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The Impact of a Standards-Based Classroom on Student Perceptions of Efficacy and Motivation

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Abstract

There are many buzzwords flying in the field of education that promise to revolutionize teaching and learning. Some of the most exciting and prominent involve the concepts of standards based classrooms (Marzano, 2007) and mastery learning (Guskey, 1996). This research focused on the implementation of a mastery learning/standards-based pedagogical paradigm in an upper level foreign language classroom. Of particular interest was how the underlying tenets of this approach allow for explicit and open communication with students about end goals of the course and the opportunity to re-attempt assessments. This action research attempted to determine if this method would influence student self-efficacy and motivation. Results showed that students had improved ownership of the course and higher achievement. Teacher survey data demonstrated a favorable perception. Conclusions can be made that this is a promising framework to use in foreign language classroom to help students as they move towards fluency.

Keywords: Foreign language teachers, teacher motivation, teacher professionalization, advanced certification

1. Introduction

In the dramatic push and pull of education reform over the last twenty years, various 'solutions' to the education 'problem' have been introduced, implemented, and then dismissed. Nearly every year theorists or policy professionals posit new approaches that will revolutionize teaching and learning while at the same time traditionalists in the media decry that education is moving away from its roots. Teachers and students are the losers in this ongoing war and are left asking the questions—What are we really supposed to teach? What are we really supposed to learn? Standards-based education, a pedagogical approach developed in large part by Robert Marzano in the 1990s, attempts to address some of these concerns. A standards-based education in some ways nicely sidesteps the policy politics and allows learners and teachers to focus on the end goals of the course and demands clarity of expectations (Marzano, 2007).

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While most teachers would undoubtedly argue that an awareness of the state and national standards permeates everything that they do, a true standards-based approach requires teachers and students to engage more profoundly with goals for a course, and it opens a space for dialogue between learner and teacher. Research has shown that students who are in standards-based classes tend to score better on assessments and feel that they have increased ownership over the course and its material (Marzano, 2007; O'Connor, 2007; Stiggins, 2007). This increase in key sociocognitive domains led to the research explored here.

Language acquisition theory has long paid attention to the social domains of learning. From Krashen (2001) on, language teachers and researchers have struggled with how to best support the development of an affective filter and internal motivation in students. Second language learning is perhaps one of the subjects where individual control and self-efficacy matter the most. Students will be unable to use the target language authentically and spontaneously outside of the classroom without developing these metacognitive and social skills.

This research comes from the confluence of these two different educational fields. Because supporting the development of sociocognitive skills like motivation and self-efficacy is so important, language teachers are constantly seeking ways to teach with this in mind. The promise of standards-based/mastery learning which gives a good deal of ownership to students is a tantalizing one. Could the implementation of this pedagogical approach grow the necessary social gains in a foreign language classroom? Historically, while educators may have used aspects of Marzano's (2007) standards-based approach at the high school level, there is a dearth of research about a wholly standards-based/mastery learning classroom, because of concerns about how to fit it into the larger grading system used by public high schools. This paper will bring together these different viewpoints to see how one bears upon the other.

2. Description of Research

This research attempted to document the implementation a standards-based/mastery learning pedagogy in an upper level foreign language classroom. While there are many characteristics to this approach that played a part during the time of the research, particular focus will be paid to the modified grading system. This grading system will symbolize the mastery learning (Guskey, 1996). Instead of the traditional grading system where perhaps 20% is accorded to quizzes, 25% to tests and projects, and so on, the gradebook was set up to be 50% summative and 50% formative assessments. Students were allowed to resubmit artifacts for any formative assessment—as long as they matched the standard tested—as many times as they wanted until the end of the unit. The goal of this innovation was to remove the stress of the initial grade upon a student and allow them the opportunity to push themselves as far as they wanted in the hopes of directly developing student motivation. The research tracked how many times students attempted to improve their grade and how much they were able to raise their score. Resubmissions could only raise a student's grade—never lower it. Students were responsible for deciding what artifacts to turn in, and they had to write a reflection in English about why the resubmission was better than the first sample in order to deepen their understanding of the standard and their own learning process. For example, if a student were unable to score well on the initial graphic organizer of a book read in class, they could do a different graphic organizer that covered the same types of questions or submit their journal entry about the book as long as they also wrote a paragraph citing specific examples related to the standard in question about how they improved.

Each formative assessment was analyzed according to the 0-4 scale (see Appendix A) described by O'Connor (2007) and Marzano (2007). The summative assessments were graded with individualized rubrics that corresponded to the product that students were being asked to make. To further the division

of the gradebook, each unit was accorded 14.28% of the overall grade. Inside of each unit, students were asked to complete ten formative assessments that corresponded to the standards of the course viewed with the lens of the particular unit—grammatical, literary, and vocabulary based. The standards used can be viewed in Appendix B. As there were ten different standards for each unit and four different linguistic skills (speaking, reading, writing, and listening), students were given multiple opportunities and multiple formats to show their knowledge and skills throughout the course.

Standards-based classrooms also place a premium on student involvement in setting class mores and openness of assessment (Brown, 2004). This bears directly on the development of self-efficacy in students. Self-efficacy is the belief that events and knowledge are inside the locus of control of a learner. When tests/projects are secret and the development of rubric is closed to students, it is harder for them to develop their concepts of self-efficacy. This capacity of advocating for oneself spills over into the risks that a second language speaker will take. To support the growth of this extremely important sociocognitive skill, there were multiple 'family' style discussions throughout the course to allow students space to offer feedback, suggestions, commentary, and complaints. This time, in which students used English for maximum comfort and communication, allowed students to clarify concerns and advocate for themselves; the discussions were not assessed. For the final product that students would do for the course—it was valued at 10% of the overall grade—a rubric was developed collaboratively with students. This was directly a result of constantly reviewing the standards for the course. Students chose to do a speaking project, because they felt that speaking was their weakest skill. They wanted to end the class reinforcing those abilities.

