two paths: the student can write an assigned research paper for their teacher’s eyes only by going to the library or browsing online to find information about their topic, or the student can work collaboratively with classmates and choose an interesting issue in their world (community, school, etc.) to discover, dissect, and disseminate, sharing their findings with an broad audience of their peers, parents, or others through a multi-media approach. The second option, indicative of a 21<sup>st</sup> century classroom, offers students the opportunity to take pride in their efforts and to share their knowledge with others, essentially eliminating the triviality of the assignment. Bowman agrees that pride is an integral part of motivation, not

only of students but of all professionals. He states, “students want to take pride both in their individual accomplishments and in the achievements of their classmates by engaging collaboratively in a constant reorganizing and reconstructing of meaningful experiences” (82). Debra DeCastro-Ambrosetti and Grace Cho discuss the power of authentic assessment in their article, “Synergism in Learning: A Critical Reflection of Authentic Assessment.” They incorporated authentic assessment into two courses and concluded that “the students’ projects went beyond our expectations. They created a variety of work, each addressing and embedding the concepts, theories and course standards within their individual projects, as outlined by the rubric” (DeCastro-Ambrosetti and Cho 60). Further, the students appreciated the chance to have a voice in their learning and demonstration of understanding. They evaluated their participation in the course and their final assignment as “one of the most meaningful assignments we have ever completed,” and added that the authentic assessment project was “fun and engaging” (60). When both teacher and students walk away excited about the learning that was done, the task of meeting standards seems less frustrating and more manageable. DeCastro-Ambrosetti and Cho found that “by incorporating this assessment all students are engaged. Also, the variety of projects spoke to incorporation of higher order thinking skills by students. This project allowed for students to utilize their individual learning styles which they came to realize were strengths” (60).

By incorporating a curriculum that starts with the end in mind, that places students learning—rather than teachers teaching—at the center of the classroom, that teaches skills as a means to successfully complete an authentic assessment with a real audience, and that incorporates technology, teachers can facilitate an active classroom that hungers for

knowledge. Ghysels discusses the role of the teacher in effective classrooms as not only facilitators, but “collaborators in learning, seeking new knowledge alongside students” (Ghysels 22). Together, students and teachers can move forward towards the bright future of limitless possibilities.

Educational theorists suggest that the most effective teaching employs multiple strategies to best meet the needs of students of varied learning styles and multiple abilities and intelligences. Researchers and teachers agree—Grant Wiggins and Jay McTighe argue for purposeful design that begins with an authentic assessment and works backwards to scaffold learning and incorporate necessary skills, and Samantha Bennett focuses on a shift from teachers doing the “work” to students doing the thinking, writing, reading, and talking in classrooms that focus on real-world problems to solve rather than merely facts to be memorized. Utilizing these theories and incorporating technology, the practice of education can be shifted away from trying to get students to be motivated towards harnessing the students’ energies to create powerful learning experiences in which students and teachers are co-learners on a journey together to make meaning. Instead of the “sage on the stage” method, which Alison King describes in *College Teaching* as the teaching being the “one who *has* the knowledge and transmits that knowledge to the students, who simply memorize the information and later reproduce it on an exam—often without even thinking about it” (King par. 1), teachers shift to the “guide on the side,” facilitating students’ exploration and learning.

Achieving this goal of motivated and engaged learners requires a transformation in the classroom that includes throwing out the old lesson plans and thinking differently about how the class will be structured. By implementing these pedagogies and shifting the focus

away from what the teachers teach to what students learn, the classroom becomes a thriving community with students who are actively engaged and who are required to think rather than sit passively and listen.

The times when rote memorization of discrete facts was necessary are over. The invention of *Google* changed that single-handedly. Today's societal norms are different than they were just ten years ago and what is more important than students with an abundance of knowledge is students who understand, who problem-solve, who dig deeper than mere facts to discover meaning and reasons why. Sticking to "traditional" methods of teaching will not produce the latter. According to Anne Shaw, who is the Founder and Director of 21<sup>st</sup> Century Schools, education today "breaks the mold. It is flexible, creative, challenging, and complex. It addresses a rapidly changing world filled with new problems, as well as exciting new possibilities" (Shaw 11). Her article "Education in the 21<sup>st</sup> Century" reevaluates the definitions of schools, teachers, and buildings. She proposes the following:

Schools will go from buildings to nerve centers, with walls that are porous and transparent, connecting teachers, students and the community to the wealth of knowledge that exists in the world. Teacher - From primary role as a dispenser of information to orchestrator of learning and helping students turn information into knowledge, and knowledge into wisdom. (Shaw 14)

Additionally, the website *21<sup>st</sup> Century Schools* argues that we must view learners in a different light. That is, we must first keep students engaged "by helping them see how what they are learning prepares them for life in the real world... We must instill curiosity, which is fundamental to lifelong learning... We must be flexible in how we teach... We must excite learners to become even more resourceful so that they will continue to learn

outside the formal school day” (“What is” par. 25-6). With these new insights into learners, schools, and teachers, what becomes even clearer is that we cannot afford to stick to the “status quo” of 20<sup>th</sup> century learning.

In the past, classrooms rarely ventured outside of the four walls, and the only thing louder than the ticking clock was the voice of the teacher sharing her knowledge to prepare students for their exam. While this was arguably successful in the 1960s, this method is no longer the only option for educating students. Rather, schools need to evolve to encompass so much more than they once did to create a highly-engaged, motivated group of students who move up the ladder on Bloom’s Taxonomy instead of a group of students who sit passively memorizing discrete facts in isolation. Bloom’s revised taxonomy shows that remembering, which is a consequence of a passive classroom that devotes the majority of its time to being successful on standardized tests, is the lowest on the scale, while creating, which is found in an active, 21<sup>st</sup> Century secondary level classroom, tops the chart. Students who have been trained to be learners who only reach the bottom rung on the taxonomy naturally struggle when their teachers ask them to move towards analyzing, evaluating, and creating. (See fig. A1) The disheartening results of the 2009 Programme for International Student Assessment demonstrate just how dire the need is to effect change in U.S. classrooms if we want our students to compete in a global marketplace.

This new, 21<sup>st</sup> century approach calls for authentic assessments and real audiences for real problems (See fig. B1). Students are given a taste of what their future may hold by being asked to step outside of the safety of the classroom setting and look at their education in a whole new light. Instead of learning about geometric principles from a textbook and doing “seatwork” in order to pass a test on said principles, students are given the task of

creating the grid for an underground sprinkler system for their school's football field. Such an assignment builds in a "need to know" attitude from students who have extra motivation to do well because it may benefit them personally as a football player or cheerleader or spectator at games.

In this geometry example, numerous other elements of a 21<sup>st</sup> century classroom exist. Collaboration is a large part of the equation. Students can work in small groups to create their grid and present their findings to other groups in the classroom as well as the principal, the janitor/grounds keeper, the sprinkler company, etc. In small group work, students have a chance to use their individual strengths to "work together towards common goals rather than in isolation" (Shaw 13). Communication skills also factor in to the equation. Students are using these 21<sup>st</sup> century skills to solve the geometry problem and the "passive classroom" problem.

Further, an assignment such as this creates an added drive for students because it does not rely solely on textbooks, but gets the students out of the classroom into an active scenario. According to Shaw, in a 21<sup>st</sup> century classroom, "choice and inquiry rule rather than textbooks driving the curriculum" (13). Creating the sprinkler system for the school and presenting the findings also lends itself to a cross-curricular approach to learning, where the curriculum not only covers standards from other content areas but is also "connected to students' interests, experiences, talents and the real world" (Shaw 13). For students, seeing that geometry does exist outside of the school setting is yet another way to build the desire to learn.

According to Shaw, given the active nature of 21<sup>st</sup> century classrooms, discipline issues decline drastically and teachers take on the role of facilitator or coach in the process

of making meaning (Shaw 13). A major shift also occurs in the area of grades. Where grades previously were an average of scores for homework, tests, etc., they are now an indication of what the students learned. Projects that are not good, according to Shaw, are simply not finished. Where tests previously marked the end of the unit, they are now used as formative assessment to see which areas students need more instruction in to successfully complete their projects. Naturally, this shift places the focus of the instruction on “uncovering” information rather than on “covering” standards and benchmarks.

Such drastic shifts in curriculum and instruction may seem like an overwhelming task for educators who are already expected to do so much. However, a transformation such as this does not increase the workload for the teacher; rather, it increases the amount of learning done by students. Teachers who make the necessary changes can still cover standards effectively, but they can change the lives of their students as well. Rather than schools fitting the joke of being a place where students come to watch teachers work, they can be places where learning is visible around every corner.

## **LITERATURE REVIEW (UBD, WORKSHOP MODEL)**

Using what Grant Wiggins and Jay McTighe call Understanding by Design to plan a unit in a 21<sup>st</sup> century classroom is similar to mapping out a road trip. In order to figure out how to get somewhere, one must first know where he or she is going. Next, one must take in to consideration that there may be several possible routes—some longer than others, some more scenic, etc.— that lead to the same end destination. Finally, one must determine which route is best and which stops will be made along the way.

In order to implement this pedagogy into the classroom, one must first understand what it is and what its goals are. According to Jay McTighe, co-creator, and Elliot Seif, “Understanding by Design (UbD) is a framework for improving student achievement through standards-driven curriculum development, instructional design, assessment, and professional development” (McTighe and Seif 1). The basis of this instructional practice follows six major premises. UbD believes first that the “primary goal of education is the development and deepening of student understanding” (1). When understanding is at the heart of what schooling is about, the students are pushed beyond simply knowing facts. They are asked to understand the whys and hows of the material they learn. Further, UbD stresses that students must apply the knowledge and skills they learn in authentic contexts to show their level of understanding (1). These two premises of student understanding are central in the way teachers must look at their classroom experience.

The final four premises of UbD deal with the way the teacher and the school create a powerful learning environment for their students. McTighe and Seif argue that teachers must avoid the “twin problems of ‘textbook coverage’ and ‘activity-oriented’ teaching in which no clear priorities and purposes are apparent” (McTighe and Seif 1). Instead,

teachers should plan their curriculum with the end in mind, using a process called “backward design” (1). In order to plan effectively, teachers must focus on three steps when designing their course’s curriculum: first, the teacher must “identify the desired results (what should students come away understanding or being able to do,” next, she must “determine acceptable evidence that demonstrates the desired results,” and finally, she needs to “plan learning experiences and instruction aligned with desired results” (Roth 96). Using UbD as a framework, teachers can successfully plan for “covering” standards and benchmarks efficiently, but incorporating other strategies can lead to increased student motivation and an emphasis on lifelong learning while “uncovering” essential skills needed for their final assessment as well as their life beyond the assessment/unit. Wiggins and McTighe argue that the mission of high school is “not to help students get good at school, but rather to prepare them for the world beyond school—to enable them to apply what they have learned to issues and problems they will face in the future” (Wiggins and McTighe, “Put Understanding First” 36). This concept sets the stage for a 21<sup>st</sup> century learning environment—one that uses standards and benchmarks as a baseline rather than the top of the learning expectations and one that is transparent about goals and outcomes at the beginning of the unit rather than arbitrarily assessing students after the standards have been covered.

Another important aspect in this framework, in order to maintain effectiveness and ensure that standards are being met and students’ level of understanding is deepening, calls for “regular reviews of curriculum and assessment designs” (McTighe and Seif 2). In essence, teachers must collaborate with one another to constantly review the curriculum and the assessments used to monitor student understanding. Together, teachers can work

smarter instead of harder to create a positive learning environment for all students, “using technology and other approaches to collaboratively design, share, and critique units of study” (McTighe and Seif 1-2).

UbD further works on the idea that students are pushed to deeper understanding through authentic assessments and engagement in Wiggins and McTighe’s six facets of understanding: explanation, interpretation, application, perspective, empathy, and self-knowledge. The first of these facts, explanation, matches low-level Bloom’s Taxonomy and *NCLB* standards. Arguably, explanation can be viewed as the floor or bottom rung in the learning process in which students explain the facts and concepts that they are learning. Oftentimes, being able to explain is enough for students to pass a state assessment, so oftentimes teachers focus solely on this level of understanding. The next rung on the ladder, interpretation, takes students further on the learning scale. At this point, students relate the information they have learned to their lives and the world around them, which increases the chance for life-long retention. However, the learning process should not stop there. According to Wiggins and McTighe, application is the next necessary step up the learning ladder. The ability to apply concepts learned in school to a new context is moving up Bloom’s Taxonomy and deepening understanding for students. The last three facets of understanding differ from Bloom’s Taxonomy, but they are equally critical for 21<sup>st</sup> century learners who hope to make a difference in their world. Teaching students to see the bigger picture of the lessons they are learning bridges the gap between the classroom and the world that awaits them. Further, teaching students to have empathy and to recognize their own prejudices will prepare them to be able to think critically about the problems that may arise in their futures and how to deal with them logically, emotionally, and ethically. (qtd.

in Roth 96). All of these basic principles are real-world applicable and are at the heart of a 21<sup>st</sup> century classroom. Focusing on these principles takes classrooms beyond preparing for a state assessment; rather students are prepared for life-long learning.

To use UbD to plan a unit or learning experience, teachers must first think about the end—what should the students know and be able to do after the unit is complete—and what questions to pose to students to pique their interests and guide them down the path towards the final assessment of learning and understanding. Ideally, the questions should be thought-provoking and open-ended that lead to multiple discussions and the end assessment should be authentic and should reach towards higher-level Bloom's skills rather than the traditional pencil and paper test (like the Geometry example from above). If the assessment is focused on what the students need to display their competencies on the subject matter/skills, it will require much more of the students than a test could/would. Generally, a test shows the teacher what the students do not yet know, so using it as formative assessment is more beneficial to student success in achieving the learning outcomes than using said test as a summative, end of unit assessment. Therefore, the final assessment should paint a picture of what the students know and what they can do. Such assessments generally incorporate multiple standards and benchmarks that students are taught and have mastered as a result of the scaffolding of instruction during the course of the unit.

UbD's six tenets speak to the push for a 21<sup>st</sup> century classroom that benefits both teachers and students. When student understanding is the focus around which the pedagogy is designed, deeper learning is the outcome in the classroom. By using formative assessment to guide the instruction towards successful completion of an authentic end

product, teachers are giving students the opportunity to have a taste of what the real world will serve them. And by working with colleagues, teachers are less likely to feel as though changing the landscape of their classroom requires back-breaking manual labor. Rather, they will see how efficient UbD can be.

Researchers Steve Graham and Dolores Perin did a study of many of the practices that UbD calls for and discuss them in *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High School*, a report published to the Carnegie Cooperation of New York. Their study was a meta-analysis of effective strategies for improving students' writing skills. They include eleven recommendations for teachers, of which ten fall into line with the practices set forth in UbD. Among them are teaching writing strategies, requiring students to summarize texts they have read, asking students to write collaboratively with specific product goals, using word processing (technology), and teaching through inquiry projects. Their findings suggest that all learners, not just a small group based on age or ability, benefited from these recommendations, and UbD is a practical way for educators to incorporate said recommendations.

