# The Effect of Self-Selected Inquiry Projects

on the

Perceptions of Students' Literacy Engagement and Motivation

by

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#### Abstract

The purpose of this study was to examine students' perceptions of literacy engagement and motivation before and after the introduction of self-selected inquiry projects. The participants in this study were twenty-five second grade students from one class in a public elementary school in Maryland. This descriptive research design used a researcher-designed pre-and post-survey. After participating in self-selected inquiry through Genius Time, pre-and post-intervention data were compared and changes to students' perceptions were noted. The findings of this study indicate that there is a positive effect on literacy engagement and motivation when students participate in self-selected inquiry projects.

#### CHAPTER I

#### INTRODUCTION

#### Overview

As the skills and knowledge required of a globally competitive 21<sup>st</sup> Century workforce continue to change, so must the expectations and outcomes of students who will be entering this workforce. For students to be equipped for work and life in the 21<sup>st</sup> Century, they will not only need to prepare for jobs that require specialized skills and training but also have the desire to continue to learn and grow as the nature of the work itself continues to change. Beyond basic academic content knowledge requirements, students will be required to develop competencies in life and career skills, such as initiative and self-direction, productivity and accountability, leadership and responsibility along with skills in learning and innovation that focus on creativity, critical thinking, communication, and collaboration (21st Century Skills, Education & Competitiveness: A Resource and Policy Guide, 2008) for jobs that will require sustained commitment to project and problem based work.

To develop these critical skills and competencies, it will be necessary for students to move beyond the rote memorization and fundamental skills required to complete rudimentary tasks and basic algorithms required in classrooms of the past. Direct instruction, while still of value, can no longer remain the primary form of instruction. For 21<sup>st</sup> Century learners to become, and remain, engaged and motivated to learn, educators will need to provide these students with more authentic, thought provoking, and relevant learning opportunities.

This researcher's school district, along with many others across the country, has responded by challenging teachers of all disciplines and grade levels to create classroom environments that are more learner centered; engagement, rigor, and relevance must be at the forefront. This challenge has led educators across the country to revisit the inquiry based learning models and methods of the past and create new ones. Genius Time, Passion Projects, and 20% are all examples of inquiry based learning models that have emerged. The difference between these models and previous models is the added dimension of student choice. This choice provides the authenticity and relevance necessary for students to sustain engagement and remain motivated to learn over an extended period of time. It also provides students with a sense of ownership of their learning as they make use of the resources both inside and outside the classroom. The role of the teacher during inquiry learning is also different. Teachers become the facilitators of learning rather than the dispersers of information. Mini-lessons focus on the needs of the students as they arise during their research and project development and assessment is based on the progression of skills development throughout the inquiry process. This highly personalized and active learning environment creates a sense of empowerment where curiosity and creativity drive the acquisition and integration of knowledge (Harvey & Daniels, 2009).

Research suggests that students who participate in authentic learning activities and projects, not only perform better on tasks and learn more but are also more engaged and motivated to learn. Throughout this type of inquiry, students develop the higher order thinking skills necessary to become critical thinkers who are able to write and speak effectively and with authority (Barron & Darling-Hammond, 2008). For the purpose of this study, the researcher used a primary adaptation of Genius Time. Students selected a topic of interest, generated researchable questions, then chose a presentation format.

It was the goal of this study to determine if a sample of second grade students viewed their literacy engagement and motivation differently after participating in self-selected inquiry learning during Genius Time.

#### **Statement of Problem**

This study sought to determine whether self-selected inquiry projects would affect the self-reported literacy engagement and motivation of second grade students.

# **Research Question**

What are students' perceptions of literacy engagement and motivation before and after the introduction of self-selected inquiry projects?

A one-group pre, O X O, pre- and post-intervention survey involving a single group of students was chosen for this study. The entire group participated in the survey (O), received the treatment (X), then participated in the survey again at the conclusion of the treatment (O). The pre-and post-survey data were compared in order to determine the effectiveness of the treatment.