3. Sample

The students who participated in this action research to a large extent reflect the statistics of the larger school population. However, this work focused on an upper level modern language course, and due to scheduling concerns and student choice, the class is less diverse than a general education core classroom. There were forty three students who took part of this standards based, mastery learning action research. Of those, 12 were gifted and represented 28% of the total sample. Three—3.9%--were considered 'remedial' or on various points on the pyramid of intervention used at XXX school as a way of tracking and modifying instruction for students who have weaker academic skills. Four students, 9%, were African American; two students, 4.6%, were Latino. One student, 2%, was of mixed racial heritage. Perhaps the largest discrepancy in Spanish III enrollment and the general school population was the low number of male students. Only 8 students, or 18.6% of the total Spanish III class, were male.

4. Assumptions and Limitations

The student participants did demonstrate remarkable gains in achievement—as explored later—as well as an increased perception of autonomy and ownership in both course goals and material. This study can serve the need that Brown (2004) notes in his work—that while Standards-Based Educational Approaches have broad support among educators, there is a lack of rigorous, scientific research to back how and why it works other than anecdotal evidence. However, even though this research addresses this gap, it would be difficult to make many broad generalizations beyond this classroom for several reasons. The participant students were all highly motivated before the start of the course with a strong interest and aptitude in the target language. Additionally, the classroom where the research took place was considered an upper level elective class. As discussed in the demographic review, the student participants did not entirely reflect the larger school body. There was a noteworthy overrepresentation of female students, who traditionally exhibit more teacher-pleasing behaviors that could have skewed the

results such as positive commentary on the Likert survey (Appendix C.) A large portion of the class—nearly one third of the students—were also identified as Gifted and Talented; historically, students in gifted/accelerated programs have had perhaps more autonomy in learning and metacognitive development. This could have had an influence on students' preparation to understand and accept the pedagogical approaches of this standards-based classroom. A further, significant limitation was that there was not a pure control group to compare differences of achievement and perception. This lowers the internal validity of the study.

4. Literature Review

This research brought together work from various fields within the wide scope of educational theory and research. This literature review will examine the history and current research of standards based/mastery learning classrooms, self-efficacy, and motivation. Once each of those is established, the paper will draw conclusions and connections previously unexplored between these theoretical fields. To recap, this action research explored how a standards-based classroom helps students develop self – efficacy and improve motivation towards mastery of state and national standards. When students are aware of ultimate course goals, it allows them to view the tasks associated with progressing towards fluency in a second language with a filter of facilitation and realistic expectation rather than debilitative anxiety. For the purposes of this research, the term standards-based classroom will be used similar to the way others use mastery learning (Guskey, 1996) or Understanding by Design (Wiggins & McTighe, 2005). Although there are key and defining facets that set each of these pedagogical approaches apart, they share certain aspects such as a pervasive focus on articulating standards to students in meaningful ways and offering them multiple opportunities and formats to show understanding. This literature review will elaborate a working definition of a standards based classroom, explore how motivation and self-efficacy influence second language acquisition, and conclude with how one bears upon the other.

The work of Marzano (2007), Davies (2000), and Wiggins and McTighe (2005) focuses on how to make the big picture standards an inseparable part of what teachers do in the classroom, plan with the end in mind, and give students multiple and varied opportunities to show their mastery of the standards. The research presented here drew on the rich depths of these theorists to create a workable classroom focused on moving students forward to the goal of increased foreign language fluency. This literature review will begin by discussing the key aspects of the work of the theorists mentioned above as well as exploring language acquisition research to see how these two fields may merge.

4.1. Understanding by Design

In order to ensure the highest quality school experience for both teachers and students, it is essential to have a well-articulated, standards-based plan that guides the teaching and learning in a class. In this manner, the work of Wiggins and McTighe (2005) with Understanding by Design (UbD) guided this research project. Understanding by Design rests upon ten major principles. According to Brown (2004), these are:

1. "Students learn actively, not passively. Students learn best when they actively construct meaning through experience-based learning activities…" (p. 15)
2. Teaching for "deep understanding" stresses students' ability to have "meaningful independent use of essential declarative knowledge and procedural knowledge" (p. 16).

3. There is a clear difference between "what is worth being familiar with versus what all students should know, be able to do and understand" (p. 17)
4. Begin with the end in mind—what do we want students walking out of the room knowing?
5. "Students develop deep conceptual understanding when they can cue into the enduring understandings and essential questions at the heart of their curriculum" (p. 17).
6. Teachers need to establish objectives that clearly articulate to students, in quantifiable terms, what they are supposed to know and do.
7. Use the "photo album" instead of the snapshot approach to assess student knowledge (18).
8. Learning is always outward, to be used in the 'real world.'
9. Teaching activities should always "support desired results and integrated planned assessments" (p. 19).
10. UbD is not a "program," it is a "synthesis of research based best practices" (p. 20).

UbD is used as a guiding framework for this research study. The rationale for selecting this format was it is research based, used widely in public schools, and has been shown to develop an "enhanced sense of student efficacy as students express a growing understanding of what they are learning and why they are learning it" (Brown, 2004, p. 64). Throughout the course, it is essential to have check-ins structured in the manner that Brown (2004) calls a "town meeting." These town meetings manifested as 'family discussions' for the purpose of this research.