Other scholars, such as Bransford, Donovan, and Pellegrino, have come up with similar findings that give merit to UbD's practices. Their book, *How People Learn: Brain, Mind, Experience, and School*, summarizes extensive research on learning and cognition. The findings are based on a National Research Council study and responds to the question: "what research and development could help incorporate the insights from the report into classroom practice?" (Bransford, et al 1). Their conclusions have many parallels with UbD. Key findings relevant to UbD include the idea that "views on effective learning have shifted from a focus on the benefits of diligent drill and practice to a focus on students'

understanding and application of knowledge” (McTighe and Seif 3). This new focus aligns perfectly with the skills necessary in the 21<sup>st</sup> century. Students are expected to go beyond remembering, or lower level Bloom’s cognitive skills, towards applying and creating.

Further, McTighe and Seif summarize Bransford, Donovan, and Pellegrino’s concept of context for learning. They argue that “knowledge learned at the level of rote memory rarely transfers; transfer most likely occurs when the learner knows and understands underlying concepts and principles that can be applied to problems in new contexts” (McTighe and Seif 3). Teaching for memorization only, as is the case all too often in secondary classrooms, is like putting a round peg into a square hole, but giving students the opportunity to apply their knowledge in unique, interesting ways will allow them to solve the puzzle themselves rather than hoping their teachers will solve it for them. Bransford et al claim that “learning is influenced in fundamental ways by the context in which it takes place” (Bransford et al 22). Without the connections to their lives and the world around them, students struggle to transfer their learning to new contexts.

Not only do traditional methods lack effective means of transfer, they also focus on breadth versus depth of coverage. According to Bransford, “learning with understanding is often harder to accomplish than simply memorizing, and it takes more time. Many curricula fail to support learning with understanding because they present too many disconnected facts in too short a time—the ‘mile wide, inch deep’ problem” (Bransford 21). McTighe and Seif further conclude the following:

superficial coverage of many topics in the domain may be a poor way to help students develop the competencies that will prepare them for future learning and work. Curricula that emphasize breadth of knowledge may

prevent effective organization of knowledge because there is not enough time to learn anything in depth. Curricula that are “a mile wide and an inch deep” run the risk of developing disconnected rather than connected knowledge. (McTighe and Seif 3)

Generally, teachers who are attempting to “cover” standards and benchmarks focus on breadth rather than deep learning. Unfortunately, this practice leads students to view the course’s content as disjointed and unconnected rather than interesting and worth knowing. However, implementing UbD can give teachers the basic framework for integrating standards into a clearer picture of learning and producing authentic products to demonstrate the learning.

UbD is not only proven effective for student learning by research into learning and cognition, but it also has become an invaluable tool for educators who want to ensure that all students are learning in the classrooms. This framework provides them with “cognitive roadmaps that guide the assignments they give students, the assessments they use to gauge student progress, and the questions they ask in the give and take of classroom life” (McTighe and Seif 4). This pedagogy also focuses on assessments, both formative and summative, that demonstrate understanding and timely, useful feedback along the way to ensure that students do not venture off track and provides “students with opportunities to revise and improve the quality of their thinking and understanding” (McTighe and Seif 3). Additionally, the “assessments and feedback must focus on understanding, and not only on memory for procedures or facts” (3). UbD also encourages the use of essential questions to deepen student understanding. According to Jane Brown, author of “Questions for the 21<sup>st</sup> Century Learner,” “Essential questions promote the disposition of inquiry, and, as a result,

they foster independent learning. Good questions lead to more questions, and when the subject of a question matters, students are motivated to inquire further about the world where they live, learn, and will eventually work” (Brown, Jane 26). Using UbD, educators can be assured that they are providing the best possible learning environment for their students, one that prepares their students to become productive, successful citizens.

Educators and researchers alike agree that UbD is a practical, efficient tool for transforming the traditional classroom to a thriving 21<sup>st</sup> century classroom. Don Roth conducted a study of the implementation of UbD in middle school science classrooms by graduate students in science. He concluded that Understanding by Design “was used effectively to develop tasks that are engaging, that are consistent with state educational standards, and that promote self-directed, life-long learning” (Roth 95). John Brown opines that UbD “provides a common language for educators who are interested in promoting student understanding rather than formulaic knowledge or recall learning” and it further “provides a framework and a toolkit of research-based best practices that have been proven effective in helping educators to promote understanding-based results for learning...” (Brown, John par. 1). Daniels, Hyde, and Zemelman insist on a student-centered curriculum and further suggest that “the best starting point for schooling is young people’s real interests; all across the curriculum, investigating students’ own questions should always take precedence over studying arbitrarily and distantly selected ‘content’” (Daniels, et al. 10). Their book, *Best Practice: Today’s Standards for Teaching & Learning in America’s Schools*, investigates the Common Recommendations of National Curriculum Reports using a More-Less Chart. Among other suggestions, they recommend less “whole-class, teacher-directed instruction,” fewer instances of “student passivity: sitting, listening,

receiving, and absorbing information,” fewer “attempts by teachers to thinly ‘cover’ large amounts of material in every subject area,” and moving away from “rote memorization of facts and details” (Daniels, et al. 8). Their argument essentially asks educators to stray from traditional, 20<sup>th</sup> century teaching methods, and their suggestions for improved curriculum fall in line perfectly with 21<sup>st</sup> century learning. They insist upon more “active learning,” more “emphasis on higher-order thinking,” and more “cooperative, collaborative activity” (9). These best practices can be easily achieved by using Understanding by Design. UbD is practical for both the veteran teacher who is skeptical of change and the rookie teacher who is full of content knowledge and inexperienced with pedagogy.

Skeptics of UbD cite the oft-used excuse of not having enough time to plan or teach in such a way that involves inquiry and large projects as end assessments. They contend that they have just too much to “cover” to get through their standards. However, state standards can be broken down into a series of verbs that students must be able to do. A common misconception amongst educators, unfortunately, is that the textbooks ARE the curriculum. At my former school, the senior English class focuses on British Literature. Many discussions arose over whether students needed to read Beowulf or the Canterbury Tales or Shakespeare or all of the above. However, this discussion could better be focused on how the students demonstrate the verbs from the state standards and which pieces of Shakespeare could be used to help them do so. If teachers are busy trying to “cover” all of the key British Literature pieces, students are given less time to engage in the writing process, engage in the speaking and listening process, engage in the research process, engage in the reading process, understand media, and understand and use the principles of language (“North Dakota Curriculum Content Standards”). Rather, teachers should be

searching for both ways to make British Literature meaningful and to use the literature to teach key skills laid out in the standards and benchmarks.

For teachers to facilitate learning in the classroom, they must focus on providing students with the necessary skills to transfer their classroom learning to new experiences. To that extent, Wiggins and McTighe assert that “a primary goal of teaching for understanding should be the assurance that students can use their acquired understanding and knowledge independently in real-world situations” (Brown par. 15). They stress the need for assessments that embody transfer and refer to such assessments as GRASPS:

- G = *Goals* from the real world.
- R = *Roles* that are authentic and based in reality.
- A = *Audiences* to whom students will present final products and performances.
- S = *Situations* involving a real-world conflict to be resolved, decision to be made, investigation to be completed, or invention to be created.
- P = *Products* and *performances* culminating from the study.
- S = *Standards* for evaluating project-based products and performances.

(Brown par. 15)

Kim Koh and Allan Luke conducted a two year study in Singapore that evaluated teachers’ assignments and the work that students submitted in response to said assignments. Their study, which spanned multiple content areas and 59 schools, concluded that, similar to the concept of GRASPS, “where teachers set more intellectually demanding tasks, students were more likely to generate work or artefacts (sic) judged to be of higher quality” (Koh and Luke 291). They further contend that “teacher professional development in authentic

intellectual assessment task design can contribute to the improvement of student learning and performance” (291). Teaching teachers how to create effective, standards-based units with backwards design and authentic assessments, therefore, is not only essential for teacher confidence in shifting their classroom to a 21<sup>st</sup> century learning environment, but also increases students’ learning.

Using UbD as a framework for the course will help educators plan out their units and assessments successfully, but many still struggle with how to structure daily activities to reach their end goals. Samantha Bennett has a solution that focuses on the daily routines, rituals, structures and systems in order to ensure that all students are getting the appropriate instruction and interventions necessary. She argues that “there is something magical about how it all comes together. These four elements—structure, routine, ritual, and system—are about the little things that happen every day in the classroom that add up to the great big thing: students doing the work of learning” (Bennett 17). Her Workshop Model consists of “four basic parts: opening, mini-lesson, work time, and debriefing” (Tovani 39). Built in to this model is time for students to practice and chances for teachers to assess what students know and can do, fitting perfectly with the 21<sup>st</sup> century classroom.

The Workshop Model efficiently utilizes class time for maximum student learning. This model is “a *predictable* structure, routine, ritual, and system that allows the *unpredictable* work of deep reading, brilliant writing, mind-changing conversations, inspirational epiphanies, and connections of new to the known—that is, learning—to happen” (Bennett 9). Following a one-third to two-thirds ratio for teacher time to student time, this model gives students opportunities for guided practice and teachers the chance to evaluate students individually on a daily basis. Changing the focus of the classroom from

what teachers are teaching to what students are learning is a crucial element of the Workshop Model. According to Cris Tovani, teacher, instructional coach, educational consultant and author of *So What Do They Really Know: Assessment that Informs Teaching and Learning*, “shifting the mind-set from planning what I’m going to do every minute of every class to what my students are going to be doing has dramatically increased student engagement” (Tovani 69). The use of Workshop Model in daily planning has the ability to create 21<sup>st</sup> century learners who are engaged in the content and who are getting daily practice in critical thinking, collaborating, etc.

The structure of the Workshop Model has four parts that determine the breakdown of each class period, making sure that the students are getting ample opportunity to do the “work.” Each day, an opening, a mini-lesson, work time, and a debrief are used (See fig. C1). According to Sam Bennett and Cris Tovani, the opening is “used to review the learning goal for the day and build the ‘need to know’ for the lesson” (Tovani 40, Fig. 3.2). This opening consists of a few minutes of setting the stage for the day and helping the “students connect one day to the next” in the scheme of the unit (40).

After opening the class, the teacher presents a mini-lesson. During this mini-lesson, the teacher “shows students both WHAT and HOW to do the work during work time” (40). Essentially, the teacher is giving students the tools they need to build the metaphorical bridge. Modeling is very important in this step. Like in athletics, students learn by seeing skills done and then practicing. Bennett’s Workshop Model applies this same theory.

Following the mini-lesson, student work time is purposefully scheduled. This chunk should take up two-thirds of the class period, allowing students maximum time for growth and for teacher facilitation. During the work time, students get the chance to “read,

write, and/or talk to get smarter about content and the learning goal” (40) while teachers hold individual and small-group conferences with students to make sure they understand the lesson and can effectively perform the task(s) at hand. These conferences serve as a type of formative assessment for teachers to see what their students know and can do. Further, this section of the daily routine gives students the chance to feel some success or to get re-directed if they are off track. Often, one part of the task is especially difficult, and when teachers are walking around facilitating the learning, they will know when the students run into problems. When this happens, or when teachers simply see multiple students or groups with the same question, teachers can perform a “catch and release” that serves as “a ‘time-out’ from work time to model or share a strategy that will help [students] re-engage in work” (40). The catch and release can be very brief or can happen more than once during the work time if need be.

The final step in the daily structure is the debrief. This is a crucial part of the class period. Many times, we, as educators, are feverishly trying to cram that last bit of information for students when the bell is ringing, but Bennett argues that doing so is ineffective in terms of planning. Having a debrief, which includes a “share-out and a synthesis of learning” (40), is essential in knowing where to go next when planning the daily lessons of the unit. Essentially, talking until the bell rings and shouting out a homework assignment as students file out of the room does not give the teacher any indication of whether or not students have mastered the concepts or content needed to move forward successfully. Using the debrief as a way of assessing the students’ level of understanding can lead the teacher towards the jumping off point for the next day’s lesson.

Further, the debrief allows students to share what they are thinking, what they learned, or what they still do not understand. According to Tovani,

[R]egular opportunities to debrief not only hold students accountable for the way they use their work time, but also give teachers a second chance to assess what students need next. Allowing students to be metacognitive at the end of the period and share new learning makes others in the class smarter, and it gives the teacher insight into students' patterns of understanding and confusion. (Tovani 57, fig. 4.6)

Too often, the debrief portion of the class is ignored or rushed through for the sake of “getting through” the content planned for the day. However, this step is essential for both teachers—in terms of planning—and for students—in terms of learning and understanding. Stevi Quate and John McDermott discuss this strategy in their book *Clock Watchers: Six Steps to Motivating and Engaging Disengaged Students Across Content Areas* that they refer to as “checking in and checking out” (Quate and McDermott 8). Both practices honor student thinking as formative assessment.

Tovani compares the Workshop Model with the ideas of Lucy Calkins, Donald Graves, and Nancie Atwell, who have long discussed the importance of giving students time to work in a structured setting. According to Tovani, these researchers helped teachers learn that “there were essential components that had to be in place so students could have more control of their learning: time, ownership, and response” (41).

Researchers have also stressed the importance of modeling. Like the name of the daily strategy itself, the Workshop Model also urges teachers to model what “good” looks like. If students are being asked to annotate a text, the Mini-lesson should include the

teacher annotating text on a smart board, document camera, or overhead projector where students can see the process and hear the thinking behind the annotating. This practice is encouraged in the Common Recommendations of National Curriculum Reports as well. According to Zemelman, Daniels, and Hyde, in *Best Practice: Today's Standards for Teaching & Learning in America's Schools*, school should work towards "more diverse roles for teachers, including coaching, demonstrating, and modeling" (8). Much of what the Workshop Model suggests is not new; however, combining these beliefs with UbD can simplify the process for the reluctant educator who worries that *No Child Left Behind* has taken away the flexibility to teach in this way.

Mike Schmoker argues that the concepts behind the workshop model are "powerful, overlooked opportunities for learning" that do not require much extra money but that make a huge difference. Also, similar to UbD, he suggests that good teachers "start the lesson by being scrupulously clear in conveying both the purpose of the lesson and *how it will be assessed, with a careful description of the criteria necessary to succeed on the assessment*" (Schmoker 526). In the workshop model, Bennett argues for mini-lessons, work time, and debriefs; similarly, Schmoker writes in his article "What Money Can't Buy: Powerful, Overlooked Opportunities for Learning," "the lesson must be taught in manageable steps or 'chunks.' Between each step, the teacher must 'check for understanding' or 'formatively' assess (e.g., by circulating, scanning, observing) to ensure that students understand the 'chunk' that was just taught. Between chunks, students engage in 'guided practice' replete with teacher modeling (or "thinking aloud") ... to help students understand the work" (Schmoker 526-7). Finally, Bennett suggests the catch and release method of instruction during work time to keep students going in the right direction. Schmoker agrees. He calls

for a teacher who makes “ongoing adjustments and clarifies difficult concepts or processes when students are struggling” (527).