## **Operational Definitions**

Self-reported literacy engagement and motivation may be defined as the students perceived literacy engagement and motivation. Literacy engagement and motivation was measured by calculating the results of the researcher-designed engagement and motivation surveys.

Self-selected inquiry projects may be defined as non-teacher assigned research projects that require students to develop a question or questions to answer after consulting multiple resources that result in a presentation of their learning.

**Literacy motivation** may be defined as a student's intrinsic desire to spend time reading and/or writing.

*Literacy engagement* may be defined as a student's active time on task. Curiosity, interest, and enjoyment provide the perceived value necessary for students to persist.

#### **CHAPTER II**

#### A REVIEW OF THE LITERATURE

#### Overview

Genius Hour, Passion Projects, and 20% Time in classrooms are forms of inquiry learning that may be either project- or problem-based. What sets these types of inquiry learning approaches apart from the more traditional approaches is that the inquiry is designed by the students and focuses on learning experiences that they find relevant and meaningful. This literature review examines the link between literacy engagement and inquiry learning, its relevance, and how innovative learning experiences impact what teaching and learning look like in these classrooms.

The review begins by providing a context for inquiry learning and identifying its place in the 21<sup>st</sup> century classroom. Section two discusses the characteristics of engaged readers versus disengaged readers. Section three describes the connection between self-selected inquiry and engagement. The final section provides strategies for developing an engaging classroom environment through self-selected inquiry.

# The Relevance of Inquiry Learning

With concerns about global competitiveness and the ever-changing global economy, the call for change in the way in which teaching and learning occur in classrooms across the United States has never been stronger. In response to this call, leaders from education and business along with parents, students, and policymakers have worked together in developing a shared

vision and a framework for 21<sup>st</sup> century learning that might be used to help prepare the youth of the United States for their entry into the global economy.

Highly competitive companies in growth industries are looking for workers not only with higher degrees of education but also workers who can communicate well with others, work collaboratively in teams, manage themselves and information, solve complex problems creatively, and generate new ideas and knowledge. To address this demand, *The Framework for 21st Century Skills, (2008),* proposed the addition of learning and innovation skills. Under this umbrella fall the skills and behaviors that are often associated with creativity, innovation, critical thinking and problem solving, communication and collaboration (21st century skills, education & competitiveness: A resource and policy guide 2008). The inclusion of these skills as part of an educational policy guide has helped set the stage for the transformation of the current model of teaching and learning from one where students are passive recipients of information to one where students are innovators, actively engaged in the learning process. This proposed transformation in educational practices has also set in motion a renewed focus on inquiry-based learning (Harvey, 2002; Liu, 2016).

Various approaches to inquiry learning have come in and out of vogue for many years. Early forms of inquiry often revolved around a unit of study or a single broad topic. Big questions, guiding questions, or essential questions were designed to provide students with a purpose for learning and the units typically ended with some type of project or presentation (Wilhelm, 2007). While teachers noted an overall increase in student engagement with these early inquiry models, students often remained disinterest in final projects and/or presentations due to the lacked authentic purpose or audience (Cianciolo, Flory, & Atwell, 2006). The components that were missing were voice and choice. For students to become truly engaged in

inquiry, and the classroom in general, they would need to take more responsibility for what they were learning and how they were learning it (Harvey & Daniels, 2009).

This shift to a more student center environment would also mean a shift in the role of the teacher from that of exclusive instructor to that of learning coach or mentor (Barron & Darling-Hammond, 2008). No longer would the classroom teacher be the transmitter of information and overseer of rote memorization. Instead, the role of the teacher in an inquiry-based classroom would be one of learning facilitator. By providing opportunities for scaffolding, questioning, researching, collaborating and presenting learning can be differentiated and students can be guided through the processes of inquiry.