Each of the components mentioned above: Mastery learning, assessing for learning, standards based, and Understanding by Design are different names for that work to achieve similar grading structures. These approaches all ask teachers to think carefully about what we want students to know and do. These guide us as we work with them to understand and how to function as a learning community towards that end goal, and they guide us as we assess in multiple ways. Research shows that each of these builds student ownership of a course and material, as well as allows them to take their learning 'outside' of school walls and apply their skills in meaningful, real-world ways. It also provides a means for teachers to have a very clear picture of students' abilities in order to adjust instruction according to student needs.

4.2. Language Acquisition Theory—The Socioemotional Domains

Teaching and learning involve inherently socioemotional development as well as cognitive processes. As such, student self-perceptions are extremely important factors in how well a student learns. This is particularly true in the field of second language acquisition. There are several psychological aspects that heavily influence a learner's ability to acquire a new language. Some of the most important of these are frustration tolerance, error acceptance, and anxiety. These combine to form what linguists call the affective filter (Krashen, 2001). Studies of this filter show that "it is well documented that language learning success or failure is influenced by the affective side of the learner" (Ghonsooly & Elahi, 2010). Affective filter anxiety in second-language acquisition is not always a bad thing. Ghonsooly & Elahi (2010) posit that facilitive anxiety is "a positive and motivating force that can best be described as enthusiasm before a challenging task" (p. 47). However, it is impossible to have a high level of motivation or success with debilitative affective filter. The tenets of mastery learning in this study which allowed for errors in the initial submission of assessment artifacts would help students develop error acceptance and frustration tolerance.

Another key facet in second-language acquisition is the concept of student self-efficacy. Burney (2008) defines self-efficacy as the belief that an individual possesses regarding their ability to perform an action well enough to succeed. Efficacy is of the utmost importance in all learning, but especially language learning. To become successful in a second language, a speaker/writer/listener has to engage some measure of risk-taking behavior with the assumption that they can succeed. As Ghonoosly and Elahi (2010) document their research in second-language acquisition, "self-efficacy is a more consistent predictor of success and achievement than other related variables" (p. 49).

4.3. Motivation as Part of Language Acquisition Theory

Self-efficacy is also intricately tied to motivation. If a student feels that they can control their learning outcomes, they are then empowered to take ownership of their learning. Burney (2008) defines motivation as "depend[ant] upon one's perception of self-efficacy and agency" (p. 131). Burney's (2008) work is particularly exciting for classroom teachers, because instead of conceptualizing motivation and efficacy as static or a product of a student's background or personality, she argues that the motivation-efficacy-agency matrix is "teachable and can lead to increases in student motivation and achievement" (p. 131). Adediwra (2012) also notes that motivation is linked to the idea of students being capable of viewing challenges as opportunities to develop skills instead of roadblocks.

In order to build self-efficacy and motivation, research encourages teachers to develop the capacity for self-assessment in students (Davies, 2007; Guskey, 2007; Marzano, 2007; Stiggins, 2007). Adediwura (2012) defines self-assessment as a process that "requires students to think critically about what they are learning, to identify appropriate standards of performance and to apply them to their own work" (p. 4496). Self-assessment results in more than metacognitive understanding of learning. As explored earlier, Marzano's (2010) work shows that "on average, the practice of having students track their own progress was associated with a 32 percentile point gain in their achievement" (p. 86). Assessment is one of the cornerstones of the standards based approach.

4.4. Assessment and Feedback

Davies' (2000) work around assessment is significant in this conversation. Although this study was performed in a mastery-focused standards-based classroom, it was still a part of the larger high school macrocosm. Students had to leave class with a letter/numerical averaged grade that could be put on their high school transcript and used for scholarship eligibility. The reality of most American high schools is that grades are still averaged in a traditional way, even if proponents of standards-based/mastery learning do not prefer an 'average' grade. The example often given in literature related to assessment is of the students who are in the "parachute packing class" where three students' scores are shown over time. There is an erratic student who is utterly inconsistent, one student who improves over time, and one student who starts quite well and ends up failing the packing test frequently at the end. (Davies, 2000; Marzano, 2007). This vignette is used to show how traditional assessments and historically-used grading systems do not always serve the student, larger society, or skydiver well; obviously, a sane person would want the student who made the consistent and marked growth be their parachute packer. However, their 'average' fails the class. While this scenario is a nice opportunity to engage with the question of how to grade, this particular research was conducted in a public high school and required to fit into larger school mores.

Davies' (2000) work of how to make assessment real, applicable, rigorous, and appropriate also focuses heavily on how, when, and why to use evaluative feedback in the classroom. Davies (2000), like Marzano (2007) and Wiggins and McTighe (2005), encourage teachers to use evaluative feedback that is

linked to the end goal of the course. Evaluative feedback "tells the learner how she or he has performed as compared…to the standard" (Davies, 2000, p. 2). Evaluative feedback in the formative assessment portion is helpful to students as they either work to re-turn in something else to meet the standard in a mastery learning scenario or prepare for the summative assessment at the end of the unit.

Davies (2000) also suggests that teachers should gather a "range of evidence" to be able to determine what students really know and are able to do (p. 26). In doing so, it is possible to address concerns about the subjectivity of our grading; "the more evidence collected and the longer the period of time over which it is collected, the more confidence everyone can have in the evaluation" (Davies, 2000, p. 68). In addition to having a range of data over time, Davies (2000) also strongly recommends that teachers triangulate their assessment by gathering data from three points: observations, products, and conversations (p. 35). With this data, it is possible to modify instruction and repoint students back to the end goal/standards of the course.