For the rookie teacher who is unsure of how to structure both the long-term and daily learning in her classroom or the veteran teacher who wants to adjust his classroom to meet the needs of the 21<sup>st</sup> century student, these practices can be efficiently morphed to take the focus off of what the teacher is teaching and place it on what the students are and should be learning.

## FROM THEORY TO PRACTICE

One of the biggest complaints from educators, myself included, is that theory is great, but if that theory cannot be easily put into practice, it is useless. Because of this valid complaint, I have taken the theories summarized above and created a 9-week unit plan that meets *NCLB*'s standards, addresses 21<sup>st</sup> century skills, and incorporates technology. Staying true to my beliefs about education and UbD's suggestion that teachers must work together to create cohesive units, I collaborated with two former colleagues who teach at the local high school who will be applying the unit plan in their classrooms this spring. Having the added impetus of 150 students learning from the unit builds in a sense of urgency and requires more effort to make certain that the work is complete and ready for students to tackle. Zemelman, Daniels, and Hyde argue for making learning authentic by, among other things, "develop(ing) broad, interdisciplinary, thematic units based on student concerns, offer(ing) frequent performances, fairs, and exhibitions, inviting parent and community audiences, get(ting) involved in community issues" (Daniels, et al. 250). This unit pays homage to what Daniels, et al, call best practices.

The project is an inquiry project called "Boom or Bust" and it deals with the local economic impacts Williston is currently dealing with. Students will be working in groups of three to investigate the good and bad effects of our booming economy on the people and the community itself. As Bransford, et al argue, students will be making "connections to the outside world, that support core learning values" (22). During the 8<sup>th</sup> week of the project, students will hold a Senior Saturday Seminar with fellow students, family members, and community leaders as their audiences, to present their findings, giving them what Grant Wiggins calls an authentic audience. He claims that "the term 'authenticity'

refers less to the particular challenge or question and more to the realism of the setting — audience, purpose, constraints, and opportunities” (Wiggins 63). Asking students to present with authenticity builds their need to know to sufficiently complete the project. Their final week will focus on metacognition and reflection.

Because this project will be completed during their final 9-weeks of high school, the seniors will have a chance to showcase the skills they have learned in their schooling and teachers will have a chance to see students demonstrate their understanding of what has been taught. For the students, a project such as this is a great for “creating independent thinkers and learners” (Bell 39). They will have a chance to “solve real-world problems by designing their own inquiries, planning their learning, organizing their research, and implementing a multitude of learning strategies” (39). For teachers, the workshop model and its components give ample opportunity to “confer with students regularly to ensure that students are on track and developing their ideas and skills fully” (Bell 40). A project of this magnitude could be considered a “cornerstone” performance, as discussed in *21<sup>st</sup> Century Skills: Rethinking How Students Learn*. In part, they are defined as reflecting “genuine, real-world accomplishments and are set in authentic contexts” (159). Identifying the issues and in some cases solving the problems that have been created by the oil boom gives relevancy to their projects and shows them that learning does not only happen in schools.

When planning using UbD and the workshop model, one must include rubrics, assignment sheets, resources for students (including brainstorming for topics, links to videos, articles, and data), a calendar of planned workshop topics, a breakdown of daily workshop learning targets, and other documents for students at the beginning of the unit.

Further, because the Language Arts teachers K-12 are completing curriculum guides in the form of units for a district-wide mandate, we mapped the unit on the required document and have thus finished one quarter of the required senior Language Arts curriculum work for the year (See table D1). The unit focuses on state standards and introduces students to twenty-two benchmarks as well as connects their learning to Bloom's Revised Taxonomy through an authentic document created by the Williston Public Schools District Curriculum Committee of which I was a member. Additionally, the document asks for "essential questions," which are in line with UbD and ask for students to think about the bigger picture of the unit; "I can statements", which break down *NCLB*'s benchmarks into what students know and can do and which Bennett stresses in the workshop model, and "enduring understandings", which are a main tenet of 21<sup>st</sup> century, lifelong learning and which focus on what students will take away from the unit or class long after they have left high school. The document also asks teachers to think about common misconceptions the students may have in order to ensure that students are not misinterpreting the lessons. According to the book *How People Learn: Brain, Mind, Experience, and School*, recognizing possible misconceptions is of importance because "if students' initial ideas and beliefs are ignored, the understandings that they develop can be very different from what the teacher intends" (Bransford et al, 10). Identifying all of these elements at the beginning of a unit and giving the information to students provides clarity for all parties.

By implementing such a unit, the senior English teachers are able to, as McCombs and Whisler describe, "design active learning tasks in which students learn by doing; there are opportunities for choice, autonomy, integration of content from more than one subject, application of content knowledge and demonstrations of creativity and personal expression

in student projects and products” (55), which ultimately lead to engaged, motivated, 21<sup>st</sup> Century learners.

Because of the magnitude of the unit, we decided on our authentic assessment and worked backwards, as the tenets of UbD call for, to create an outlook for teaching and learning for the 9-weeks (See App. D). Further, we created a spreadsheet that breaks down the daily workshops that the project consists of (See App. E). Another element of this unit is the opportunity for students to volunteer to be on a committee of their choice.

Committees will be responsible for the essential tasks of advertising, creating programs, organizing refreshments, and the like. While these jobs seem to fall outside the academic spectrum, they are valuable life skills that can be learned in a project such as this, and, according to Stevi Quate and John McDermott, in their book *Clock Watchers: Six Steps to Motivating and Engaging Disengaged Students Across Content Areas*, “one of the ways to put students in control of their learning—to build their sense of autonomy—is to ensure that they have a voice in their learning” (8). Adding in the element of choice does just that.

In week one, students will be introduced to the assignment (See App. F), an inquiry project about the effects of the oil boom on Williston. Students will be working in groups of three to identify problems and solve them, when applicable. To create a buzz of interest, they will be given articles detailing the unique situation in Williston currently (See App. G) and will be asked to brainstorm possible topics by adding to the list of topics already generated by my colleagues and myself (See App. H). Topics range from informative projects on the difference between mineral owners and land owners and how that difference came to be to the role of women in the oil industry to student-generated ideas. Because the students have either lived in Williston for a long time and have been witness to the change

or have moved here recently and have a different perspective on the workings of the community, they should be eager to contribute to possible ideas. At the end of the week, students will write a proposal (See App. I) to their teachers for which project they will choose to do and whether they will do an informative presentation or a persuasive. By giving students choices, the teachers will be able to differentiate their teaching and encourage them to challenge themselves. McQuate and McDermott argue that a challenging assignment such as this “is a motivator and an essential factor in engagement” (McQuate and McDermott 9). Further students will choose their group members, giving them another say in their education and learning, which consequently builds the students’ sense of autonomy.

Week two consists of research and mini-workshops offered by the teachers. Mini-workshop topics include “Finding sources,” “Evaluating sources,” “Paraphrasing, summarizing, and direct quotes,” “Breaking down a source for MLA citations,” “Finding effective quotes,” “Attributing sources,” “Speaking,” and “Parenthetical citations.” Because many students will be gone for the week for Close-Up, these mini-workshops will be offered to students throughout the week while they work on their research. Students can choose to go to as many of the workshops as they want, but they must attend at least two for daily points. Again, offering multiple opportunities to learn and giving students choice keeps them interested and differentiates the learning, and, as Elena Silva argues, “an emphasis on what students can do with knowledge, rather than what units of knowledge they have, is the essence of 21st-century skills” (630). Because “today’s workers in nearly all sectors of the economy must be able to find and analyze information, often coming from multiple sources, and use this information to make decisions and create new ideas” (Silva

631), spending additional time making sure students are able to transfer the skills they have learned to their project is a great use of class minutes in a week otherwise decimated by absences.

Weeks three and four focus on understanding sources, completing an Annotated Bibliography to help students manage those sources for their upcoming presentation, and learning the rhetorical functions of ethos, pathos, and logos. As is required of people in all walks of life, students will be asked to evaluate the sources they are citing for bias, effectiveness, usefulness for their particular circumstance (See App. J). Unfortunately, both in and out of academia, people trust sources that may be misleading in some way, so teaching students how to evaluate information provided is an essential skill. After evaluating their sources, students will write their annotated bibliography, detailing the information they found. A rubric and examples are provided for students (See App. K). The class time for the week is set up so students can collaborate and work on breaking down their sources to evaluate and summarize, focusing on two sources per day. According to Allan Collins and Richard Halverson, in the book *Rethinking Education in the Age of Technology: The Digital Revolution and Schooling in America*, educating students to be successful adults is less about mass coverage and more about teaching students “how to find information and resources they need to supplement their existing knowledge” (46). They argue that “not only do they (students) need to be able to find information and tools, but they also need to know how to integrate information from different sources, to evaluate the reliability of those sources, and to use the powerful computer tools available to them to analyze the information and present it to others” (46). An assignment of this magnitude is exactly the recipe for success beyond school. Further, taking the time to discuss the

importance of rhetoric in presenting will give students another set of skills to incorporate into their final “cornerstone” projects.

Week five asks students to begin outlining their project and to write an in-class essay that states three major claims in support of their thesis statement. Students will do sample activities, including backwards-outlining an existing essay to remind them of the important elements of an essay, and will be given a rubric for them to grade the sample essay (See App. L). Asking the students to take on the role of evaluator falls in line with Maurice Ghysels argument in “Will Students Make the Grade in an Education for the World Ahead?: The Erroneous Dilemma Between Testing and Creativity.” He urges teachers to “create a peer culture in which classroom goals are known and transparent and related to the essential standards directly linked and aligned to ... the state standards” (Ghysels 22) and giving students the opportunity to evaluate one another’s work with the rubric before turning in their own paper will do create that peer culture. Further, having an in-class essay as a starting point to a more polished version of their research during their presentations ensures that students will know what is required of them when the presentation date arrives.

During weeks six and seven, the teachers will give a sample presentation using a non-linear powerpoint, and the students will be given the rubric for the final powerpoint. They will have the opportunity to critique their teacher’s work by scoring her powerpoint using the rubric. Further, if needed, the students will add to the rubric to be certain that what is being asked is being evaluated properly. Then the students will have the opportunity to utilize technology in the classroom to create their own powerpoints that include audio, video, action buttons, and images related to their projects (taken by them).

According to Dave Cornelius, in his article “The Education and Skills Gap: A Global Crisis,” today’s generation of students are “constantly connected, creating and multitasking in a multimedia world everywhere except school” (Cornelius 53). This week of the unit gives the students a chance to bring that part of their lives together with their formal education. Additionally, the students will be asked to create a leaflet to hand out to their audience (See App. M), and will be asked to incorporate a visual and a slogan with a small paragraph of text that reminds their audience of their presentation after the audience is long gone. This portion of the project gives students yet another opportunity to integrate technology in the way they choose. Finally, the students will write an abstract to include in the program for the Super Saturday Senior Seminar (See App. N), summarizing their findings to appeal to their potential audience members to want to attend their presentations above others.

Week eight calls for discussing presentation skills and practice, practice, practice of their presentations, with the week culminating in the Super Saturday Senior Seminar. Using the workshop model to allow students ample opportunity to practice in front of their peers and teacher gives teachers the opportunity to, as Tovani encourages, “assess all period, not just at the end of the unit” (Tovani 45). For their final presentation, students will have other teachers from the school serve as judges (based on their own choices) (See App. O), and they will present their projects in classrooms set up like a professional conference. The principal has agreed to advertise, provide refreshments, and help in any way. Anne Shaw emphasizes the importance of projects such as these. She states: “students find their voices as they create projects using multimedia and deliver these products to real-world audiences. Students realize they can make a difference and change

their world. They learn what it is to be a contributing citizen and carry these citizenship skills forward throughout their lives” (Shaw 14). Giving students the opportunity to make a difference in their communities by completing such a project allows them the voice they deserve and encourages them to continue to do so long after the project is complete.

Their final week of their senior year will be spent reflecting on their learning, their efforts, their presentations, and their overall parting thoughts. They will write a reflective essay as a part of their grade for the project (See App. P). As with all opportunities to earn points, students will be given the rubric in advance for their essay. Being transparent and asking for student feedback in the learning process gives students the feeling that they have a say in their own education, and that transparency gives the teacher the chance to improve upon projects for the future. Asking for reflection from students, essentially, asking them to be metacognitive, forces students to “think about their thinking,” which “can be a powerful tool in shaping, improving, internalizing, and habituating their thinking” (Jacobs 215).

Creating this unit in collaboration with other teachers puts theory into practice for me as well as the students who will learn from this project—UbD focuses on teacher collaboration, and 21<sup>st</sup> century learning urges student collaboration. As is true with units of this depth, students will be in the driver seat of their own education. According to John Barel, a professor emeritus of Curriculum and Teaching at Montclair State University, in his article “Problem-Based Learning: The Foundation for 21<sup>st</sup> Century Skills, “while engaged in the unit, students will ask good questions, conduct purposeful investigations, think critically, draw conclusions, and reflect until they arrive at a meaningful solution” (Bellanca and Brandt, eds. 175). The final product will play itself out in the classroom in the spring of 2012, will cover multiple standards and over twenty benchmarks, and will

help students become more informed about their own community. They will be learning for a lifetime while meeting legislative requirements.

## PARTING THOUGHTS

In a time when educators are asked to do more than plan lessons and grade tests, working smarter—not necessarily harder—is critical. Rather than having students who only write four essays during their high school careers, teachers can produce literate, critical thinkers by combining UbD, Workshop Model, and technology to create powerful lessons that engage students and require more than filling out bubbles on a piece of paper. Though legislative changes constantly swirl around the education system, one thing remains steady: the students of today are the leaders of tomorrow. How we choose to respond to *NCLB* will determine whether tomorrow’s leaders are able to think critically, solve problems, and work together. Bernie Trilling and Charles Fadel, in their book *21<sup>st</sup> Century Skills: Learning for Life in our Times*, suggest that educators ask themselves four questions when they are considering the how and what of their pedagogy:

1. What will the world be like twenty or so years from now when your child has left school and is out in the world?
2. What skills will your child need to be successful in this world you have imagined?
3. Now think about your own life and the times when you were really learning, so much and so deeply, that you would call these the “peak learning experiences” of your life. What were the conditions that made your high-performance learning experiences so powerful?
4. What would learning be like if it were designed around your answers to the first three questions? (Trilling and Fadel xxiv-xxv)

Educators have the power to enact positive change in the classroom without waiting for legislation to require it. After asking these four questions of themselves, educators must simply look to UbD and the Workshop Model to create a classroom filled with 21<sup>st</sup> century learners and a future filled with critical thinkers and problem solvers who contribute positively to the global society they live in.