#### **Literacy Engagement**

Literacy engagement consists of observable behaviors as well as cognitive, motivational, and social attributes that are essential to the development of reading success. Students who are engaged readers are intrinsically motivated by several factors including curiosity, involvement, preference for challenge, and desire to read. Engaged readers are those have acquired the cognitive strategies necessary to tackle and make meaning of a wide range of text levels and genres. They are also capable of forming and supporting their opinions about, sharing, and discussing these texts with others as well. Additionally, engaged readers often have writing skills that match their reading and can communicate and support their thinking through text based writing (Guthrie, 2004).

These reader behaviors and attributes allow others to easily recognize engaged readers and to distinguish them from disengaged readers. Engaged readers choose to read for pleasure as well as purpose. Because they can apply foundational skills as well as cognitive strategies with

efficiency they have developed the stamina to persist through more difficult texts. They spend 500% more time reading than their peers and may be observed interacting with texts for extended periods of time (Guthrie, 2004). Engaged readers are curious about their world, are able to make connections among and between things in texts and in their lives, and believe that they are good at reading (Harvey, 2002).

Disengaged readers, on the other hand, look and act very differently from engaged readers and, like the engaged reader, also demonstrate observable behaviors and attributes. These are the students who are sharpening pencils, wondering around the room, and chatting in order to avoid the task of reading. Although these students may possess the cognitive ability and foundational skills necessary to read the written word, they do not interact with the text at the metacognitive level and often view reading as a means to an end rather than a meaning making enjoyable activity. Because some disengaged readers may not yet have developed the strategies to actively engage in the processes of reading for purpose or enjoyment, or may require an active learning style, the traditional instructional setting may not be the best match (Abadiano, Turner, & Valerie, 2010; Guthrie, 2004).

## The Relationship Between Self-Selected Inquiry and Engagement

Research has demonstrated that learning opportunities that promote active learning engage students when the focus is shifted from teacher-led to student-centered. Complex, meaningful inquiry based projects that provide students with thought-provoking, authentic learning experiences have been found to be effective for promoting active learning. These types of tasks not only increase learner engagement, but also increase the engagement of the instructor (Barron & Darling-Hammond, 2008; Ji-Wei, Tseng, & Hwang, 2015). Additionally, the

literature provided evidence that the level of engagement was further elevated when coupled with student choice and autonomous learning (Harvey, 2002; Harvey & Daniels, 2009; Katrein, 2016).

Students who are given the opportunity to choose a topic to investigate that they know, care, and wonder about learn best. When provided with the opportunity to immerse themselves in topics that they are passionate about, students often dig deeper in an effort to become experts. As a matter of choice, these students may or may not collaborate with others. But, because their curiosity is driving the inquiry, much of the learning will be autonomous leading students down the path toward enhanced learning experiences (Harvey & Daniels, 2009).

#### **Classroom Strategies**

Paradigm shifts in curriculum that include moving away from traditional teacher driven instructional practices with the textbooks and teachers as primary sources of knowledge to more student-centered practices where learners of all ages construct knowledge using various computer sources that include access to the World Wide Web are on the rise. The way students are being asked to demonstrate their knowledge is also changing. Rather than passively responding to test questions, students are being asked to design and produce projects that address real world questions. Instead of being asked to memorize information, students are being asked to think and make connections and teachers are holding them accountable for their learning (Barron & Darling-Hammond, 2008).

With a greater focus on wonder, inquiry, exploration, and creativity teachers and students alike are redefining their roles and responsibilities in the teaching and learning process as well as developing constructivist behaviors inherent in these student-centered practices. Genius Hour,

Passion Projects, 20% Time, and Project-Based Learning, Inquiry Circles, and the use of Guiding Questions are examples of student centered inquiry based practices that foster constructivist learning (Rush, 2015). With each of these models, students are asked to learn more independently and work harder as they overcome challenges associated with a higher level of autonomy at an earlier age. Additionally, there is not only the expectation that students set their own learning goals but that they also possess the determination necessary to persevere through tasks necessary to achieve these goals. This is where the concept of "grit" comes into play. Students who are engaged learners develop the mind-set required to persevere through these challenges and obstacles of life and become life-long learners (Katrein, 2016).