4.5. Standards Based—Bringing It Together

This journey and action research began with the work of Robert Marzano. Marzano has generated extensive writings about the concept of standards based education. According to Marzano's (2007) approach, the first and most important step an educator can make is to define and examine the standards that their students are supposed to achieve. Scherer (2001) poses that this has been an ongoing process at both the state and national level and that education has struggled with how to concisely and universally define what students should know and do (p. 14). Once an established end goal has been determined, educators need to plan all teaching, learning, feedback, and assessments around that big picture concept.

Marzano's research focuses on how modifications in classroom assessment can result in dramatic gains in student knowledge. The heart of this transformation and growth rests in communicating with students about where they are supposed to go. Standards-based classrooms allow for rich conversation where all students are capable of learning. Marzano (2007) proposes that in a standards-based classroom, there is less focus on traditional grading and a heightened focus on growth over time. This point of view pairs nicely with foreign language learning, because the ultimate goal of language learning is language fluency, and this skill can enrich a student throughout their lifetime. Additionally, the 0-4 scale (see Appendix A) mentioned in the work of Marzano (2007) and O'Connor (2007), provides a platform for recognizing a student's ability to make what Marzano argues are "inferences and applications that go beyond what was taught in class" (2007, p. 112). For students who truly want to be able to use Spanish in spontaneous conversations, it is essential that there be some sort of framework that both expects extemporaneous, out of class use and that scaffolds students to move towards meaningful communication. To that end, standards-based can also function as mastery learning. This study tracked student growth over time and allowed students to resubmit work samples to show development and mastery toward the standard being practiced.

One of the most significant aspects of standards-based used in this study to build a classroom where this research took place was to redirect assessment to include formative and summative forms. Formative assessment provides evidence so that the student and teacher can review how the student is progressing towards an established standard before a high stakes summative assessment takes place. According to Marzano (2007), formative assessments "should be frequent" and give a teacher guidance on what and how to reteach concepts when necessary (p. 106).

Standards based also works to take the subjectivity out of grading, which Marzano (2007) and O'Connor (2007) both decry as commonplace in traditional score systems. While no teacher wants to view themselves as partial, traditional forms of assessment often prize extracurricular achievements. An

example of this is a student receiving a 100% for a homework assignment for turning in a signed syllabus. While it is undoubtedly important to have a record of parental acknowledgement of the structure of a class, it is not actually something related to achieving overarching goals of the course. Standards-based classrooms focus on all content, all the time.

A standards-based classroom and gradebook offer an opportunity to clearly articulate to students what is expected of them instead of a nebulous test at the unit and course end. The standards-based approach can be easily encapsulated in the following diagram.

Distinctions between Standards-Based and Standards-Referenced Educational Systems

Standards Based`	Standards Referenced
• System based on defined number of learning levels • Students advance through the system based on achievement of each level • Standards are used to guide curriculum and student progress is measured and used to determine advancement • Students advance through system at their own pace • Learning is the constant; time is the variable	• ` System based on traditional grade levels • ` Students advance through the system at the same pace as other students of the same age • ` Students will advance with varying levels of knowledge and skills • ` Standards are used to guide curriculum and measure student progress • ` Some promotion decisions may be made based on standards • ` Time is the constant; learning is variable

(http://www.maine.gov/education/sbs/documents/RobertMarzanoResearchSBS.pdf)

The standards based approach relies heavily on the concepts of formative and summative assessment. Not only is the idea of assessment an ongoing process, it is one that is shared continually with students. Stiggins (2007) notes that

> by providing [students] with continuous access to descriptive feedback that shows them how to do better next time. And [helping] them learn to self-assess so that, over time, they can generate their own descriptive feedback. When we do these things, we bring our students to a place where they are partners with us, their teachers, in setting goals for what comes next in the learning. This builds a strong sense of academic self-efficacy (pp. 74-75).

When students understand what they need to do and have a well-developed sense of self-efficacy coupled with motivation, they are "more likely to focus on effort and have learning goals (mastery) instead of performance/grade goals" (Burney, 2008, p. 133). Additionally, with multiple opportunities for students to re-turn in work, the end goal becomes learning, not punishment or just grades. Guskey (2007) asks teachers to begin thinking a little differently about grades and learning; achieving our end goal of effectiveness "is not based on what [we] do as teachers. Rather, it [should] be defined by what [our] students are able to do" (p. 20).

Moving from performance (grade) goals to mastery goals in learning is a significant mind shift for second-language students. However, it is an important one. As explored briefly above, frustration tolerance is an important socio-cognitive skill for learners. A standards-based classroom supports the concept of mastery approach rather than the performance or grade approach. Burney (2008) notes, "those students with a mastery orientation will likely change strategy in the face of difficulty and persist in the pursuit of the goal. Students with a performance goal orientation will generally withdraw effort when they find failure" (p. 133). There are innumerable obstacles to achieving language fluency. One of the

most important tasks that a teacher has is helping students to keep the long term goal of communication in the second language being studied will help them persevere when they fall on their proverbial linguistic face.

As discussed earlier, motivation and self-efficacy are crucial in second language acquisition. Learner autonomy was first defined by Holec (1981), and it allows for collaboration in establishing the end goal, analyzing formative assessment and content, and sharing in learning. Little (2013) gives a fuller definition: "autonomous learners understand the purpose of their learning programme, explicitly accept responsibility for their learning, share in the setting of learning goals, take initiatives in planning and executing learning activities, and regularly review their learning and evaluate its effectiveness" (¶2). Learner autonomy is considered key in current modern language research (Usuki, 2002; Tsang, 2005). Marzano (2011) supports this view and describes this as one of the best practices a teacher can use to move students forward. Davies (2007) also highlights the importance of learner autonomy by stating, "when students are involved with the assessment process—by co-constructing the criteria by which they are assessed…they learn more, achieve at higher levels, and are more motivated" (pp. 31-32).