## REFERENCES

- Associated Press. "In Ranking, U.S. Students Trail Global Leaders." *USA Today* 7 Dec. 2010, Education sec. *USA Today Online*. Web. 13 July 2011. <[http://www.usatoday.com/news/education/2010-12-07-us-students-international-ranking\\_N.htm#](http://www.usatoday.com/news/education/2010-12-07-us-students-international-ranking_N.htm#)>.
- Bell, Stephanie. "Project-Based Learning for the 21st Century: Skills for the Future." *Clearing House* 83.2 (2010): 39-43. *Academic Search Premier*. EBSCO. Web. 6 June 2011. <<http://ebSCOhost.com>>.
- Bellanca, James A., and Ronald S. Brandt. *21st Century Skills: Rethinking How Students Learn*. Bloomington, IN: Solution Tree, 2010. Print.
- Bennett, Samantha. *That Workshop Book: New Systems and Structures for Classrooms That Read, Write, and Think*. Chicago: Heinemann, 2007. Print.
- Bergman, Daniel J. "Why Do We Have to Learn This? Teaching Goals Beyond Content." *Clearing House* 83.4 (2010): 129-132. *Academic Search Premier*. EBSCO. Web. 25 July 2011.
- "Bloom's Taxonomy of Learning Domains." *Home of Skagit Watershed Council*. N.p., n.d. Web. 17 July 2009. <<http://www.skagitwatershed.org/~donclark/hrd/bloom.html>>.
- Bowman, Jr., Richard F. "How Can Students Be Motivated: A Misplaced Question?" *The Clearing House* November/December (2007): 81-86. *Education Resource Information Center*. Web. 23 May 2009. <<http://www.eric.ed.gov/>>.
- Bransford, John. *How People Learn: Brain, Mind, Experience, and School*. Washington, D.C.: National Academy, 2000. Print.

- Brown, John L. "Implementing Understanding by Design: A Summary of Lessons Learned." *Making the Most of Understanding by Design*. Alexandria, VA: Association for Supervision and Curriculum Development, 2004. ASCD. 2004. Web. 5 July 2011. <<http://www.ascd.org/publications/books/103110/chapters/Implementing-Understanding-by-Design@-A-Summary-of-Lessons-Learned.aspx>>.
- Brown, Karen. "Questions for the 21st-Century Learner." *Knowledge Quest* 38.1 (2009): 24-27. *Academic Search Premier*. EBSCO. Web. 6 June 2011. <<http://ebscohost.com>>.
- Churches, Andrew. "Bloom's Digital Taxonomy." Web log post. *Edorigami*. WikiSpaces, 4 Jan. 2009. Web. 29 June 2011. <[edorigami.wikispaces.com](http://edorigami.wikispaces.com)>.
- Collins, Allan, and Richard Halverson. *Rethinking Education in the Age of Technology: the Digital Revolution and Schooling in America*. New York: Teachers College, 2009. Print.
- Cornelius, Dave. "The Education and Skills Gap: A Global Crisis." *Techniques*. 01 Apr. 2011: 50. *eLibrary*. Web. 17 Jun. 2011. <<http://elibrary.bigchalk.com>>.
- Cuban, Larry. "Teacher Resistance and Reform Failure." Web log post. *Larry Cuban on School Reform and Classroom Practice*. Wordpress, 30 Apr. 2011. Web. 30 June 2011. <[larrycuban.wordpress.com](http://larrycuban.wordpress.com)>.
- DeCastro-Ambrosetti, Debra, and Grace Cho. "Synergism in Learning: a Critical Reflection of Authentic Assessment." *High School Journal* 89.1 (2005): 57-62. *Academic Search Premier*. EBSCO. Web. 29 July 2011.

- Donovan, Suzanne, John Bransford, and James W. Pellegrino. *How People Learn Bridging Research and Practice*. Washington, DC: National Academy, 1999. Print.
- Forsyth, Donna J. "Engaging Readers and Writers With Inquiry: Promoting Deep Understandings in Language Arts and the Content Areas With Guiding Questions." *Journal of Adolescent & Adult Literacy* 52.4 (2008): 361-363. *Academic Search Premier*. EBSCO. Web. 19 July 2011.
- Ghysels, Maurice. "Will Students Make the Grade in an Education for the World Ahead?." *Journal for Quality & Participation* 32.1 (2009): 20-24. *Academic Search Premier*. EBSCO. Web. 17 June 2011. <<http://ebscohost.com>>.
- Graham, Steve, and Dolores Perin. *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools*. Rep. New York: Alliance for Excellent Education, 2007. *Alliance for Excellent Education*. Web. 14 Nov. 2011. <<http://www.all4ed.org/>>.
- Higgins, Peter. "Into the Big Wide World: Sustainable Experiential Education for the 21st Century." *Journal of Experiential Education* 32.1 (2009): 44-60. *Academic Search Premier*. EBSCO. Web. 6 June 2011. <<http://ebscohost.com>>.
- Jacobs, Heidi Hayes. *Curriculum 21: Essential Education for a Changing World*. Alexandria, VA: Association for Supervision and Curriculum Development, 2010. Print.
- Jensen, Eric. *Teaching with the Brain in Mind*. Alexandria, VA: Association for Supervision and Curriculum Development, 1998. Print.
- Johnson, Andrew P. "No Child Left Behind." *Clearing House* 80.1 (2006): 34-36. *Academic Search Premier*. EBSCO. Web. 1 Aug. 2011.

- King, Alison. "From Sage on the Stage to Guide on the Side." *College Teaching* 43 (1993): n. pag. *Questia*. Web. 15 July 2009. <<http://questia.com>>.
- Koh, Kim, and Allan Luke. "Authentic and Conventional Assessment in Singapore Schools: an Empirical Study of Teacher Assignments and Student Work." *Assessment in Education: Principles, Policy & Practice* 16.3 (2009): 291-318. *Academic Search Premier*. EBSCO. Web. 29 July 2011.
- Maleyko, Glenn, and Marytza A. Gawlik. "No Child Left Behind: What We Know and What We Need to Know." *Education* 131.3 (2011): 600-624. *Academic Search Premier*. EBSCO. Web. 20 June 2011. <<http://ebscohost.com>>.
- McCombs, Barbara L., and Jo Sue Whisler. *The Learner-Centered Classroom and School: Strategies for Increasing Student Motivation and Achievement*. San Francisco: Jossey-Bass, 1997. Print.
- McTighe, Jay, and Elliot Seif. "A Summary of Underlying Theory and Research Base." *New York City Department of Education*. 30 Apr. 2003. Web. 5 July 2011. <<http://schools.nyc.gov/NR/rdonlyres/EF87607D-227F-448E-A2F3-19061280855E/0/UbDSummary.pdf>>.
- Miller, Jane, Eloise Ginty, Karen Kurzman, Joey Hawkins, and Diana Leddy. *Writing for Understanding: Using Backwards Design to Help All Students Write Effectively*. Hopewell, NJ: The Vermont Writing Collaborative: Authentic Education, 2008. Print.
- Mitchell, Judith, and D. Ray Reutzell. "Looking in the Rearview Mirror: The Best of the Worst Times or the Worst of the Best Times?." *Reading Teacher* May 2007: 714+. *Academic Search Premier*. EBSCO. Web. 2 Aug. 2011.

- "North Dakota Curriculum Content Standards." *ND Department of Public Instruction*.  
Web. 19 Sept. 2009. <<http://www.dpi.state.nd.us/standard/content.shtm>>.
- Organisation for Economic Co-Operation and Development. *Knowledge and Skills for Life: First Results from the OECD Programme For International Student Assessment (PISA) 2000*. N.p.: n.p., 2001. *OECD*. Web. 29 Sept. 2011.  
<<http://www.oecd.org/dataoecd/44/53/33691596.pdf>>.
- Quate, Stevi, and John McDermott. *Clock Watchers: Six Steps to Motivating and Engaging Disengaged Students across Content Areas*. Portsmouth, NH: Heinemann, 2009.  
Print.
- Roth, Don. "Understanding by Design: A Framework for Effecting Curricular Development and Assessment." *Cell Biology Education* 6.2 (2007): 95-97. *CBE-Life Sciences Education*. Summer 2007. Web. 5 July 2011.  
<<http://www.lifescied.org/cgi/reprint/6/2/95>>.
- Sanacore, Joseph. "Turning Reluctant Learners into Inspired Learners." *The Clearing House* September/October (2008): 40-44. *Education Resource Information Center*.  
Web. 23 May 2009. <<http://www.eric.ed.gov/>>.
- Shaw, Anne. "Education in the 21st Century." *Ethos* 17.1 (2009): 11-17. *Academic Search Premier*. EBSCO. Web. 6 June 2011. <<http://ebSCOhost.com>>.
- Silva, Elena. "Measuring Skills for 21st-Century Learning." *Phi Delta Kappan* 90.9 (2009): 630-634. *Academic Search Premier*. EBSCO. Web. 17 June 2011.  
<<http://ebSCOhost.com>>.
- Smyth, Theoni Soubli. "Who Is No Child Left Behind Leaving Behind?." *Clearing House* 81.3 (2008): 133-137. *Academic Search Premier*. EBSCO. Web. 1 Aug. 2011.

- Sofo, Ron. "To Test or Not to Test? This is Not the Right Question to Ask if we Want to Fix our Schools." *Pittsburgh Post - Gazette*. 11 Nov. 2009: B-7. *eLibrary*. Web. 17 Jun. 2011. <http://elibrary.bigchalk.com>>.
- Thompson, Gayle. "Reaching the Reluctant Learner: Beneath the Apathy." *Educational Leadership* 65.6 (2008): 50-54. *Claremont Graduate University*. ASCD, 2008. Web. 13 July 2011. <[http://www.cgu.edu/PDFFiles/ses/Beneath\\_Apathy.pdf](http://www.cgu.edu/PDFFiles/ses/Beneath_Apathy.pdf)>.
- Tovani, Cris. *So What Do They Really Know?: Assessment That Informs Teaching and Learning*. Portland, Me.: Stenhouse, 2011. Print.
- Trilling, Bernie, and Charles Fadel. *21st Century Skills: Learning for Life in Our Times*. San Francisco: Jossey-Bass, 2009. Print.
- United States. U.S. Department of Education. Office of Communications and Outreach. *Built for Teachers: How the Blueprint for Reform Empowers Educators*. Washington, D.C: 2010. *U.S. Department of Education*. Aug. 2010. Web. 2 Aug. 2011. <<http://www2.ed.gov/policy/elsec/leg/blueprint/teachers/publication.pdf>>.
- United States. U.S. Department of Education. Office of the Secretary. *U.S. Department of Education Website*. By Rod Paige. Oct. 2004. Web. 29 June 2011. <<http://www2.ed.gov/NCLB/overview/intro/guide/guide.pdf>>.
- "What Are 21st-Century Skills?" *Assessment & Teaching of 21st-Century Skills*. Cisco, Intel, and Microsoft. Web. 08 June 2011. <<http://atc21s.org>>.
- "What is 21st Century Education?" *21st Century Schools*. Web. 19 Sept. 2009. <[http://www.21stcenturyschools.com/What\\_is\\_21st\\_Century\\_Education.htm](http://www.21stcenturyschools.com/What_is_21st_Century_Education.htm)>.
- Wiener, Ross, and Daria Hall. "Accountability under No Child Left Behind." *Clearing House* 78.1 (2004): 17-21. *Academic Search Premier*. EBSCO. Web. 1 Aug. 2011.

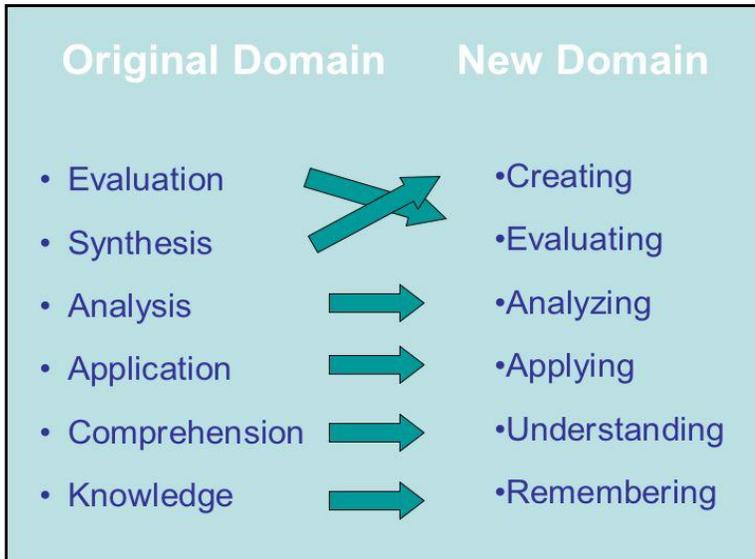
Wiggins, Grant. "Moving to Modern Assessments." *Phi Delta Kappan* 92.7 (2011): 63.  
*Teacher Reference Center*. EBSCO. Web. 28 June 2011.

Wiggins, Grant, and Jay McTighe. "Put Understanding First." *Educational Leadership* 65.8  
(May 2008): 36-41. *Masterfile Premier*. EBSCO. Web. 9 July 2009. <Essential  
Questions>.

---. *Understanding by Design, Expanded 2nd Edition*. Upper Saddle River: Prentice Hall,  
2005. Print.

Zemelman, Steven, Harvey Daniels, and Arthur A. Hyde. *Best Practice: Today's Standards  
for Teaching and Learning in America's Schools*. Portsmouth, NH: Heinemann,  
2005. Print.