These behaviors and attributes don't come naturally. Students need to be nurtured and supported to develop into independent learners. Teachers who fail at setting up and guiding inquiry based learning often do because they didn't fully understand the complexity of the approach. The success of inquiry learning and the development of the students' inquiry behaviors are highly dependent upon the inquiry behaviors of the teachers. Engaged teachers lead to engaged learners. Teachers who engage in and model inquiry and passion for learning create a culture where thinking and learning are valued and supported. Models that focus on building a classroom environment that promotes active learning recognize that the creative process, cognition, scaffolding responsibility, coaching, and cultivating independence are essential components of inquiry learning and must be cultivated in order for students to conduct high level inquiry (Harvey, 2002; Jones, Flohr, & Martin, 2015). Successful students are those who have been taught how to learn and can apply this knowledge to design and drive their own learning. Empowered by this sense of ownership, these students actively engage in their learning

and can take part in projects that require higher-level thinking, sustained engagement, and collaboration (Barron & Darling-Hammond, 2008).

# **Summary**

As supported by the literature presented in this review, active learners are engaged learners and engaged learners are more likely to be successful at achieving learning targets associated with reading and writing. Inquiry learning approaches are one avenue for increasing active learning and thus engagement. Students who participate in inquiry learning projects can successfully navigate learning experiences that require higher-level, critical thinking skills. They approach learning with passion and enthusiasm and, because they find relevance in what they are learn, are more likely to persist through tough tasks. When also provided with choice, students build the skills and confidence necessary to develop and demonstrate understanding well beyond the parameters the traditional tasks. These are not only the skills and behaviors associated with inquiry based learning models but also some of those identified in the Standards for the 21<sup>st</sup> Century Learner.

#### **CHAPTER III**

#### **METHODS**

The purpose of this action research study was to determine whether self-selected inquiry projects would affect the self-reported literacy engagement and motivation of second grade students.

### **Design**

This descriptive study used a pre- and post-intervention survey of a single group of students to examine the engagement and motivation of students before and after the introduction of self-selected inquiry through Genius Time. The mid-year implementation of Genius Time replaced regular instructional routines during the language arts block and was comprised of eight 60 – 90 minute sessions on consecutive Fridays. The independent variable for this study was the self-selected inquiry project. The dependent variable was the literacy engagement and motivation of the participants.

## **Participants**

The participants in this study consisted of a non-probable convenience sample of twenty-five second grade students from one class enrolled in a public elementary school in Baltimore County, Maryland. Of these students six were Black, two were Hispanic, one was Asian, and the remainder were White. Gender was divided almost equally; twelve boys and thirteen girls. The range in reading ability was broad. Multiple data points were considered in the determination of reading ability. The student participants were working from just below grade level to well above grade level as measured by MAP scores, I-ready data, classroom performance, and guided reading levels. This was information was necessary as it was used to guide student participants'

selection of resources. One student participant had a speech IEP for articulation. All but one student spoke English as their first language.

#### **Instrument**

The instrument used in this study was an eleven-question survey designed by the researcher and used to gauge the participants' motivation and engagement. Therefore, it was not tested for validity. The survey included questions related to both teacher assigned learning experiences and participant selected and directed learning experiences.

#### **Procedure**

Participants in this study completed the Motivation and Engagement Survey designed by the researcher prior to being introduced to Genius Time. Numbers were assigned to each student to encourage honesty and ensure anonymity. After distributing the survey, directions were given orally and each question was read aloud to the class. Surveys were then collected, scored, and the data recorded by the researcher.