Each of the theorists mentioned above offer a unique puzzle piece that can be used to form a larger, more complex view of teaching and learning in the foreign language classroom. A standards based pedagogy which focuses on mastery learning can help move students towards self-efficacy and therefore motivate them to metacognitively take ownership of their learning in a more meaningful way.

5. Methodology

Data were gathered for this action research based on the framework laid out by Burnhardt (2004). Triangulation was achieved by gathering a range of process, demographic, perception, and achievement data. To ensure further validity and credibility, participants were allowed to self-select involvement in member checking the data in an ongoing, organic process. Burnhardt's (2004) measures of data build a context for reliable measurement of the effectiveness of the action research; to this end, data were gathered in the following categories.

1. Demographic data was comprised by student age, gender, ethnicity, number of years in language courses, and any school based programs—gifted, special needs, pyramid of intervention, remedial, etc.
2. Perception data formed perhaps the most significant collection category as the research question focused on efficacy and student perceptions of locus of control. To this end, data were gathered via likert surveys (Ghonsooly & Elahi, 2010; Adediwura, 2012) administered at the beginning and end of the course with additional open ended questions to gauge the extent students understood objectives/felt that they could master them/had control over their learning and grade. Additional data were gathered throughout the course via monthly journal entries. Student interviews were conducted formally and informally at the end of the course. Teacher perceptions were obtained by a research diary and interviews with the next level language teacher.
3. Achievement data were also important. As the research question focused on mastery learning and standards based pedagogy in relation to the gradebook, students were allowed to turn in work to meet a standard multiple times throughout the unit until the unit ended or they obtained a satisfactory grade. To that end, the number of times that students re-turned in assignments and the growth shown were tracked throughout the course. Each attempt had to be something that the student had completed in the unit, but not the same original assignment. These new assessments allowed for learner autonomy as well as development of metacognitive awareness; with each re-attempt, students had to elucidate the reasons that the second submission was better than the first by writing a paragraph in English specifically relating to the standard. Another

significant rule established collaboratively with students entailed that grades could only rise. Second, third, or fourth attempts could only help a student's average. Pre and post test data were gathered, as well as the final assignment grade—whose rubric was developed collaboratively with students in regards to their strengths and state/national standards. The last substantial achievement data gathered were the results of the WebCAPE exam, a nationally used language placement exam at the university level.

4. Process data were essential for this action research as the procedures developed and established would be what influenced self-efficacy and motivation. To this end, Marzano's (2007) work with rubrics was central. A generic 0-4 scale (Marzano, 2006) was developed and used with every assignment. Additionally, assignments were broken down into different domains based on the ten standards with learning targets from the American Council on Teaching Foreign Language and the Georgia Performance Standards. Each learning unit was designed to have multiple assignments that measured each of the ten standards with only one required submission. Students were allowed to submit work that showed mastery of standards throughout the unit, and the number of times students chose to submit other work in order to show improved mastery/higher grade was tracked. Rubrics were developed collaboratively with students for the final project, and significant attention was paid to allowing student commentary and discussion regarding grading in class throughout the semester. See appendix A for all rubrics and standards shared with students.

5. Research Design and Implementation

This study focused on whether the implementation of a pedagogy focused on standards-based mastery learning would influence student efficacy and motivation in regards to language learning. The dependent variables for this study were student achievement and perception; the independent variables were the process changes made in regard to how assignments would be assessed and also the policy change that allowed students to re-turn in work until they achieved a grade they were comfortable with or the unit ended.

The achievement results were determined by a single group pre-test post-test design. There was no control group, and therefore concerns about replication or wider validity are present.

This qualitative research relied heavily on student responses to the twenty question Likert survey developed and administered at the beginning and end of the course. The survey was developed based on work done with second language learners and research focused on efficacy in learning; the rating scale ranged from *strongly agree* to *strongly disagree*. The survey also had two open ended questions at the end designed to specifically address the grade a student would and did receive in class.

In addition to the survey, students responded in the target language to journal topics throughout the course such as *"¿Cómo te sientes de esta nueva manera de recibir notas?"* (How do you feel about the new way of receiving grades?) *"¿Estás cómodo/a en expresar tus pensamientos al respeto a tus notas?"* (Are you comfortable about communicating your thoughts in respect to your grades?) *"¿Si fueras el/la maestro/a, qué cambarías al respeto a dar notas?"* (If you were the teacher, what would you change about the grading system?) *"¿Piensas que con esta forma de notas, aprendes más?"* (Do you think that with this grading system, you are learning more?)

In addition to these journal entries, there were several anonymous ticket-out-the-door style queries in both the target language and English to establish whether students understood mastery learning grading and how their work was being assessed in relation to state and national standards, whether they felt comfortable asking for clarification/questioning the teacher, and if students felt that the teaching matched the assessments students were asked to do. By allowing both anonymous and identified check-ins,

traditionally marginalized figures (students) were allowed to have principal feedback in the classroom/grading norming experience as well as the research, which is always a concern when there is a power differential between subject and researcher (Weis & Fine, 2000).

6. Discussion

Brown (2004) notes in his work, that while Standards-Based classrooms have many aficionados with numerous anecdotal stories about its efficacy, there is very little hard research proving that this approach makes a difference in student learning. This paper helps to fill that gap. The study found that students made dramatic gains in achievement as well as strong growth in the sociocognitive domains of self-efficacy and motivation. Results discussed will come from the pre- and post-Likert surveys, open-ended commentary from students such as ticket-out-the-door anonymous check-ins, journal entries, etc., as well as from the results of the WebCAPE exam. Full data from the Likert survey can be found in Appendix D.