## APPENDIX A. BLOOM'S REVISED TAXONOMY



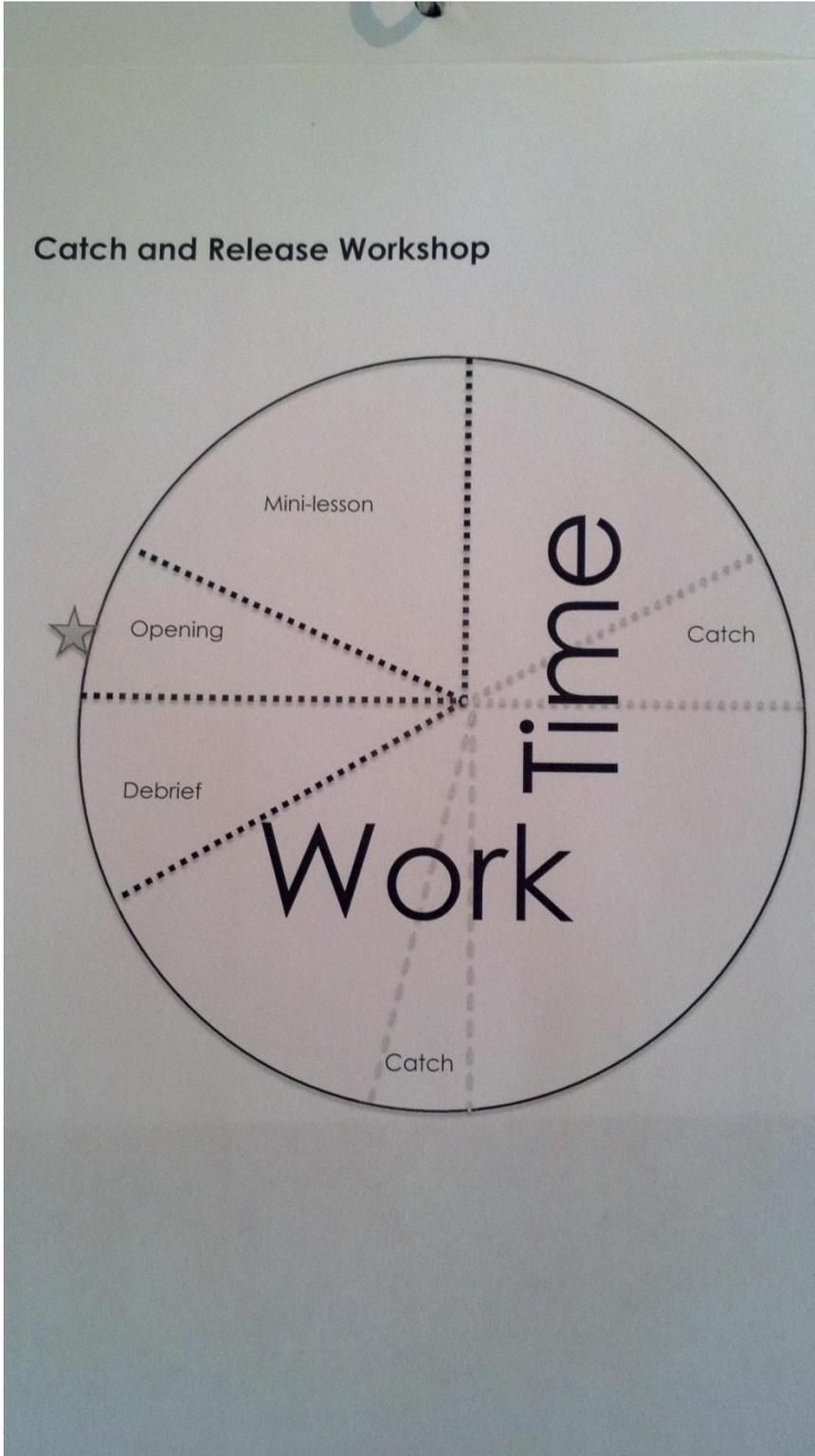
**Figure 1. BLOOM'S REVISED TAXONOMY**

## APPENDIX B. 20<sup>TH</sup> VS. 21<sup>ST</sup> CENTURY CHART

**Table 1. 20th VS. 20st CENTURY CHART**

<b>The 20<sup>th</sup> Century Classroom</b>	<b>The 21<sup>st</sup> Century Classroom</b>
1960's typical classroom – teacher-centered, fragmented curriculum, students working in isolation, memorizing facts	An architectural firm establishes an alternative school providing internships for high school students. A perfect example of real-life, relevant, project-based 21 <sup>st</sup> century education
Time-based	Outcome-based
Focus: memorization of discrete facts	Focus: what students Know, Can Do and Are Like after all the details are forgotten
Lessons focus on the lower level of Bloom's Taxonomy – knowledge, comprehension and application	Learning is designed on upper levels of Blooms' – synthesis, analysis, and evaluation
Textbook-driven	Research-driven
Passive learning	Active learning
Learners work in isolation – classroom within 4 walls	Learners work collaboratively with classmates and others around the world – the Global Classroom
Teacher-centered: teacher is center of attention and provider of information	Student-centered: teacher is facilitator/coach
Little to no student freedom	Great deal of student freedom
Discipline problems – educators do not trust students and vice versa	No “discipline problems” – students and teachers have mutually respectful relationships as co-learners; students are highly motivated
Fragmented curriculum	Integrated and Interdisciplinary curriculum
Grades averaged	Grades based on what was learned
Low expectations	High expectations – “If it isn't good it isn't done.” We expect and ensure, that all students succeed in learning at high levels. Some may go higher – we get out of their way to let them do that.
Teacher is judge. No one else sees student work.	Self, peer and other assessments. Public audience, authentic assessments
Curriculum/School is irrelevant and meaningless to students	Curriculum is connected to students' interests, experiences, talents and the real world.
Print is the primary vehicle of learning and assessment.	Performances, projects and multiple forms of media are used for learning and assessment.
Diversity in students is ignored.	Curriculum and instruction address student diversity
Literacy is the 3 R's – reading, writing and math	Multiple literacies of the 21 <sup>st</sup> century – aligned to living and working in a globalized new millennium

**APPENDIX C. MINI-LESSON SHEET**



**Figure 2. MINI-LESSON SHEET**

**APPENDIX D. WPSD CURRICULUM DOCUMENT FOR BOOM OR BUST**

Williston Public School District #1	<b>Subject Area: English/Language Arts</b>	District Curriculum Guide				
<i>Grade Level: 12</i>						
Identified Standards and Benchmarks: 11-12.RL.2, 11-12.RL.3, 11-12.RL.7, 11-12.RI.1, 11-12.RI.2, 11-12.RI.3, 11-12.RI.7, 11-12.W.1, 11-12.W.2, 11-12.W.4, 11-12.W.5, 11-12.W.6, 11-12.W.7, 11-12.W.8, 11-12.W.9, 11-12.SL.1, 11-12.SL.2, 11-12.SL.3, 11-12.SL.4, 11-12.SL.5, 11-12.SL.6, 11-12.L.6						
Suggested Time Frame (Grading Period) <input type="checkbox"/> Q1 <input type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input checked="" type="checkbox"/> Q4						
<p style="text-align: center;"><b>Learning Targets I Can... Statements</b></p> <p><input type="checkbox"/> identify a problem in my community.</p> <p><input type="checkbox"/> organize and collect data.</p> <p><input type="checkbox"/> evaluate information from multiple sources.</p> <p><input type="checkbox"/> integrate that information to propose a solution.</p> <p><input type="checkbox"/> communicate both verbally and non-verbally to present my findings.</p> <p><input type="checkbox"/> utilize technology to aid in my presentation.</p>	<table border="1" style="margin: auto;"> <tr> <td style="font-size: x-small;"><i>Unit Title/Topic</i></td> <td style="font-size: x-small;"><i>Universal Theme</i></td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Senior Capstone Project: Boom or Bust?</b></td> </tr> </table> <p><b>Enduring Understandings</b>            Despite my age/status/etc., I can make a positive difference in my community.            Being an active member of my community involves asking questions and proposing solutions.            Learning is a process that happens both inside and outside of the classroom..</p> <p><b>Essential Questions</b>            What are the consequences of a boom and bust cycle on a community?            How does growth impact infrastructure?            Other than voting, how can one individual make a difference in his/her community?            Is change necessary for progress?</p> <p><b>Prior Knowledge</b>            Powerpoint; Research methods (library, internet, online databases); Presentations            Living in Williston and experiencing the changing times!</p>	<i>Unit Title/Topic</i>	<i>Universal Theme</i>	<b>Senior Capstone Project: Boom or Bust?</b>		<p style="text-align: center;"><b>Key Vocabulary</b></p> <p><input type="checkbox"/> jargon</p> <p><input type="checkbox"/> field-related vocabulary, ie. fracking</p> <p><input type="checkbox"/> abstract</p> <p><input type="checkbox"/> non-linear</p> <p><input type="checkbox"/> Embed</p> <p><input type="checkbox"/> slogan</p> <p><input type="checkbox"/> rhetoric</p> <p><input type="checkbox"/> ethos, pathos, logos</p> <p><input type="checkbox"/> rationale</p> <p><input type="checkbox"/> infrastructure</p> <p><input type="checkbox"/></p> <p style="text-align: center;"><b>Authentic Assessments</b></p> <p><input type="checkbox"/> Senior Saturday Seminar</p> <p><input type="checkbox"/> Proposal</p> <p><input type="checkbox"/> Abstract</p> <p><input type="checkbox"/> Annotations</p> <p><input type="checkbox"/></p>
<i>Unit Title/Topic</i>	<i>Universal Theme</i>					
<b>Senior Capstone Project: Boom or Bust?</b>						

**Figure 3. WPSD CURRICULUM DOCUMENT FOR BOOM OR BUST**

**Instructional Additions and Resources**

Page 2

<p><b>Additional Learning Targets</b> <b><u>I Can... Statements</u></b></p> <p><input type="checkbox"/> conduct a professional interview.</p> <p><input type="checkbox"/> review my, my partners', and my classmates' projects and give valuable feedback.</p> <p><input type="checkbox"/> collaborate with my classmates.</p> <p><input type="checkbox"/> manage my time and resources effectively.</p> <p><b><u>Technology Integration</u></b></p> <p><input type="checkbox"/> Non-linear powerpoint</p> <p><input type="checkbox"/> Online database research</p> <p><input type="checkbox"/> Internet research</p> <p><input type="checkbox"/> embedding of visual elements</p>	<p style="text-align: center;"><b><i>Big Ideas</i></b></p> <p>Change is a four letter word... (Or is it?) Thriving economy = happy people, right???? Stranger Danger!!!! or... Howdy Partner!!! Networking does not just mean Facebook!!!</p> <p><b><u>Utilizing Bloom's Taxonomy</u></b></p> <div style="display: flex; align-items: center;">  <p>Creating: Non-linear Powerpoint</p> <p>Evaluating: Classmates' presentations; bias</p> <p>Analyzing: Research, print and other sources</p> <p>Applying: Information gathered for project</p> <p>Understanding: Lifelong learning skills</p> <p>Remembering: Jargon and rhetorical skills</p> </div> <p><b><u>Common Student Misconceptions</u></b></p> <p>Research is something only done in school.</p> <p><b><u>Interventions</u></b></p> <p><b><u>Reflection</u></b></p>	<p><b><u>Resources and Materials</u></b></p> <p><input type="checkbox"/> Primary documents</p> <p><input type="checkbox"/> Community members</p> <p><input type="checkbox"/> laptops</p> <p><input type="checkbox"/> CNBC videos</p> <p><b><u>Example Activities and Instructional Strategies</u></b></p> <p><input type="checkbox"/> Interview Process</p> <p><input type="checkbox"/> Writing an Abstract</p> <p><input type="checkbox"/> Non-linear Powerpoint</p> <p><input type="checkbox"/> In-class essay</p> <p><input type="checkbox"/> Ethos, pathos, logos refresher</p> <p><input type="checkbox"/> Presentation Techniques</p>
--	--	---

© 2010, Williston Public School District #1

**Figure 3. CONT.**

## APPENDIX E. OUTLOOK FOR 9-WEEK UNIT

**Table 2. OUTLOOK FOR 9-WEEK UNIT**

Day 1 (ML)  Introduce the final assignment  Discuss topics and groups-brainstorming for possible topics in small groups-teacher has list to suggest topics to students as well-for groups suggest partnering with someone in the same activities	Day 2 (ML)  Evaluating Resources and Examining articles based on topic – choose an article, annotate it, and record sources  Jargon	Day 3 (ML)  MLA formatting	Day 4 (ML)  Group proposal	Day 5 (ML)  Discuss/networking  <b>Group proposal due!</b>
Day 6-Close-up  Research Week* (see list of optional mini-workshops below)	Day 7  Mini-Workshops	Day 8  Mini-Workshops	Day 9  Mini-Workshops	Day 10  <b>Resources due by the end of the hour-interview included</b>
Day 11 (ML)  How to write an Annotated Bibliography	Day 12  Annotated Bibliography work day (2 per day) Bib Check Brainstorming committee ideas	Day 13  Annotated Bibliography work day (2 per day) Bib check	Day 14  Annotated bib work day (2 per day) Annotated Bib Review Workshop (for those who need it)	Day 15  Annotated bib work day  (2 per day) <i>Committee Sign-ups</i>
Day 16  Annotated Bib work day <b>Rough Draft due end of the hour!</b>	Day 17  Edit and revise Annotated Bib	Day 18 (ML)  Ethos  <b>Annotated Bibliography Due!</b>	Day 19 (ML)  Pathos	Day 20 (ML)  Logos
Day 21 (ML)  Fallacies in persuasive writing	Day 22 (ML)  Create an outline of persuasive	Day 23 (ML)  Group discussion over topic and research	Day 24 (ML)  Outline and thesis for essay	Day 25  In class essay

**Table 2. CONT.**

Day 26 (ML) Introduce Final Presentation-sample presentation  <b><i>Committee Work Due!</i></b>	<b>Day 27 (ML)</b>  <b>Nonlinear PowerPoint</b>	Day 28  PowerPoint work day	Day 29 (ML)  PowerPoint work day- Does my PowerPoint suck?	Day 30  PowerPoint work day
<b>Day 31 (ML)</b>  <b>Finalizing the presentations! How to write an abstract</b>	<b>Day 32 (ML)</b>  <b>Visual aids/Leaflet</b>	Day 33 Revisions	Day 34 Editing  <b><i>Abstract due</i></b>	Day 35 Editing
Day 36- (ML) Presentations are due! Discuss speaking skills, etiquette, etc.	Day 37 (ML) Begin rehearsing Leaflet & annotated Ppt due	Day 38  Rehearsing	Day 39  Rehearsing	Day 40  Go over agenda for tomorrow
Day 41 Reflecting on the seminar, audience feedback, self- assessment	Day 42  Reflecting on your group, overall unit	Day 43  Reflecting on your research and topic	Day 44  Reflecting on your skills gained after the unit	Day 45  Compose a reflection of project

**Optional Mini-workshops (during research week – attend two for weekly points if not at close-up)**

**Monday – Finding sources; evaluating sources**

**Tuesday – Paraphrasing, summarizing, and direct quotes; Breaking down a source for MLA citations**

**Wednesday – Finding effective quotes, attributing sources**

**Thursday – Speaking; Parenthetical citations**

## APPENDIX F. MINI-LESSON BREAKDOWN

<b>DAY:</b>	1
<b>TOPIC:</b>	Brainstorming – What do we know? What should we know?
<b>MATERIALS NEEDED:</b>	Articles for students; assignment handout

<b>Opening</b>	Discuss Essential Questions from unit plan
<b>Mini-Lesson</b>	Go over a short article about Williston; pull out possible topics for research that stem from the article
<b>Work time</b>	Print articles for each group to go over together; summarize the articles to share out; look for potential topics for research; teacher confers
<b>Catch and Release</b>	Students present summaries to classmates
<b>Work time</b>	Students go back to work discussing possible topics; teacher confers
<b>Debrief</b>	Teacher hands out Boom or Bust assignment sheet

<b>DAY:</b>	2
<b>TOPIC:</b>	Evaluate Resources and Examine articles through annotation
<b>MATERIALS NEEDED:</b>	Article used on day 1

<b>Opening</b>	After reading assignment sheet, what questions?
<b>Mini-Lesson</b>	Annotate and evaluate source from yesterday (through modeling); Have students help create a checklist for evaluating sources
<b>Work time</b>	In same groups from Day 1, students annotate and evaluate article they read; teacher confers
<b>Catch and Release</b>	Questions on source credibility and understanding jargon
<b>Work time</b>	Continue annotating; teacher confers
<b>Debrief</b>	Sharing with classmates whether their source is credible and WHY

DAY:	3
TOPIC:	MLA Formatting
MATERIALS NEEDED:	Articles from day before; MLA resources; easybib.com; laptops (reminder that groups are due tomorrow)

<b>Opening</b>	Now that we've determined credibility, let's cite this source!
<b>Mini-Lesson</b>	Work through article to find information needed to properly cite the source
<b>Work time</b>	Cite sources from article that you've been using, using laptops and online source maker; teacher confers
<b>Catch and Release</b>	Possible confusion – no author, etc.; parenthetical citations
<b>Work time</b>	Try to create the in-text citation; teacher confers
<b>Debrief</b>	Free-write for points – include your citation of your article; What are possible topics you are considering?