Genius Time was then presented to the participants as self-selected research which would result in a final self-selected project/presentation. Genius Time occurred during the participant's regular language arts block each Friday for eight consecutive weeks. Genius Time sessions ranged from 60 – 90 minutes per session depending upon the needs of the participants and their time on task. While students had received previous instruction on how to conduct research, topic choice was limited to a teacher provided list. Participants were familiar with various resources available through the school districts digital platform. They had also received instruction regarding the value and usage of multiple sources of information and had experience with several forms of presentation. Therefore, the first two sessions were devoted to getting inspiration for a

topic by discovering what one is passionate about, creating a working definition for genius, asking good (non-Google) questions, and establishing expectations during Genius Time.

Check-ins were conducted throughout the study with both small groups of participants and individuals as needed. Because participants were working at their own pace on self-selected topics, research was being completed at various times throughout the study. Project possibilities and presentation formats were introduced at the beginning of session four. Choices included both digital and paper options. All participants received instruction on how to use the snipping tool. There was also a discussion about plagiarism followed by a mini-lesson on how to combine multiple sources of information into one's own words.

Participants were introduced to the basics of PowerPoint, Publisher, and Word. They were also taught how to save their work on the shared drive and how to send their work to a remote printer. Participants had had previous experience with Discovery Boards and WIXIE.

Therefore, refresher and advanced workshops were offered for students who wished to expand their knowledge and explore other features.

Although participants were expected to complete final projects independently, they were permitted to work collaboratively on research if they shared the same topic. Additionally, participants were encouraged to share their thinking, findings, and project ideas orally with peers. This provided an opportunity to generate more questions and receive feedback on their project design.

Throughout this study the teacher encouraged students who remained motivated, and demonstrated engaged behaviors during tasks. At the conclusion of the eight weeks, students once again completed the Motivation and Engagement Survey designed by the researcher. This

survey was presented in the same manner as the survey given prior to the study. After distributing the survey, directions were given orally and each question was read aloud to the class. Surveys were then collected, scored, and the data recorded by the researcher.

#### CHAPTER IV

#### **RESULTS**

The design of this study used pre-and post-intervention surveys to evaluate students' perceptions of literacy engagement and motivation before and after the introduction of self-selected inquiry projects. Since there is a strong relationship between engagement and motivation, statements were not designed to be nor were they categorized as one or the other. Instead statements were clustered as choice, work preference, or school and learning. A description of the data is presented in Table 1.

A total of twenty-five students from a single second grade classroom participated in this study. Students were asked to report the degree to which they agreed or disagreed with statements designed by the researcher. All participants responded to both the pre and posttest survey and were present throughout the study. Responses resulting in agreed/strongly agreed were combined to represent positive responses and disagreed/strongly disagreed were combined to represent negative responses. The degree to which the responses to statements changed between pre-and post-intervention ranged from 0-20% as evidenced in Table 1.

Statements 1-3 speak directly to student choice and resulted in the highest degree of change between pre-and post-intervention. When asked to respond to the statement "I have a choice about what I learn in the classroom", 60% of students strongly agreed or agreed on the pretest where 80% of students strongly agreed or agreed on the posttest, resulting in a 20% increase post-intervention. Similarly, when asked to respond to the following statement, "I like when I get to choose what I want to learn about", 68% of students strongly agreed or agreed on the posttest, resulting in a 20% the pretest where 88% of students strongly agreed or agreed on the posttest, resulting in a 20%

increase post-intervention. Finally, when asked to respond to "I like when my teacher tells me what to learn about", 60% of students strongly agreed or agreed on the pre-test where 48% of students strongly agreed or agreed on the posttest, resulting in a 12% increase post-intervention.

Students perceptions regarding work preferences were addressed in statements 3 – 4. Students were asked to respond to "I work better in a group" and I work better alone". While students' perceptions about working better alone remained the same at 40% strongly agreed or agreed on both the pre and posttest, their perceptions about working better in a decreased from pre-to post-intervention by 16% from 60% to 44%.

The remainder of the statements, 6-11, attempted to gauge students' perceptions about school and learning. When asked to respond to "I feel excited about being in school", 68% of students strongly agreed or agreed on the pretest where 76% of students strongly agreed or agreed on the posttest, resulting in an 8% increase post-intervention. Responding to the statement, "I am bored sometimes", 64% of students strongly agreed or agreed on the pretest where 72% of students strongly agreed or agreed on the posttest, resulting in an 8% increase post-intervention. The next statement, "I always do my best work", showed a slight change with 76% of students choosing strongly agreed or agreed on the pretest and 80% of students choosing strongly agreed or agreed on the posttest, resulting in an 4% increase post-intervention. Conversely, "I like to create presentations to share what I've learn", decreased by 4% postintervention with 76% of students choosing strongly agreed or agreed on the pretest and 72% of students choosing strongly agreed or agreed on the posttest. The final statement asked students to respond to "I keep trying even when the work is hard", 84% of students choosing strongly agreed or agreed on the pretest and 88% of students choosing strongly agreed or agreed on the posttest, resulting in an 4% increase post-intervention. The results of only one statement

remained unchanged from pre-to post-intervention. 80% of students strongly agreed or agreed to the statement, "I am happy to learn about new things", on both the pre and posttest. These results and their implications will be discussed in the next chapter.

Table 1

Descriptive Statistics for Pre and Posttest

Statement	% Agree/ Strongly Agree (Pretest)	% Disagree/ Strongly Disagree (Pretest)	% Agree/ Strongly Agree (Posttest)	% Disagree/ Strongly Disagree (Posttest)
1. I have a choice about what I learn in the classroom.	60%	12%	80%	4%
2. I like when my teacher tells me what to learn about.	60%	24%	48%	28%
3. I like when I get to choose what I want to learn about.	68%	16%	88%	4%
4. I work better in a group.	60%	28%	44%	40%
5. I work better alone.	40%	44%	40%	40%
6. I feel excited about being in school.	68%	8%	76%	8%
7. I am bored sometimes.	64%	20%	72%	12%
8. I always do my best work.	76%	4%	80%	4%
9. I am happy to learn about new things.	80%	0%	80%	0%
10. I like to create presentations to share what I've learn.	76%	8%	72%	16%
11. I keep trying even when the work is hard.	84%	8%	88%	0%

#### **CHAPTER V**

#### **DISCUSSION**

The purpose of this study was to examine the effect of self-selected inquiry projects on the perceptions of students' literacy engagement and motivation during Genius Time. This descriptive study utilized self-reported pre-and post-intervention survey data. Data was evaluated by comparing the results of the pre and posttests. The researcher then made qualitative judgments based upon the change in the data.

Although there was no hypothesis for this descriptive study, it was anticipated via the research question that students' perceptions of literacy engagement and motivation would reflect a positive change after participating in self-selected inquiry projects during Genius Time.

Comparison of the pre- and post-intervention surveys indicate that indeed self-selected inquiry projects do have a positive effect on students' perceptions of literacy engagement and motivation.

## **Implications**

The results of this study indicate that self-selected inquiry projects had an effect on students' perceptions about literacy engagement and motivation and that this effect resulted in a positive change to their perceptions. The greatest change occurred in students' responses to the first cluster of statements. Students were asked to respond to whether they had a choice about what they learned in the classroom and if they liked when they were able to choose what they wanted to learn. The percentage of students who agreed or strongly agreed to these statements both increased by 20 percentage points post-intervention. Additionally, the statement that asked students if they liked when the teacher told them what to do decreased by 12 percentage points.

These changes in data would indicate that more students preferred learner autonomy over teacher directed learning after participating in Genius Time.

Another interesting cluster of statements involved work habits. Students who indicated a preference for working in a group decreased by 16 percentage points post-intervention while students who showed a preference for working alone remained the same. Topics required approval and there were some minimal requirements. Otherwise, students began and finished projects at their own pace. In fact, students who finished one project immediately began work on a new topic. Therefore, it is possible that this is the result of maturation and increased confidence due to the independent nature of the research projects.