The pre-class survey was administered during the first week of class after students had been exposed to the 0-4 rubric, the state and national standards, and the rationale for the course. Students had already participated in the first norm-setting session/family meeting, and they had the opportunity to ask questions about the whys and hows of the new grading system. The post survey was given the last week that students were in class, after they had completed all requirements for the course except for the final exam. There were some small discrepancies in the numbers due to students being absent, leaving boxes unchecked, or having unclear answers. The box below shows the pre-(top) and post-(bottom)results of the ten most pertinent questions as defined by the researcher. The complete Likert results can be found in Appendix D.

Table 1
Likert Survey Results

	ALWAYS	MOST OF THE TIME	ABOUT ½ OF THE TIME	RARELY	NEVER
I understand what I'm supposed to be learning in Spanish class.	11	20	3		
	22	12	3		
I am confident in my own ability to learn new things in Spanish.	14	14	5	2	
	16	17	4		
I take initiative to learn.	15	14	4		
	17	16	5		1
I have a way of organizing my studying that makes sense to me and is helpful in my learning.	13	14	7	2	
	19	12	5	1	1
I can motivate myself to finish my assignments when I am distracted.	12	17	6	1	1
	13	18	5	1	1

I consider my teacher's introductions, objectives, and instructions as essential for my studies.	23	13	2	
	22	14	4	
I am confident that I understand what is expected from me for summative (end of unit) assessments.	21	14	2	
	19	16	4	
I think that my teacher uses my formative (throughout the unit) assessments/activities/performances/products to help me learn better.	17	19	1	
	27	7	5	
I can use my formative (throughout the unit) assessments/activities/products/performances to help me learn better.	19	15	3	
	21	14	3	1
As a student, I believe that I am responsible and/or accountable for my grade.	36	2		
	36	3		

There are several findings from the survey that are of particular interest to this research. The number of students who responded "always" to the question about whether or not they understood what they were supposed to be learning in Spanish doubled. Conversations about the state and national standards truly saturated the course. This was reflected in student commentary as well. For example, one student noted, "I could focus more on learning instead on completing every little bit of work like worrying about worksheets and stuff."

Perhaps most applicable to foreign language practitioners is the last question on the survey—*As a student, I believe that I am responsible and/or accountable for my grade*. While the number or responses did not vary on the survey, student explanations reinforce why this is a positive pedagogical approach. Of the free response answers, 41% of students noted that mastery learning really pushed them to work harder and learn more. From the succinct: "It made me try harder" to the more thoughtful: "it changed me a lot because it made me try harder and really made me feel responsible for my grade," students truly began to grapple with the concept of ownership in the language and the course. One student picked up on the difference of focus in assignments between a traditional course and one that was standards-based and mastery focused—" It made me want to try harder to get that 4 on something that would otherwise be a free 100 daily grade in class."

As Marzano (2007) and Stiggins (2007) write, formative assessment should truly drive the teaching and learning in a class. A mastery-focused pedagogical approach requires the classroom teacher to be constantly surveying students and checking on their growth. Nearly 70% of students responded that the teacher always used the formative assessments to help plan for their growth. In one ticket-out-the-door check-in, a student wrote that "you help stay on top of me and push me." With formative assessment playing out as an ongoing conversation, it is possible to truly know how students are progressing. Another student wrote, "I feel challenged to do my best. You're flexible about assignments." Students could choose which artifacts to submit for formative assessment re-dos. As the Likert survey shows, there was small growth for students as they learned how to use formative

(throughout the unit) assessments to help themselves learn better. Another student commented, "[I] know what I need to work on [now]" instead of a general desire to 'get better.'

Students showed growth in the extremely important metacognitive domains of self-efficacy and motivation as shown in the survey results above. 82% of students responded that they always or most of the time have a way to organize their knowledge and study that makes sense to them and helps them learn. Also, 82% of students always or most of the time were able to motivate themselves to finish assignments when they were distracted. At the end of the course, 89% of students were able to say that always or most of the time they felt confident in their abilities to learn new things in Spanish. As part of an exit evaluation one student commented, "I've gained a tremendous amount of knowledge, and if I was dropped out of a plane into a Spanish speaking country, I could survive!" Another learner shared, "For once, I finally feel confident in Spanish!"

According to perception data explored above, students made growth in the sociocognitive domains of self-efficacy and motivation as a result of the standards-based mastery-learning pedagogy. Students grew to be more confident in their own linguistic risk-taking behavior—*I believe that I can become as fluent as I desire in Spanish*—and in their ownership of the course as evidenced by the numbers above.

There were two different forms of achievement data used. The first was the WebCAPE exam. WebCAPE was developed at Brigham Young University in their Humanities department to accurately and quickly assess language levels in incoming students. According to the host website,

> Computerized Adaptive Placement Exams (CAPE) use state-of-the-art computer testing techniques to accurately and efficiently place students in the first two years of college language courses. CAPE selects each test item as a result of the answer to the previous question. When the student answers an item correctly, a more difficult question is presented; if an item is answered incorrectly, an easier question is given. In short, the test "adapts" to the student's level of ability and will accurately determine the student's competency level in about twenty minutes (Perpetualworks.com, 2013, p.2).

This was noteworthy, because the department goal for Spanish levels I and II were to match the equivalent of university 1000 level courses. For Spanish levels III and IV, department members took state and national standards alongside the syllabi from 2000 level Spanish classes of prominent state universities to develop course work. The goal of the department was to thoroughly prepare students that participated in levels I-IV to enter the university ready to minor or major in Spanish by skipping ahead to more challenging and compelling courses.