DAY:	4
TOPIC:	Group Proposal
MATERIALS NEEDED:	Forms for groups to fill out; rubrics for assignment components

<b>Opening</b>	Handing back of free writes; discussion; questions
<b>Mini-Lesson</b>	Go over group proposal document; teacher models and brainstorms own concerns ideas on proposal sheet
<b>Work time</b>	Students complete forms with their chosen group; teacher confers
<b>Catch and Release</b>	Concerns with possible interview candidates; networking with classmates
<b>Work time</b>	Continue completing form; searching for sources if possible; teacher confers
<b>Debrief</b>	Free write – what is your action plan for getting research done? DUE FRIDAY

DAY:	5
TOPIC:	Organizing research
MATERIALS NEEDED:	Students need binders and computers; Google Docs

<b>Opening</b>	Discuss free write from day before – action plan
<b>Mini-Lesson</b>	Key terms search on library database and Google; choosing an article together; evaluating source
<b>Work time</b>	Students will have computers and begin searching for sources; teacher confers
<b>Catch and Release</b>	After finding one source, discussing, then teacher models opening Google docs account
<b>Work time</b>	Finding other source and adding it to Google docs; teacher confers
<b>Debrief</b>	Delegate to group – 10 sources minimum, annotated, evaluated, and cited; class creates game plan

DAY:	11
TOPIC:	Annotated Bibliography
MATERIALS NEEDED:	Handout on how to create an annotated bib and sample annotated bibs

<b>Opening</b>	Summarizing is key to keeping sources organized
<b>Mini-Lesson</b>	Creating an annotated bib on short article WITH students
<b>Work time</b>	Students work in groups to summarize, evaluate, and create annotated bibliography entries; teacher confers
<b>Catch and Release</b>	None planned; used with issues arise
<b>Work time</b>	Continued from above
<b>Debrief</b>	Hand out rubric and checklist to “grade” own entries

DAY:	18
TOPIC:	Persuasive techniques in a speech; rhetorical devices
MATERIALS NEEDED:	“Vindication of the Rights of Women”; ethos handout; article or video to analyze

<b>Opening</b>	Audience awareness – ask who our audience will be
<b>Mini-Lesson</b>	ETHOS – what is it? Examine article and examine ethos in article
<b>Work time</b>	Students will examine their sources and find proof of ethos; teacher confers
<b>Catch and Release</b>	Share out; apply to self
<b>Work time</b>	Determining what they need to HAVE ethos; teacher confers
<b>Debrief</b>	Review ethos; having good character is not enough; free write – 3 ways your group can establish ethos

DAY:	19
TOPIC:	Persuasive appeals; Pathos
MATERIALS NEEDED:	Pathos handout; comments from articles on Williston Herald website

<b>Opening</b>	Review ethos; brainstorm why different groups would care about their presentation; audience awareness again --- lead into pathos
<b>Mini-Lesson</b>	Definition of pathos; Examine article and find elements of pathos in reader comments
<b>Work time</b>	Students examine articles and find proof of emotional appeals; teacher confers
<b>Catch and Release</b>	Share out
<b>Work time</b>	What do you need to do to include emotional appeals in your presentation?
<b>Debrief</b>	Review pathos; free write -- list 3 ways you and your group are going to show pathos

DAY:	20
TOPIC:	Persuasive appeals – Logos
MATERIALS NEEDED:	Logos handout; articles

<b>Opening</b>	Review ethos/pathos; counting on the experts!
<b>Mini-Lesson</b>	Logos definition; Examine articles together
<b>Work time</b>	Students examine their sources for examples of logos; teacher confers
<b>Catch and Release</b>	Share out
<b>Work time</b>	What do you need to show logos?
<b>Debrief</b>	Review logos; free write – 3 ways to add logos

DAY:	21
TOPIC:	Fallacies
MATERIALS NEEDED:	Powerpoint with fallacies; fallacy handout

<b>Opening</b>	Review E/P/L; discuss common errors in logic
<b>Mini-Lesson</b>	Teacher gives brief powerpoint on fallacies
<b>Work time</b>	Students fill in fallacy handout; teacher confers
<b>Catch and Release</b>	Review; hand out examples of fallacies from articles, etc.
<b>Work time</b>	Identify fallacies in articles; teacher confers
<b>Debrief</b>	Free write -- Think of different times during your presentation where it would be easy to fall into a fallacy.

DAY:	22
TOPIC:	Outlining
MATERIALS NEEDED:	Notecards; markers; large easel paper; rubrics

<b>Opening</b>	How do you incorporate appeals into your organization?
<b>Mini-Lesson</b>	Rubric for powerpoint – identifying elements required for presentation
<b>Work time</b>	Students create a visual representation of an outline for their presentations using large paper, notecards, markers, etc.; teacher confers
<b>Catch and Release</b>	None planned; as needed
<b>Work time</b>	Continue above
<b>Debrief</b>	Share out; Discuss

DAY:	23
TOPIC:	Group Discussion
MATERIALS NEEDED:	Unit plan (lists of essential questions, etc.)

<b>Opening</b>	What have you figured out after all this research?
<b>Mini-Lesson</b>	Look at essential questions and your own research questions
<b>Work time</b>	Discuss in small groups how your research answers your question(s); teacher confers
<b>Catch and Release</b>	As needed
<b>Work time</b>	Share out from small groups to whole class
<b>Debrief</b>	Free write – write your three main points to support your research question

<b>DAY:</b>	24
<b>TOPIC:</b>	Creating a Reverse Outline; Spotting important elements in essays
<b>MATERIALS NEEDED:</b>	Sample essay(s)

<b>Opening</b>	Discuss tomorrow's in-class essay; how to prepare
<b>Mini-Lesson</b>	Review elements of a 5-paragraph essay; model reverse outlining
<b>Work time</b>	Students examine a variety of 5-paragraph essays and complete a reverse outline; teacher confers
<b>Catch and Release</b>	Share out
<b>Work time</b>	Begin outlining their own essay with thesis, claims, etc.; teacher confers
<b>Debrief</b>	Students go over their outlines with partners

<b>DAY:</b>	27
<b>TOPIC:</b>	Non-linear Powerpoint
<b>MATERIALS NEEDED:</b>	Computers; sample powerpoint; Boom or Bust assignment sheet;

<b>Opening</b>	Audience awareness – how do we address issues and concerns of audience?
<b>Mini-Lesson</b>	Going over assignment sheet; what does non-linear mean?; show sample non-linear pp to students
<b>Work time</b>	Students will examine powerpoint rubric – critique teacher's pp; teacher confers
<b>Catch and Release</b>	How did you rate the powerpoint? Share out
<b>Work time</b>	go back to rubric and make suggestions for improving; teacher confers
<b>Debrief</b>	Groups will begin delegating roles for powerpoint

DAY:	29
TOPIC:	Evaluation of PP
MATERIALS NEEDED:	Handout of 5 common errors in pp; student powerpoints

<b>Opening</b>	Does my PP stink?
<b>Mini-Lesson</b>	Go over handout of 5 common mistakes
<b>Work time</b>	Students work in groups to evaluate their own pp based on handout; teacher confers
<b>Catch and Release</b>	As needed
<b>Work time</b>	Continue above
<b>Debrief</b>	Discuss issues found and possible solutions

DAY:	31
TOPIC:	How to write an abstract
MATERIALS NEEDED:	Abstract rubric; sample abstracts

<b>Opening</b>	How do you lure people to come to your session?
<b>Mini-Lesson</b>	Examine abstracts and identify how they appeal to the reader – create an abstract checklist together
<b>Work time</b>	Students reflect on their topic and research and create their abstract; teacher confers
<b>Catch and Release</b>	How can we spice it up?
<b>Work time</b>	Adjust word choice; teacher confers
<b>Debrief</b>	Free write -- After reading your abstract, why would people want to come to your session?

DAY:	32
TOPIC:	Leaflet; Comparing ads
MATERIALS NEEDED:	Leaflet rubric; sample magazine ads

<b>Opening</b>	Display eye-catching ads and discuss
<b>Mini-Lesson</b>	Examine effective ads and create a checklist for what criteria makes an effective ad
<b>Work time</b>	Students will examine ads in various magazines and determine whether or not they follow criteria of an effective leaflet; teacher confers
<b>Catch and Release</b>	Examine their requirements from rubric
<b>Work time</b>	Students think of visuals for their ads; teacher confers
<b>Debrief</b>	Free write – what do you want your audience to take home after your session?

DAY:	36
TOPIC:	Presenting!
MATERIALS NEEDED:	Rubrics; video clips of speeches

<b>Opening</b>	How do you sell your research? Public speaking!
<b>Mini-Lesson</b>	Watch clips of famous orators – identify physical and rhetorical techniques they used
<b>Work time</b>	Small groups create checklist of techniques to use when presenting; teacher confers
<b>Catch and Release</b>	Share out
<b>Work time</b>	Students practice presenting their speeches
<b>Debrief</b>	Free write – what are your major concerns with presenting/your presentation? How can we help?

## APPENDIX G. BOOM OR BUST ASSIGNMENT SHEET

Williston, North Dakota – your home and the epicenter of an economic boom that rivals the largest in the country... Changes have happened overnight. Some good. Some bad. New people, more traffic, longer lines, and lots of money have left many people in the community wondering what the heck happened! That's where we come in!

In this final 9-week unit, we will be taking our skills out into the community to explore the various aspects of living in a Boomtown and share our findings with our fellow Willistonites. Over the course of your high school education, you have, among other things, read, written, researched, and presented. This project will serve as the capstone of your four years of hard work and will feature your talents and intelligence at a Super Saturday Senior Seminar!

### WHAT?

This project will include multiple chances for you to earn points. Along with your final presentation that includes a non-linear powerpoint, you will be required to propose a topic for your project, create a working binder of your research, compile your research into an annotated bibliography, conduct an interview (or more than one), write an in-class essay, and reflect on the project and you and your group's efforts after Senior Seminar.

### HOW?

After brainstorming in class and proposing a topic, you will be researching through multiple avenues—online databases, internet sources, books, newspapers, magazines, and personal interviews, etc. You will work collaboratively to synthesize the information and share your findings with an audience of more than just your classmates and teacher.

### WHO?

Considering this is your last hoorah at WHS, you will have the opportunity to pick your own groups of three (3) for this project. Choose wisely, however, because your 4<sup>th</sup> quarter grade is hanging in the balance!

### WHEN?

The culmination of this project will occur at Super Saturday Senior Seminar, where we will invite community members, family, and friends to listen to our authentic presentations.

### WHY?

Even though a project like this can seem daunting at first, it's a great way to use the skills you have learned and showcase just how amazing you really are! What better way than to look at the issues affecting everyone in this town? You will be practicing real-world skills, educating lots of people, AND meeting standards set forth by *NCLB*. **It's a win-win for everyone!**

### HOW MUCH?

Because this is a 9-week unit, this capstone project will account for your Quarter 4 grade as well as a part of your final course grade. You will receive rubrics for the major elements of the project and will have the opportunity to earn daily points as well.

### QUESTIONS?

If you have other questions, please ASK! We will be working together to make this project a reality! Let's get started!

## APPENDIX H. SOURCES DATABASE

**Table 3. SOURCES DATABASE**

<b>TITLE</b>	<b>URL</b>	<b>TYPE</b>	<b>INFO</b>
“After the Rush”	<a href="http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=4271">http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=4271</a>	Article	Charts and graphs, info on lull from 2009
“Bakken Oil Shale Biggest Oil Find In USA, Montana, North Dakota, Minnesota”	<a href="http://wn.com/bakken_oil_shale_biggest_oil_find_in_usa_montana_north_dakota,minnesota">http://wn.com/bakken_oil_shale_biggest_oil_find_in_usa_montana_north_dakota,minnesota</a>	Youtube news video – also includes other similar videos	Discusses the surge in the Bakken play, the technology of horizontal drilling
“BAKKEN PLAY: BOOM or BURDEN? Paying the price”	<a href="http://billingsgazette.com/news/state-and-regional/montana/article_36b89f80-a8da-11df-bc67-001cc4c002e0.html">http://billingsgazette.com/news/state-and-regional/montana/article_36b89f80-a8da-11df-bc67-001cc4c002e0.html</a>	Billings Gazette article	The issues that come with the boom
“Assessment of Undiscovered Oil Resources in the Devonian-Mississippian Bakken Shale Formation, Williston Basin Province, Montana and North Dakota, 2008”	<a href="http://geology.com/usgs/bakken-formation-oil.shtml">http://geology.com/usgs/bakken-formation-oil.shtml</a>	Geology.com	Shows graphs of the Williston Basin and discusses amount of oil left to be extracted
“Crude Oil and Total Petroleum Imports Top 15 Countries”	<a href="ftp://ftp.eia.doe.gov/pub/oil_gas/petroleum/data_publications/company_level_imports/current/import.html">ftp://ftp.eia.doe.gov/pub/oil_gas/petroleum/data_publications/company_level_imports/current/import.html</a>	Chart	Lists the top 15 countries who import oil and how much
“Flock To N.D. Oil Town Leads To Housing Crisis”	<a href="http://www.npr.org/templates/story/story.php?storyId=127244617">http://www.npr.org/templates/story/story.php?storyId=127244617</a>	NPR article	See title
“Housing Boom in Williston”	<a href="http://www.kxnet.com/getArticle.asp?ArticleId=687856">http://www.kxnet.com/getArticle.asp?ArticleId=687856</a>	KX News article	See title
“I Wish I Owned a Trailer Park in Williston, ND”	<a href="http://www.rapidcityjournal.com/app/blogs/business/?p=2771">http://www.rapidcityjournal.com/app/blogs/business/?p=2771</a>	Rapid City Journal article	See title
“In Focus: Housing Shortage”	<a href="http://blogs.denverpost.com/captured/2010/04/26/in-focus-housing-shortage/1729/">http://blogs.denverpost.com/captured/2010/04/26/in-focus-housing-shortage/1729/</a>	Denver Post	Info about housing around the country
“The Law of Shale Frakking”	<a href="http://www.thegwpf.org/energy-news/2532-the-law-of-shale-gas-fracking.html">http://www.thegwpf.org/energy-news/2532-the-law-of-shale-gas-fracking.html</a>	Info about frakking technology	

**Table 3. CONT.**

“Oil-drilling boom exacts toll on Williston, N.D.-area town”	<a href="http://www.allbusiness.com/mining-extraction/oil-gas-exploration-extraction-oil-oil/14948012-1.html#ixzz1Wu7fW9VL">http://www.allbusiness.com/mining-extraction/oil-gas-exploration-extraction-oil-oil/14948012-1.html#ixzz1Wu7fW9VL</a>	All Business	See title
“A State with Plenty of Jobs but Few Places to Live”	<a href="http://www.nytimes.com/2010/04/21/us/21ndakota.html">http://www.nytimes.com/2010/04/21/us/21ndakota.html</a>	NY Times article and video	
“North Dakota in Middle of Modern-Day Oil Boom”	<a href="http://video.foxbusiness.com/v/4503681/north-dakota-in-middle-of-modern-day-oil-boom-/">http://video.foxbusiness.com/v/4503681/north-dakota-in-middle-of-modern-day-oil-boom-/</a>	Video Fox Business	
“North Dakota Oil Boom Outpaces Oversight”	<a href="http://www.huffingtonpost.com/2011/02/17/north-dakota-oil-boom-out_n_824574.html">http://www.huffingtonpost.com/2011/02/17/north-dakota-oil-boom-out_n_824574.html</a>	Huffington Post article	
“North Dakota Oil Boom Started in a Wheat Field”	<a href="http://www.hpj.com/archives/2008/nov08/nov10/NorthDakotaOilboomstartedin.cfm">http://www.hpj.com/archives/2008/nov08/nov10/NorthDakotaOilboomstartedin.cfm</a>	High Plains/Midwest Ag article	
“North Dakota Oil Jobs”	<a href="http://www.ndoiljobs.com/">http://www.ndoiljobs.com/</a>	Listings of jobs	
“Kuwait on the Prairie: Can ND Solve the Energy Crisis?”	<a href="http://www.newyorker.com/reporting/2011/04/25/110425fa_fact_konigsberg">http://www.newyorker.com/reporting/2011/04/25/110425fa_fact_konigsberg</a>	New Yorker article about Boom	
“A Brief History of ND Oil Production”	<a href="http://northdakotaoil.wordpress.com/2011/06/02/north-dakota%E2%80%99s-oil-bust-in-the-1980s/">http://northdakotaoil.wordpress.com/2011/06/02/north-dakota%E2%80%99s-oil-bust-in-the-1980s/</a>	Background article	
“North Dakota's Oil Boom is a Blessing and a Curse”	<a href="http://www.governing.com/topics/energy-env/north-dakotas-oil-boom-blessing-curse.html">http://www.governing.com/topics/energy-env/north-dakotas-oil-boom-blessing-curse.html</a>	Article	
“North Dakota’s Unconventional Oil Boom and Risks to Scarce Water”	<a href="http://theenergycollective.com/keithschneider2/43495/north-dakotasunconventional-oil-boom-and-risks-scarce-water">http://theenergycollective.com/keithschneider2/43495/north-dakotasunconventional-oil-boom-and-risks-scarce-water</a>	Article	Discusses environmental impact
“Oil Boom Helps Williston, ND Rental Equipment Business”	<a href="http://www.forconstructionpros.com/online/Construction-Equipment-News/Oil-Boom-Helps-Williston--ND-Equipment-Rental-Business-Flourish-/38FCP20284">http://www.forconstructionpros.com/online/Construction-Equipment-News/Oil-Boom-Helps-Williston--ND-Equipment-Rental-Business-Flourish-/38FCP20284</a>	Article	Deals with the other benefits of oil boom
“Oil Creating ‘Overnight Millionaires’ in ND”	<a href="http://www.msnbc.msn.com/id/25466382/ns/business-oil_and_energy/t/oil-creating-overnight-millionaires-nd/">http://www.msnbc.msn.com/id/25466382/ns/business-oil_and_energy/t/oil-creating-overnight-millionaires-nd/</a>	MSNBC article	

**Table 3. CONT.**

“Oil Industry Booms in North Dakota”	<a href="http://online.wsj.com/article/SB10001424052748703795004575087623756596514.html">http://online.wsj.com/article/SB10001424052748703795004575087623756596514.html</a>	Wall Street Journal article	
“Williston, ND”	<a href="http://blog.republicanreporter.com/2011/06/21/williston-nd.aspx">http://blog.republicanreporter.com/2011/06/21/williston-nd.aspx</a>	Blog entry	Discusses current economy
“The ND Slump and Turnaround of Oil Production in the 1990s”	<a href="http://northdakotaoil.wordpress.com/2011/02/07/the-north-dakota-oil-production-slump-and-turnaround-in-the-1990s/">http://northdakotaoil.wordpress.com/2011/02/07/the-north-dakota-oil-production-slump-and-turnaround-in-the-1990s/</a>	Historical / informative	
“A Circa 1990 Production Boomlet in the Bakken Formation”	<a href="http://northdakotaoil.wordpress.com/2011/01/29/a-circa-1990-production-boomlet-in-the-bakken-formation/">http://northdakotaoil.wordpress.com/2011/01/29/a-circa-1990-production-boomlet-in-the-bakken-formation/</a>	Historical / informative	
“Visions of Oil Bust Haunt Dalrymple’s North Dakota Budget Plan”	<a href="http://www.businessweek.com/news/2011-03-21/visions-of-oil-busts-haunt-dalrymple-s-north-dakota-budget-plan.html">http://www.businessweek.com/news/2011-03-21/visions-of-oil-busts-haunt-dalrymple-s-north-dakota-budget-plan.html</a>	Article Bloomberg Business	
“ND’s Oil Boom: We’ll let the Numbers do the Talking”	<a href="http://www.energyandcapital.com/articles/north+dakota-bakken-oil/778">http://www.energyandcapital.com/articles/north+dakota-bakken-oil/778</a>	Energy and Capital article	
“Mineral rights”	<a href="http://geology.com/articles/mineral-rights.shtml">http://geology.com/articles/mineral-rights.shtml</a>	Information about surface vs mineral owners	
“Oil and Gas Leases: Joy or Heartache for Surface and Mineral Owners”	<a href="http://www.buddfalen.com/content/2-Landowners%20and%20Energy%20Development/B.%20%20Oil%20and%20Gas%20Lease%20Negotiation/Oil%20and%20Gas%20Lease%20Negotiations.pdf">http://www.buddfalen.com/content/2-Landowners%20and%20Energy%20Development/B.%20%20Oil%20and%20Gas%20Lease%20Negotiation/Oil%20and%20Gas%20Lease%20Negotiations.pdf</a>	Document about leasing	
“Oil and Gas Glossary”	<a href="http://www.madronaenergy.com/oil-gas-glossary.htm">http://www.madronaenergy.com/oil-gas-glossary.htm</a>	Jargon	
“Land Owners, Mineral Rights Owners and Oil Producers Work Together on HB 1241”	<a href="http://plainsdaily.com/entry/land/">http://plainsdaily.com/entry/land/</a>	Article	
“Shale Gas Development Involves Many Lawyers and Legal Questions”	<a href="http://www.frackcheckwv.net/2011/04/15/shale-gas-development-involves-many-lawyers-and-legal-questions/">http://www.frackcheckwv.net/2011/04/15/shale-gas-development-involves-many-lawyers-and-legal-questions/</a>		

**Table 3. CONT.**

“Biggest Oil Discovery in US History”	<a href="http://www.miningtopnews.com/the-biggest-oil-discovery-in-us-history.html">http://www.miningtopnews.com/the-biggest-oil-discovery-in-us-history.html</a>	Short article	
“Less Than 48 Hours Left to Get a Piece of the Bakken”	<a href="http://www.energyandcapital.com/articles/williston-basin-bakken/662">http://www.energyandcapital.com/articles/williston-basin-bakken/662</a>	Article from 2008	
“There Will be Bucks in the Town that Struck Black Gold”	<a href="http://www.independent.co.uk/news/world/americas/there-will-be-bucks-in-the-town-that-struck-black-gold-2296769.html">http://www.independent.co.uk/news/world/americas/there-will-be-bucks-in-the-town-that-struck-black-gold-2296769.html</a>	Article from UK	
“US Oil Production to Speed Up, Obama Announces”	<a href="http://www.huffingtonpost.com/2011/05/14/us-oil-production-to-obama_n_861962.html">http://www.huffingtonpost.com/2011/05/14/us-oil-production-to-obama_n_861962.html</a>	Huffington post article	
“US Oil Supply in Deep Trouble”	<a href="http://westfaironline.com/2011/11322-u-s-oil-supply-in-deep-trouble/">http://westfaironline.com/2011/11322-u-s-oil-supply-in-deep-trouble/</a>	Westfair???	Could be refuted?
“Western ND Oil Boom Challenges Law Enforcement”	<a href="http://www.wday.com/event/article/id/34093/group/homepage/">http://www.wday.com/event/article/id/34093/group/homepage/</a>	WDAY article	
“Where Does the US Oil Supply Come From?”	<a href="http://www.wisegeek.com/where-does-the-us-oil-supply-come-from.htm">http://www.wisegeek.com/where-does-the-us-oil-supply-come-from.htm</a>	Wisegeek article	
“Interstate Oil and Gas Commission to Discuss Challenges”	<a href="http://www.willistonherald.com/articles/2011/06/25/news/doc4e0681b0b5729405709108.txt">http://www.willistonherald.com/articles/2011/06/25/news/doc4e0681b0b5729405709108.txt</a>	Williston Herald article	
“Williston Leaders: ND’s Oil Patch is Developmental Crisis”	<a href="http://bismarcktribune.com/news/state-and-regional/article_850ffe24-3b54-11df-a842-001cc4c002e0.html">http://bismarcktribune.com/news/state-and-regional/article_850ffe24-3b54-11df-a842-001cc4c002e0.html</a>	Bismarck Tribune article	
“Williston State Enrollment Drops: Oil Boom, Employment Abundance a Reason”	<a href="http://bismarcktribune.com/news/state-and-regional/article_4e1d4018-3dcc-11e0-8844-001cc4c002e0.html">http://bismarcktribune.com/news/state-and-regional/article_4e1d4018-3dcc-11e0-8844-001cc4c002e0.html</a>	Bismarck Tribune article	
“Workers Go Homeless Amid North Dakota Oil Boom”	<a href="http://www.stltoday.com/news/national/article_1d867269-55f4-55b2-94b6-177f54608cf3.html">http://www.stltoday.com/news/national/article_1d867269-55f4-55b2-94b6-177f54608cf3.html</a>	St. Louis Journal	
“Running With Oil”	<a href="http://www.runningwithoil.com/?category_name=dayone">http://www.runningwithoil.com/?category_name=dayone</a>	Fargo Forum Series	Has 8 days of articles and a video
Speech from Obama	<a href="http://obamaspeeches.com/030-Resources-for-the-Future-Obama-Speech.htm">http://obamaspeeches.com/030-Resources-for-the-Future-Obama-Speech.htm</a>	Speeches	

**Table 3. CONT.**

“The Start of Horizontal Drilling in ND”	<a href="http://northdakotaoil.wordpress.com/2011/05/14/the-start-of-horizontal-drilling-in-north-dakota-in-1987/">http://northdakotaoil.wordpress.com/2011/05/14/the-start-of-horizontal-drilling-in-north-dakota-in-1987/</a>	Informative	
“North Dakota’s Black Gold Rush”	<a href="http://english.aljazeera.net/indph/features/2011/03/20113287346280214.html">http://english.aljazeera.net/indph/features/2011/03/20113287346280214.html</a>	Article from Al Jazeera	
“Oil Boom Creates Millionaires and Animosity in North Dakota”	<a href="http://www.organicconsumers.org/articles/article_14571.cfm">http://www.organicconsumers.org/articles/article_14571.cfm</a>	Issues with oil boom	
“Bakken – Home of the Next Big Oil Boom?”	<a href="http://www.cbn.com/cbnnews/us/2008/October/Bakken---Home-of-the-Next-Big-Oil-Boom-/">http://www.cbn.com/cbnnews/us/2008/October/Bakken---Home-of-the-Next-Big-Oil-Boom-/</a>		
“Oil has been coming out of North Dakota since the 1950s, but are we on track for another boom and bust cycle like previous decades?”	<a href="http://willistonherald.com/articles/2011/08/04/news/doc4e3ac938d8b80474168799.txt">http://willistonherald.com/articles/2011/08/04/news/doc4e3ac938d8b80474168799.txt</a>	Williston Herald	
“ND Gov: Oil Boom Just Beginning”	<a href="http://www.cnbc.com/id/44261841/">http://www.cnbc.com/id/44261841/</a>	Jim Cramer article	
“Fueling the Future”	<a href="http://video.cnbc.com/gallery/?video=3000041194">http://video.cnbc.com/gallery/?video=3000041194</a>	CNBC video from Kildeer	

## **APPENDIX I. BOOM OR BUST IDEAS**

Boomtown, USA – Blessing or Curse?  
Benefits  
Downfalls  
Immigration?  
Jobs  
Housing  
Service industry  
Schools  
Roads  
Culture?  
Lack of options of things to do?  
Restaurants  
Truck stop?  
Percentage of jobs tied to oil industry?  
US vs. THEM?  
Price gouging?  
Guy to girl ratio  
Crime  
Student workers  
Environment? Fracking, etc.  
Man camps  
Churches  
WSC  
Hospital  
Hotels – building new  
Bust  
Landowner versus mineral owners  
Family life  
Start to finish (2)  
Women? Role?

**APPENDIX J. BOOM OR BUST PROPOSAL**

Boom or Bust: Senior Capstone

Proposal

- 1) Write your proposed topic on the line provided:

\_\_\_\_\_

- 2) Give the reason why you want to investigate this topic as your capstone project:

\_\_\_\_\_  
\_\_\_\_\_

- 3) Do you plan to persuade or inform during your presentation? If unsure, write unsure:

\_\_\_\_\_

- 4) Provide the full MLA citation for three print or media sources you plan to incorporate:

a. \_\_\_\_\_

\_\_\_\_\_

b. \_\_\_\_\_

\_\_\_\_\_

c. \_\_\_\_\_

\_\_\_\_\_

- 5) List one person (full name) you plan to interview:

\_\_\_\_\_

- 6) List how you plan to conduct your interview, for example by email, phone, or in person: \_\_\_\_\_

- 7) List why this person is qualified as an expert on your topic

\_\_\_\_\_  
\_\_\_\_\_

## APPENDIX K. EVALUATING SOURCES

Title of source	What kind of periodical is the source from?	Date of publication	Author of source	Date of access	Author bias	Topic of article	Write 3-4 sentences on how the source will contribute to the topic.

APPENDIX L. ANNOTATED BIBLIOGRAPHY RUBIC

# Senior Capstone Project: Boom or Bust! Annotated Bibliography

REQUIREMENTS?? Now it is time to create an Annotated Bibliography divulging what your sources were about and how they relate to your topic. These bibliographies will be displayed along with your final project.

Your bibliography should include 3-4 sentences explaining the information found in the source. Avoid beginning with the mundane, “This article is about...” Next, include 2-3 sentences that evaluate the source. Explain why the source was useful to your main position. Do not simply say, “This was useful.” Be Specific!

Here you will include the Title, author, publisher, publication date, city, and number of pages (i.e., complete and proper MLA citation information for each book). Here you will put annotations for each source that are approximately seventy-five (75) words long and that explain not only what the source was about but also how it related to your topic.

**Rubric:**

Traits	Criteria	Grading
Ideas	<ul style="list-style-type: none"> <li>○ Annotations are approximately 75 words</li> <li>○ Annotations include explanations of sources &amp; how they relate to individual topic</li> <li>○ Clear summary of source</li> <li>○ Effective Evaluation of source’s usefulness</li> </ul>	_____ /
Organization	<ul style="list-style-type: none"> <li>○ MLA citations</li> <li>○ Minimum of 10 sources annotated</li> </ul>	_____ /
Word Choice	<ul style="list-style-type: none"> <li>○ No “I” inside of the annotations.</li> <li>○ Do not use “in this book”, “in (insert title here)”, or any form of “in this...” in the annotation!</li> </ul>	_____ /
Presentation	<ul style="list-style-type: none"> <li>○ Typed <i>Times New Roman 12 point font</i></li> <li>○ Alphabetical order</li> <li>○ Proper MLA citations</li> <li>○ Proper spacing, heading, &amp; margins (see examples)</li> </ul>	_____ /
Conventions	<ul style="list-style-type: none"> <li>○ Free of all major grammatical, usage, and mechanical errors.</li> </ul>	_____ /

## APPENDIX M. IN-CLASS ESSAY RUBRIC

<b>6+1 Trait</b>	<b>Exceeds/Advanced</b>	<b>Meets/ Proficient</b>	<b>Nearly Meets/ Partially Prof.</b>	<b>Novice/Below</b>
<b>Ideas</b>	- <b>Thesis</b> clearly, directly, and fully responds to the prompt. - <b>Main idea</b> is clear throughout essay -Explains how the evidence illustrates and reinforces thesis	1 or 2 criteria are less strong than those of the advanced, but student has still met proficiency	Almost all criteria are less strong than the advanced and/or one criterion are especially weak.	All criteria are weak. Some criteria may have been forgotten altogether.
<b>Organization</b>	- <b>Introduction</b> includes a creative and effective attention-grabbing device, thesis, & preview of what's to come - <b>Body</b> contains 3-4 main points that support the thesis & are fully developed using resources from Annotated Bibliography - <b>Conclusion</b> revisits thesis & major points & uses an effective concluding device to drive home purpose	1 or 2 criteria are less strong than those of the advanced, but student has still met proficiency	Almost all criteria are less strong than the advanced and/or one criterion is especially weak.	All criteria are weak. Some criteria may have been forgotten altogether.
<b>Voice &amp; Sentence Fluency</b>	- <b>Tone</b> is informative or persuasive. The subject is treated formally and respectfully	1 or 2 criteria are less strong than those of the advanced, but student has still met proficiency	Almost all criteria are less strong than the advanced and/or one criterion is especially weak.	All criteria are weak. Some criteria may have been forgotten altogether.
<b>Conventions</b>  <u>/20</u>	- <b>Grammar</b> and <b>mechanics</b> have been controlled masterfully for intended effect: No errors in... <ul style="list-style-type: none"> <li>• verb tense changes,</li> <li>• parallel structure,</li> <li>• run-ons,</li> <li>• spelling or</li> <li>• fragments</li> </ul>	1 or 2 minor errors may have occurred in... <ul style="list-style-type: none"> <li>• verb tense changes,</li> <li>• parallel structure,</li> <li>• run-ons,</li> <li>• spelling or</li> <li>• fragments</li> </ul>	1 or 2 minor & 1 or more major errors may have occurred in... <ul style="list-style-type: none"> <li>• verb tense changes,</li> <li>• parallel structure,</li> <li>• run-ons,</li> <li>• spelling or</li> <li>• fragments</li> </ul>	Major, distracting errors have appeared in... <ul style="list-style-type: none"> <li>• verb tense changes,</li> <li>• parallel structure,</li> <li>• run-ons,</li> <li>• spelling or</li> <li>• fragments</li> </ul>
<b>Presentation MLA Format</b>	-proper heading -1" margins -page # appears as your name & page in upper right ½" -double spaced, -Title centered, regular 12 point TNR font	1 or 2 minor errors may have occurred in MLA format.	1 or 2 minor & 1 or more major errors may have occurred in MLA format.	Major, distracting errors have appeared in MLA format.

## APPENDIX N. BOOM OR BUST LEAFLET

### Leaflet—your Visual Advertisement!

As part of the presentation process, you will be creating a one page leaflet in Microsoft Word, Publisher or by some other approved medium that further informs and/or persuades your chosen audience before, during and after your presentation. This handout will be the first exposure your audience has to your topic and a reminder they can take away with them. Many “societal cause” campaigns incorporate advertisements in magazines and on billboards—looking at these might be a helpful place to start. (Think the “Got Milk” campaign, the PETA “No Fur” campaign or anti-smoking ads/campaigns.)

### Leaflet Rubric

<b>Criteria</b>	<b>Advanced</b>	<b>Average</b>	<b>Below Average</b>	<b>Unacceptable</b>
<b>Visual Presentation</b>	Colors, designs, drawings, and/or photos displayed in a highly appealing manner that speaks to your audience and topic. A strong and appealing balance of visuals to text appear. Text is easy to read.	Some attention has been given to colors, designs, drawings, and/or photos displayed in an appealing manner. For the most part, audience, topic, balance, and readability were considered.	While colors, designs, and pictures were used, little attention is given to placing these in an appealing manner. Presenter did not consider one or more of the following: audience, balance, and readability.	The handout is missing one or more of the following: colors, designs, drawings, and/or photos. Presenter did not consider 2 or more of the following: audience, balance between visuals and text, or readability of text.
<b>Ideas: Information/ Content</b>	Contains a catchy slogan that uses sound devices and/or figurative language that capture the heart of your topic and purpose. Information included is a strong and quick reminder of why your cause is important.	Has an effective title or slogan related to topic and purpose, but uses no figurative language. Information is a quick reminder of importance of your cause.	The title is not in the form of a slogan. No figurative language was used. Information relates to your topic, but may or may not convey the importance of cause or purpose.	The title is not in the form of a slogan. No figurative language was used. Little information is provided. Information does not convey the importance of the cause or purpose.
<b>Grammar and Mechanics</b>	All grammar, spelling and mechanical errors have been avoided.	All major grammar, spelling and mechanical errors have been avoided. A few minor errors may appear.	One or more major grammatical, mechanical or spelling errors exist or minor errors abound.	Clearly, editing has not taken place. Multiple major and/or minor grammar, mechanical, or spelling errors appear.

## APPENDIX O. ABSTRACT RUBRIC

### Senior Capstone: Boom or Bust

**Abstract:** Each group will be given a portion of the program which will consist of an abstract stating the purpose of your session. This abstract must be short and focused. An abstract must intrigue the reader by using colorful words and mentioning key topics to be discussed.

Criteria	Advanced	Average	Below Average	Unacceptable
<b>Word Choice</b>	-The abstract is between 125- 150 words. Powerful, varied, broad range of vocabulary <ul style="list-style-type: none"> <li>• Thoughtfully placed terms or expressions</li> <li>• Words effectively communicate message in an interesting, precise, and natural way</li> </ul>	-Between 125-150 -Accurate, precise vocabulary <ul style="list-style-type: none"> <li>• Purposeful, clear meaning but rarely experiments with language</li> <li>• Words convey the intended message</li> </ul>	-less than or more than 125-150 words <ul style="list-style-type: none"> <li>• Appropriate but ordinary vocabulary</li> <li>• Functional expressions; may have some fine moments</li> <li>• Terms convey message but passive verbs or clichéd expressions may interfere</li> </ul>	-Does not meet word count requirements <ul style="list-style-type: none"> <li>• Colorless, generic vocabulary</li> <li>• Expressions may impair understanding; monotonous repetition</li> <li>• Inappropriate; unimaginative terms or slang detract from message</li> </ul>
<b>Ideas:</b>  Information/ Content	Contains a catchy slogan that uses sound devices and/or figurative language that captures the heart of your topic and purpose. Information included is a strong and quick reminder of why your cause is important.	Has an effective title or slogan related to topic and purpose. Information included is a reminder of why cause is important.	Contains a title. Information does pertain to topic. Vague in some areas and easily loses readers attention.	Abstract does not contain a title. Information does not pertain to topic.
<b>Grammar and Mechanics</b>	All grammar, spelling and mechanical errors have been avoided.	All major grammar, spelling and mechanical errors have been avoided. A few minor errors may appear.	One or more major grammatical, mechanical or spelling errors exist or minor errors abound.	It's clear editing has not taken place. Multiple major and/or minor grammar, mechanical, or spelling errors appear.

## APPENDIX P. BOOM OR BUST JUDGE EVALUATION FORM

Boom or Bust: Senior Capstone

Judge's Evaluation Sheet—For **Persuasive Presentations**

**Content of Presentation:** \_\_\_\_\_

(overall score – 4, 3, 2, 1)

- 1) The presenters convinced you that his/her topic is a problem that needs to be fixed.

**4 3 2 1**

- 2) The presenters proposed solution seemed feasible.

**4 3 2 1**

- 3) The presenters indicated how and why their proposal would work.

**4 3 2 1**

- 4) The presenters included what the cost would be and who would be needed in the solution.

**4 3 2 1**

- 5) The presenters appeared knowledgeable and professional during presentation and while answering questions.

**4 3 2 1**

- 6) The information surrounding the problem and solution appears well-researched.

**4 3 2 1**

COMMENTS:

**Presentation Skills and Preparedness:** \_\_\_\_\_ (overall score – 4, 3, 2, 1)

- 7) The presenter adequately introduced his/her topic and gave a roadmap of what would be included in the presentation.

**4 3 2 1**

- 8) The presenter used a persuasive and respectful tone.

**4 3 2 1**

- 9) The presenter and his/her PowerPoint displayed a strong grasp of technology in his/her presentation.

**4 3 2 1**

- 10) Appropriate eye contact and body language were used.

**4 3 2 1**

- 11) The speaker was easy to hear.

**4 3 2 1**

- 12) The handout effectively addressed both the problem and its solution.

**4 3 2 1**

COMMENTS:

Judge's Evaluation Sheet—For **Informative Presentations**

**Content of Presentation:** \_\_\_\_\_ (overall score – 4, 3, 2, 1)

- 1) The information appeared complex enough for a senior capstone project.

**4 3 2 1**

- 2) An effective explanation accompanied the PowerPoint presentation.

**4 3 2 1**

- 3) The material was well-organized in the PowerPoint.

**4 3 2 1**

- 4) The topic of the presentation examined a needed public service.

**4 3 2 1**

- 5) The presenter appeared knowledgeable, professional, and well-researched during his/her presentation and while answering questions.

**4 3 2 1**

- 6) The presenter effectively traced history to present-date or explained a process. If the presenter included an evaluation, the evaluation appeared insightful and warranted.

**4 3 2 1**

COMMENTS:

**Presentation Skills and Preparedness:** \_\_\_\_\_ (overall score – 4, 3, 2, 1)

- 7) The presenter adequately introduced his/her topic and gave a roadmap of what would be included in the presentation.

**4 3 2 1**

- 8) The presenter used a respectful tone.

**4 3 2 1**

- 9) The presenter and his/her PowerPoint displayed a strong grasp of technology in his/her presentation.

**4 3 2 1**

- 10) Appropriate eye contact and body language were used.

**4 3 2 1**

- 11) The speaker was easy to hear.

**4 3 2 1**

- 12) The handout effectively addressed both the problem and its solution.

**4 3 2 1**

COMMENTS:

## APPENDIX Q. REFLECTIVE ESSAY RUBRIC

<b>Reflective Essay Rubric – Boom or Bust</b>				
<b>6+1 Trait</b>	<b>Exceeds/Advanced</b>	<b>Meets/ Proficient</b>	<b>Nearly Meets/ Partially Prof.</b>	<b>Novice/Below</b>
<b>Ideas</b>	- <b>Thesis</b> clearly, directly, and fully responds to the prompt. - <b>Main idea</b> is clear throughout essay -Explains how the evidence illustrates and reinforces thesis	1 or 2 criteria are less strong than those of the advanced, but student has still met proficiency	Almost all criteria are less strong than the advanced and/or one criterion are especially weak.	All criteria are weak. Some criteria may have been forgotten altogether.
<b>Organization</b>	- <b>Introduction</b> includes a creative and effective attention-grabbing device, thesis, & preview of what's to come - <b>Body</b> contains 3-4 main points that support the thesis & are fully developed - <b>Conclusion</b> revisits thesis & major points & uses an effective concluding device to drive home purpose	1 or 2 criteria are less strong than those of the advanced, but student has still met proficiency	Almost all criteria are less strong than the advanced and/or one criterion is especially weak.	All criteria are weak. Some criteria may have been forgotten altogether.
<b>Voice &amp; Sentence Fluency</b>	- <b>Tone</b> is reflective and thoughtful.. The subject is treated respectfully	1 or 2 criteria are less strong than those of the advanced, but student has still met proficiency	Almost all criteria are less strong than the advanced and/or one criterion is especially weak.	All criteria are weak. Some criteria may have been forgotten altogether.
<b>Conventions</b>  <u>/20</u>	- <b>Grammar</b> and <b>mechanics</b> have been controlled masterfully for intended effect: No errors in... <ul style="list-style-type: none"> <li>• verb tense changes,</li> <li>• parallel structure,</li> <li>• run-ons,</li> <li>• spelling or</li> <li>• fragments</li> </ul>	1 or 2 minor errors may have occurred in... <ul style="list-style-type: none"> <li>• verb tense changes,</li> <li>• parallel structure,</li> <li>• run-ons,</li> <li>• spelling or</li> <li>• fragments</li> </ul>	1 or 2 minor & 1 or more major errors may have occurred in... <ul style="list-style-type: none"> <li>• verb tense changes,</li> <li>• parallel structure,</li> <li>• run-ons,</li> <li>• spelling or</li> <li>• fragments</li> </ul>	Major, distracting errors have appeared in... <ul style="list-style-type: none"> <li>• verb tense changes,</li> <li>• parallel structure,</li> <li>• run-ons,</li> <li>• spelling or</li> <li>• fragments</li> </ul>
<b>Presentation MLA Format</b>	-proper heading -1" margins -page # appears as your name & page in upper right 1/2" -double spaced, -Title centered, regular 12 point TNR font	1 or 2 minor errors may have occurred in MLA format.	1 or 2 minor & 1 or more major errors may have occurred in MLA format.	Major, distracting errors have appeared in MLA format.