These data have a huge implication on motivation and engagement. Students who have a connection to what they are learning are engaged and engaged learners are not only motivated learners but also learners who are more likely to work harder and persist through activities that are difficult (Harvey, 2002).

#### **Theoretical Consequences**

Numerous research studies confirm that student motivation is a key factor in successful literacy development. These studies also identified choice as a key method for enhancing literacy motivation, finding that even minimal choice of reading material increases engagement in both reading and writing production related to that choice. Additionally, other studies suggest that both effort and commitment to reading increase when student choices are genuine (Guthrie, 2004). The results of the study presented in this paper support existing theories that literacy engagement and motivation are increased when student choice is present.

Genius Time, Passion Projects, and 20% Time in classrooms are a movement in education that provides students with choice about what they learn and how they learn it. This movement has sparked new interest in inquiry learning and created an opportunity for a paradigm shift toward more student-centered learning goals. In order for these more innovative learning experiences to transform curricular approaches and become a true shift in education, further investigation and justification must take place.

# Threats to Validity

While great care was taken to ensure the fidelity of this study, there are several potential internal and external threats to its validity. First, the instrument used in this study was a self-reported survey. This internal threat may be flawed by participant interpretation of the question that, in turn, could have an impact on their responses. Another possible internal threat is that of participant maturation. Though this study only lasted for eight weeks, it is possible for children of this age to change dramatically over a brief period of time thus, impacting their perceptions. Finally, the sampling method utilized for this study consisted of a small convenience sample of twenty-five participants from one second-grade classroom. This external threat to validity may limit generalizations of the results to other populations due to the very small sample size.

#### **Connections to Previous Studies/Existing Literature**

There is a multitude of research around inquiry-based learning, motivation and engagement, and student choice. However, due to the relative newness of self-selected inquiry driven learning, few studies have examined the combination of all three and no studies included participants at the early elementary level. Research that did combine the three elements were similar in nature but did not utilize surveys of students' self-reported perceptions as an

instrument for data collection. Additionally, these studies included a much larger sample size, were observational in nature, and had been conducted over longer periods of time.

One study found that inquiry based learning in primary schools had a positive effect on student engagement and motivation (Jones et al., 2015). Another study looked at the attributes of engaged readers who participated in instructional reading time designed to increase motivation and engagement. One of the components found to be effective was self-directed learning (Guthrie, 2004).

A review of the literature also revealed several summary sources that considered both the history and research behind both student choice and inquiry learning and their connection to engagement and motivation. One such summary source presented evidence to suggest that students who take part in student designed inquiry based learning experiences develop the stamina required to sustain engagement in more complex performance tasks and therefore perform better on such tasks (Barron & Darling-Hammond, 2008). The results of another meta-analysis of 41 studies that examined the effect of choice on intrinsic motivation indicated that intrinsic motivation was enhanced when choice was provided (Patall, Cooper, & Robinson, 2008).

#### **Conclusions/Summary**

The purpose of this study was to examine the effect of self-selected inquiry projects on the perceptions of students' literacy engagement and motivation during Genius Time. The results of this study suggest that students who are provided with choice during literacy activities are indeed intrinsically motivated to remain engaged in literacy activities for sustained periods of time. Indeed, students' stamina increased during the course of the study, quite possibly due to

the personal connection to their topics. Typically, Genius Time sessions lasted for one hour per week. Over time, it was observed that the students were so deeply engaged in their research that they had a difficult time stopping when the session was over.

Although it would be reasonable to assume that students in other classes would respond similarly to the introduction of Genius Time, this sample was not a true representation of the population. Therefore, further research should be conducted on a larger sample of students and for a longer period of time in order to gain a better understanding of both the short- and long-term effects self-selected inquiry projects on the perceptions of students' literacy engagement and motivation.

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