Students took the WebCAPE exam for Georgia State University at the beginning of their Spanish IV course. The data are not pure, because there was no control group that did not participate in the standards-based pedagogy. Additionally, not all students proceeded on to Spanish IV. There was some attrition, and a few students were absent on the day that the class tested. However, the data in the chart below are fascinating.

Table 2
WenCAPE Results

WebCAPE Results	Corresponding University Placement (Beginning with)	Number of Students at Level	Percentage of Participants at Level
100-199	Spanish 101/1001	2	9%
200-299	Spanish 201/2001	8	36.4%
300-399	Spanish 301/3001	9	41%
400-499	Spanish 401/4001	0	0%
500-800	Graduate Level	3	13.6%

There are undoubtedly some concerns that a computer test would not be an accurate reflection of an individual's linguistic ability—which is much more fluid, dependent on situation, and includes the competencies of speaking and listening as well. However, these are extremely promising results. Also, it should be noted that in the highest level are two heritage speakers (although they have lived in the United States most of their lives) and the third has been dating a heritage speaker for several years. This represents a significant growth over last year's scores according to the Spanish IV teacher.

The second indicator of achievement data used was the number of times that students would re-attempt formative assignments in class. The ground rules established collaboratively about the resubmission were that students were responsible for deciding what other artifact to turn in—the teacher would not develop additional assignments for this purpose—the artifact had to match the standard in question, students had to write a paragraph in English giving specific examples why the second (or third, etc.) attempt was better, and the artifact had to be turned in before the end of the unit. 63% of students in the class took advantage of this policy. Of the students who did not, 4 had an "A" average at the end of the semester, 4 had a "B," 5 had a "C," and 4 failed the course. Interestingly, of all of the students who chose not to attempt to improve their formative assessments and made an "A" in the class, not a single one of them was a heritage speaker.

There were forty formative assessments given over the span of the semester. This is lower than the original plan—to have one formative assignment for each of the ten standards for each unit for a total of 60 samples—but the semester passed so quickly that the initial goal had to be modified. Students submitted 60 re-attempts throughout the course. 10 students resubmitted one artifact, 12 turned in two, 1 student turned in three, and four students turned in four or more artifacts. The highest number of reattempts was 6.

Everything was graded on the 0-4 scale (see Appendix A), and the average of the growth in scores is 1.25 (or 31.25% on the 0-100 scale) between the initial assessment and the resubmission. There were three students who resubmitted and did not raise their scores, and one student who turned in four different artifacts until she finally got the grade she wanted. The largest growth was from 1.5-4 (37.5% to 100%), and the smallest growth was of .25 (6.25%).

Table 3
Resubmissions

Student	Growth	Average	Number of Attempts
A	2-4, 2.5-4	1.75—43.75%	2
B	3.5-3.75, 3.5-4	.375—9.38%	2
C	3.5-4, 1.5-4, 2-4, 3-4, 3-4, 2.5-4	1.42—35.42%	6
D	3.25-4	.75—18.75%	1
E	2.5-4	1.5—37.5%	1
F	2.5-3.5	1—25%	1
G	2.5-2.75, 1.5-4, 2.5-3.75, 2.5-4, 2.5-4	1.4—35%	5
H	1.5-3, 2.5-3.75	1.375—34.38%	2
I	2.5-2.5, 2.5-4	.75—18.75%	2
J	2.75-3.75, 2.5-4, 1.5-3.25, 2-3.25, 2-4	1.5—37.5%	5
K	2.75-4, 2.75-4	1.25—31.25%	2
L	3-4, 3-4	1—25%	2
M	2.5-3.5	1—25%	1
N	2.5-3.75, 2.5-4	1.375—34.38%	2
O	3.5-4, 3-3.75	.625—15.63%	2
P	1.5-3.25, 2.5-2.5, 2.5-4, 2.75-4, 2.75-4, 2-4	1.34—33.34%	6
Q	2.75-3.75, 2-4	1.5—37.5%	2
R	2.5-4	1.5—37.5%	1
S	3.5-4	.5—12.5%	1
T	2.5-2.5	0—0%	1
U	2.5-3.5	1—25%	1
V	1.5-4, 2-4	2.25—56.25%	2
W	2-4, 2.5-3.25	1.88—46.88%	2
X	3.75-4, 2.5-3.25	.5—12.5%	2
Y	2.5-4, 2-4, 2.75-4	1.58—39.58%	3

Other data gathered include the researcher's own perceptions and the point of view of the Spanish IV teacher. Both educators report a positive, strong growth in student knowledge as compared to the previous year's students. Students were also noted to be more aware of the standards generally as well as more confident in advocating for their grades and asking questions in class.

6. Conclusions and Recommendations

This study looked at how a standards-based and mastery-focused pedagogy would influence student perceptions of self-efficacy and motivation as well as achievement. The perception data were gathered via pre- and post-class Likert surveys, journal entries, ticket-out-the-door check-ins. Students showed growth over the course of the semester in the domains of understanding class standards, an awareness and use of formative assessment to improve their own learning, and in feeling capable of their abilities in Spanish. Achievement data were gathered via the WebCAPE exam and by tracking the number of times students would resubmit assignments for mastery learning. Student scores on the WebCAPE exam were higher than the year before, and they showed high levels of achievement. Nearly two thirds of the class used the opportunity to return in assignments to raise their grade.

This action research is grounded in the premise that the researcher has as much to learn as the potential audience of a paper. As discussed earlier, most teachers would probably say that they plan around and use state and national standards in their course. Before beginning this research, the researcher would have said the same. However, by diving deeply into what it really means to teach with

standards and mastery-focused, the researcher grew as much as or more than the students over the course of the semester. Individually as a practitioner and then collectively with students, the class grappled with how to teach and learn more effectively. The class also spoke a great deal about the linguistic process of language acquisition. Instead of a blanket, easy statement like, "you should learn to trust yourself when you speak Spanish!" the class teased out how the intersection of personality, cognition, and drive influence our ability to communicate.

The data in this research show that in both perception and achievement, students made remarkable gains. The data systematically gathered here help address the need that Brown (2004) outlines in his work for research to support true standards-based classrooms. Students showed strong scores in the WebCAPE exam, putting 91% of them in intermediate or advanced university courses after only three classes at the high school level. Students also grew according to perception data in understanding of the end goals of the course and in feeling that they were able to become fluent in Spanish. Almost universally, students commented that the class was more difficult, and they believe that they were significantly stronger Spanish speakers

While the students did demonstrate definite progress, there are still some challenges that must be addressed. To begin, it is essential to offer students feedback quickly on formative assessments so they can make the necessary adjustments in learning. However, with forty three students in class and a block schedule, it was very difficult to grade artifacts quickly enough. Some thought also needs to be put into deciding what should be graded this cannot easily recommend this to another language practitioner without resolving realistically how to give enough formative assessments to guide instruction yet avoid excessive time spent grading. Regardless, this approach shows a promising practice for language educators to consider.

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Appendix A

Score **4.0**	In addition to Score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.
3.5	In addition to Score 3.0 performance, the student demonstrates partial success at inferences and applications that go beyond what was taught.
3.0	There are no major errors or omissions regarding any of the information and/or processes (simple or complex) that were explicitly taught.
2.5	There are no major errors or omissions regarding the simpler details and processes, and partial knowledge of the more complex ideas and processes.
2.0	There are no major errors or omissions regarding the simpler details and processes, but there are major errors or omissions regarding the more complex ideas and processes.
1.5	The student on their own demonstrates partial knowledge of the simpler details and processes, but there are major errors or omissions regarding more complex ideas and processes.
1.0	With help, the student demonstrates a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.
0.5	With help, the student demonstrates a partial understanding of some of the simpler details and processes, but not the more complex ideas or processes. Student is incomprehensible to listener/reader.
0.0	Even with help, the student demonstrates no understanding or skill of topic, OR student did not turn in the assessment.

Appendix B

PS 1		**Interpersonal speaking & listening: Students engage in conversation, provide and obtain information, express feelings and emotions, and exchange opinions.**
	LT 1	Students will be able to engage in unrehearsed conversation by obtaining and providing information about familiar topics by asking and answering questions using the present, past, and future tenses.
	LT2	Students will be able to engage in unrehearsed conversation by expressing feelings and emotions, and exchanging opinions about familiar topics.
		Commentary:
PS 2		**Interpersonal writing & reading: Students engage in written conversation, provide and obtain information, express feelings and emotions, and exchange opinions.**
	LT 1	Students will be able to engage in written communication by obtaining and providing information about familiar topics by asking and answering questions using the present, past, and future tenses.
	LT 2	Students will be able to engage in written communication by expressing feelings and emotions and exchanging opinions about familiar topics.
		Commentary:
PS 3		**Interpretive listening: Students understand and interpret spoken language on a variety of topics.**
	LT 1	Students will be able to understand and interpret spoken language about a variety of familiar topics using everyday words, phrases, and questions in the present, past and future tenses.
	LT 2	Students will be able to understand and interpret main ideas and some details in spoken sentences and short conversations using different forms of media.
		Commentary:
PS 4		**Interpretive reading: Students understand and interpret written language on a variety of topics.**
	LT 1	Students will be able to understand and interpret written texts about a variety of topics that contain familiar vocabulary in the present, past, and future tenses.
	LT 2	Students will be able to understand and interpret main ideas and many details in written texts about a variety of topics using familiar and unfamiliar words in the present, past, and future tenses.

		Commentary:
PS 5		**Presentational Speaking: Students present information, concepts, and ideas to an audience of listeners on a variety of topics.**
	LT 1	Students will be able to orally present information about familiar topics using complex sentences.
	LT 2	Students will be able to orally present concepts and ideas with some details about what is read, heard and seen.
		Commentary:
PS 6		**Presentational Writing: Students present information, concepts and ideas to an audience of readers on a variety of topics.**
	LT 1	Students will be able to write a clear, detailed paragraph on familiar topics and experiences using present, past, and future tenses.
	LT 2	Students will be able to present concepts and ideas in a multi-paragraph essay.
		Commentary:
PS 7		**Cultures—students demonstrate an understanding of the practices and perspectives, and products and perspectives of the cultures studied.**
	LT 1	Students will be able to demonstrate an understanding of the practices (patterns of behavior) and the related perspectives of the cultures studied.
	LT 2	Students will be able to demonstrate an understanding of the products (tangible and intangible) and the related perspectives of the cultures studied.
		Commentary:
PS 8		**Connections—students reinforce and further their knowledge of other disciplines such as history, literature, and geography through the world language and its cultures.**
	LT 1	Students will be able to further their knowledge of history through the world language and its cultures.
	LT 2	Students will be able to further their knowledge of geography through the world language and its

		cultures.
		Commentary:
PS 9		**Comparisons—students demonstrate understanding of the concept of culture and recognize distinctive viewpoints through comparisons of the cultures studied and their own.**
	LT 1	Students will be able to demonstrate an understanding of the concept of culture (such as by indentifying beliefs and attitudes and recognizing distinctive viewpoints) of the culture studied and to make comparisons with their own culture(s).
		Commentary:
PS 10		**Communities—students use the language both within and beyond the classroom for a variety of purposes.**
	LT 1	Students will be able to use the language beyond the typical classroom experience and reflect on the experience.
		Commentary: