

AN EXPLORATION OF LEVELS OF CHOICE IN ONLINE ASSIGNMENTS
AND THE RELATIONSHIP TO STUDENTS' WORK
AND THEIR THOUGHTS ABOUT MOTIVATION

by

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DEDICATION

This dissertation is dedicated to my family.

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ABSTRACT

This case study explored the relationship between levels of content choice in three high school online English language arts courses and evidence of student motivation in student work and students' thoughts about motivation. These courses were designed around the main components of Self-Determination Theory (autonomy, competence, relatedness) and with a personalized learning framework. During the 2020-2021 school year, students in the courses were given reading options and writing prompts that offered "no choice" (zero options), "low choice" (2-3 options), and "high choice" (4+ options). Forty students completed anonymous end-of-course surveys designed to gather details about the relationship between motivation and levels of choice. These surveys were analyzed using a two-step coding process. Five students consented to complete non-anonymous surveys asking similar questions about the relationship between choice and motivation; analysis of artifacts created by these five students also yielded valuable supporting data. A majority of respondents found a high level of choice to be most motivating; their explanations were usually linked to autonomy and intrinsic motivation. A minority of students found no-choice or low-choice assignments to be most motivating; their explanations were linked to a desire for simplicity. Survey responses and coursework showed a preference for choice, but also a need for both competence and autonomy support in course design. Additional research should investigate the influence of other factors influencing motivation in a course, the role of competence in relation to motivation, and the role of preferred literary genres.

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LIST OF ABBREVIATIONS

ADDIE	Analysis, design, development, implementation, and evaluation
ARCS	Attention, relevance, confidence, and satisfaction
BSU	Boise State University
CET	Cognitive Evaluation Theory
COVID-19	Coronavirus disease 2019
ELA	English Language Arts
K-12	Kindergarten thru 12 th grade
IMB	Intrinsically motivated behaviors
IRB	Institutional review board
LMS	Learning management system
NGO	Non-governmental organization
OIT	Organismic Integration Theory
SDT	Self-Determination Theory

CHAPTER ONE: INTRODUCTION

The issue of student well-being has received increasing attention in schools around the world as school districts, governments, and non-governmental organizations (NGOs) continue to invest more time and resources to address well-being (OECD 2009; WHO 1998; WHO 2016). At the K-12 level, much of the investment focuses on physical health and ensuring that students have access to nutrition and sufficient exercise. These investments also focus on students' mental health, and this often comes in the form of access to counseling, social support, and mental health promotion (WHO, 1998). For example, in Los Angeles, the Los Angeles Unified School District "...recognizes the connection between academic achievement and student wellness...Student social-emotional wellness is the critical building block of student overall well-being" (Los Angeles Unified School District, 2019). Schools are not solely interested in students' academic performance—they want students to achieve academically while being healthy and happy individuals.

While there is considerable investment in improving the mental health of students, programs tend to focus on traditional interventions (such as on-site professionals or student pull-outs) and rarely attempt to integrate mental health with academic programs (Malti & Noam, 2008). A number of studies find that students at the secondary level are increasingly disengaged, demotivated, and alienated at school; some of these note that courses themselves can be a source of these problems, as a vast majority of high school students cite regular boredom in class, largely due to a lack of interesting material

(Gallup, 2016; Gillet, Vallerand, & Lefrenière, 2011; NAIS, 2015). Because it is more difficult to do research with students at the K-12 level, there are few studies that focus on the relationship between coursework and student well-being during the adolescent years, and even fewer that study the phenomenon in a qualitative way in order to explore themes in depth (using the students' own words and ideas).

This case study does exactly that: it examines how students feel about being given choice in their coursework. Encouraging autonomy in students (through choice) has been shown to have a relationship to motivation in classes, significantly predicting autonomous motivation in students (Patall, Cooper, & Wynn, 2010). Autonomous motivation, in turn, is associated with improvements in persistence and positive affect, as well as enhanced performance and greater well-being (Deci & Ryan, 2008). Motivation and optimism predict a motivated, mastery approach to learning in a statistically significant way (Phan, 2016). Based on findings from the existing literature, student choice has a clear and logical connection to motivation and, by extension, well-being (Deci & Ryan, 2008; Sheldon & Kasser, 1995). Because motivation and well-being have positive effects on academic performance, schools and districts should be particularly interested in learning how their students perceive increased autonomy through meaningful choices.

This study uses Self-Determination Theory (or "SDT") as a theoretical foundation for exploring ways in which students perceive their own motivation and well-being in relation to online instructional designs that offer them different levels of choice. This theory posits that well-being is made up of three components: autonomy, competence, and relatedness (Ryan & Deci, 2001). SDT is a leading theory of well-being; since the

1970s, it has been used in a wide variety of educational research, including case studies that explore the relationship between autonomy and motivation (Prigmore, Taylor, & De Luca, 2016). In this study, choice is used to represent the “autonomy” component of SDT as it is expressed in 9th and 10th grade online English Language Arts (ELA) courses and a high school creative writing course. According to Deci and Ryan (2008), autonomy means “to act volitionally, with a sense of choice” (p. 15). The three courses used in this study were designed to have three levels of choice: no choice (assigned readings and writing prompts), low choice (2-3 reading options or potential writing prompts/topics), and high choice (four or more reading options or potential writing prompts/topics).

Forty students answered end-of-course surveys that asked for written feedback on how levels of choice and other course/instructional design elements related to their motivation. Five students, each reporting different degrees of pre-existing motivation and well-being in relation to English Language Arts (ELA) courses, participated more directly in the study by answering non-anonymous, open-ended surveys several times over the course of a school year, by creating coursework that could be analyzed for evidence of motivation, and by exhibiting online behaviors related to motivation. All of these surveys featured questions designed to examine how each student perceived changes in well-being and motivation depending on the level of choice granted in each unit; other artifacts (such as reflective assignments and other work samples) and online behaviors were examined for evidence of motivation and well-being in relation to different units, as well as a way of triangulating survey data.

The survey data was analyzed using a two-step coding process to code student written responses with emotion coding and In Vivo coding (Saldaña, 2013). Other data

was examined for evidence of motivation and summarized in extended vignettes known as “profiles” (Miles, Huberman, & Saldaña, 2020). These analyses made it possible to gain a deeper understanding of ways in which different levels of choice (within an online course) relate an adolescent student’s coursework and perceptions of motivation and well-being.

Background of the Study

According to Ryan and Deci (2001), well-being is “optimal psychological function and experience” (p. 142). In the context of education, student well-being has been of particular interest to educational philosophers (such as John Dewey) for well over a century (Dewey, 1906; Soutter, Gilmore, & O’Steen, 2011). Because adolescent well-being is a concern for society in general, a number of organizations and governmental agencies regularly gather data on well-being; these data tell us how students are doing both in and out of school.

One study of particular interest—the 2019 National Survey on Drug Use and Health—shows that general adolescent well-being is deteriorating in recent years: major depressive episodes among 12-17 year olds increased 52% from 2005 to 2017, and increases in mood disorder indicators were found to be larger among females (Twenge, Cooper, Joiner, Duffy, & Binau, 2019). Other reports show suicide rates climbing steadily for adolescent age groups (Curtis & Heron, 2019). The COVID-19 pandemic has exacerbated adolescent mental health problems, with notable increases in overdoses, self-harm, depression, anxiety, and suicide (C.S. Mott Children’s Hospital, 2021; FAIRHealth, 2021). Furthermore, the lack of access to public school buildings has

removed access to mental health support for many students (U.S. Department of Education Office for Civil Rights, 2021).

Adolescent mental health is in decline, and K-12 schools have a difficult time meeting the challenge (Malti & Noam, 2008). In fact, many adolescents perceive school as negatively impacting their well-being (Navarro et al., 2017). Another recent study (the 2014 High School Survey of Student Engagement) finds that 39% of students report enjoying school and only 38% feel challenged by their coursework, while 86% report being regularly bored, largely because of “the material not being interesting” (NAIS, 2015). Adolescents have a developmental need for autonomy, and achieving autonomy is an indicator of a healthy, adjusted adolescent (Eccles, Early, Fraser, Belansky, & McCarthy, 1997). As autonomy is an essential component of well-being (Ryan & Deci, 2001), courses and curriculum designed to give autonomy to these students should, logically, have beneficial effects on their overall well-being; some recent studies have found similar connections (Beaton, 2010; Hafen et al., 2012). The online course designs in use for this study grant more choice than traditional ELA courses in brick-and-mortar or online courseware settings.

As the COVID-19 pandemic has caused a significant increase in students taking online courses (Lieberman, 2020), design elements emphasizing autonomy have the potential to positively impact more students than ever. By giving students multiple levels of choice in a course and then gathering data about how they *feel* about having those choices, insight is gained as to the relationship between levels of choice in an online course and student perceptions regarding their own well-being. Lindgren and McDaniel’s (2012) mixed methods study did gather data about student preferences and perceptions

related to being given choices in a course but had no specific link to any psychological theory; they were focused on gathering data on engagement and student skills. Morgan and Wagner's (2013) qualitative study found overall positive student perceptions relating to student choice in their high-school ELA course, but (again) the data was not linked to well-being in any specific way. A mixed-methods study from Pitcher et al. (2007) examined adolescent motivation in relation to reading—including how they perceived choice/autonomy as a factor in motivation—but did not address how those choices related to student well-being. Other studies have examined how different levels of choice in a course related to student performance or motivation, but these studies were either at the college level (Ackerman, Gross, & Celly, 2014; Reed, DiGennaro-Reed, Chok, & Brozyna, 2011) or in other content areas (Mozgalina, 2015).

Purpose of the Study

The purpose of this study is to explore how levels of choice in assignments relate to evidence of motivation in student work and student thoughts about motivation. Traditionally, high school ELA courses focus on teaching particular pieces of literature—a trend that continues to this day (Morgan & Wagner, 2013). Anecdotally, I was recently (2018-2019) part of the ELA curriculum committee for the school district in which I teach and found this to be true—curriculum design was based around canonical texts first, with standards alignment being secondary (instead of designing with standards as the top priority). For example, it was assumed that most 9th grade ELA classes in the school district would use *To Kill A Mockingbird* as their main novel study during the school year. The approach of telling students what they will read and then assigning common writing prompts (and other assignments) to go along with the readings is not

compatible with the adolescent need for autonomy; some researchers have found that this approach (forcing students to do things they don't want to do) has a negative effect on well-being (Grund, Grunschel, Bruhn, & Fries, 2015; Mora, 2011).

When an online course is designed to offer different levels of choice, it becomes possible to examine how students feel and act in response to these different levels. Students are able to move through the course at their own pace, choose their content, and (at times) choose what they will create (and how they will create it). Existing studies have examined how students feel about choice in certain courses—and how much choice is too much (Ackerman et al., 2014; Mozgalina, 2015; Reed et al., 2011)—but an exhaustive search of the literature has yet to reveal a study that explicitly asks students how it relates to their motivation. Furthermore, other research has noted that students' perceived competence in a subject can affect how they feel about being given choices (Patall, Sylvester, & Han, 2014). Three courses (ELA 9 and ELA 10, “core” courses, and Creative Writing, an elective) were used, as students have also been shown to have varying motivation depending on whether a course is perceived as being book-based and “boring” (Cockroft & Atkinson, 2017; Farrell, Peguero, Lindsey, & White, 1988; Mora, 2011), yet students taking elective courses are found to be easier to motivate (Keller, 1999).

Research Question

This study's research question is as follows: How does the level of choice for an assignment relate to evidence of motivation in student work samples and student thoughts about motivation?

Because the study is focused on how student motivation relates to levels of choice given in online ELA courses (and not on things such as performance on specific assessments), the most appropriate type of data is that which asks students about their motivation in relation to the different levels and available assignments. This can be accomplished with Likert-style surveys, and there are many such instruments designed to measure well-being. However, these instruments do not feature questions that could specifically link changes in well-being or motivation to course-design elements; changes in well-being could be just as easily caused by any number of outside factors, including a student's life (i.e. home life, social life) outside of that class context. Another option is to develop an instrument specific to this study, but the population in question would be too small for reliable quantitative data (the number of students in these classes is usually 25-35, with many of those only in the course for one semester instead of two; there was also a cap of 20 students in the creative writing course).

Due to these limitations (in regard to population), the most sensible approach was a case study that included survey questions asking specifically about the relationship between levels of choice in the course and motivation/well-being in a direct and simple way. Some survey questions (including selection questions and scale questions) asked students to select their most motivating levels of choice, to select which assignments they found most motivating, and to use a scale to rate their feelings about one level of choice in relation to another; answers to these questions allow a general analysis of which levels of choice students consider most motivating. These questions were followed by open-ended questions that asked for students to give explanation that would allow analysis of the relationship between those preferences, the levels of choice in question, and even

other factors yet to be investigated; answers to these questions allow an analysis of why students prefer different levels of choice and/or different assignments. Other artifacts—such as student work samples (including written reflections), discussion posts, and course activity—can also give insight as to when students are feeling motivated and to which context the motivation is related (the level of choice in a particular unit, in this case). For a detailed description of the population, see chapter 3.

Certain types of autonomy are a hallmark of many online courses, and because autonomy is one of the central components of well-being (according to SDT), instructional designers have the ability to influence a student's well-being via course design. Even so, not all courses are designed with autonomy in mind, nor are they all designed in a way to optimize student well-being through other components of well-being (such as relatedness and competence). As the courses in this study were designed with autonomy and well-being in mind, surveying students made it possible to understand how different levels of choice (being essential for feelings of autonomy) can relate to changes in a student's motivation and well-being.

Significance of the Study

Autonomy has been studied from a number of different angles. It is well-established that autonomy is essential for well-being (Ryan & Deci, 2001) and that it is particularly important for adolescents (Eccles et al., 1997). In the context of education, autonomy has been shown to have positive relationships with student engagement, adjustment, satisfaction, and certain indicators of well-being (Hafen et al., 2012; Holfve-Sabel, 2014; Jenö, Adachi, Grytnes, Vandvik, & Deci, 2019; Van Ryzin, Gravely, & Roseth, 2009; Zandvliet & Fraser, 2005). While such studies provide a good starting

point for understanding that choice in education is generally well-received by students, few studies allow for students to elaborate on why they prefer certain choices over others, and in what contexts.

In general, studies that focus on student choice don't get into fine detail about how students perceive that choice—they are mainly concerned with whether or not students simply *like* having choice, both at the college level (Lindgren & McDaniel, 2012) and at the secondary level (Barry, 2013; Morgan & Wagner, 2013; Wigfield, Gladstone, & Turci, 2016). Some go further and ask students deeper questions about how they feel about being given choices (Beaton, 2010; Morgan & Wagner, 2013). Ivey and Broadus (2001) surveyed 1,765 students about reading preferences, following up with interviews of a select group (31 students total) that allowed the researchers to tease out connections between choice and motivation; while responses did reveal that students found choice to be motivating, choice itself was not a part of any particular curricular or instructional design, nor was it connected to any psychological theories of well-being. An exhaustive literature search did not find any comparable qualitative studies that examine how adolescent students perceive choice in their learning experiences as it relates to their motivation and well-being, and to tie those feelings directly to instructional design elements.

While a qualitative, case study approach with a limited sample size is not easily generalizable to all contexts, detailed description of course design elements and the study participants make it possible for other teachers and instructional designers to decide to what extent the types of autonomy used in these courses might be suitable for their student populations. While no single study could fully encapsulate how adolescent

students feel about autonomy in ELA courses, this study will be a good starting point because of these factors: survey design and focus, instructional design (which includes regular opportunities for student reflection), and context/participant description. The study should be of particular interest to any instructional designer, administrator, researcher, or policy maker that is interested in how adolescents perceive changes in their motivation as they relate to instructional design elements—they will be finding out how dozens of adolescents feel, and in the students' own words.

Theoretical Framework

This study uses Self-Determination Theory, one of the leading theories of well-being, as a framework for examining student motivation as it relates to choices given in these three online ELA courses. According to Self-Determination Theory (Ryan & Deci, 2001), there are three components of well-being: competence (when people feel able to meet their challenges), relatedness (the presence of positive personal relationships), and autonomy (the ability to act volitionally with a sense of choice). While all three are essential to well-being and all three can be applied to online instructional design, this study focuses specifically on the “autonomy” component due to its close relationship to choice.

Choices must be meaningful to the student in order to foster autonomy (Jeno et al., 2019). To be meaningful, choices should allow students to find their own paths to a solution, evaluate ideas (their own and those of classmates), ask questions freely, and/or find tasks that line up with their own personal goals, such as choosing a reading selection in an area of interest or choosing to write about something they find important or are passionate about (Stefanou, Perencevich, DiCintio, & Turner, 2004).

Autonomy and Motivation

According to Cognitive Evaluation Theory, a sub-theory of SDT (Ryan, 1982), human motivation lies on a spectrum from amotivation (total lack of motivation) through several different types of extrinsic motivation (each with different degrees of endorsement from the person in question) to intrinsic motivation, in which a person is fully autonomous and self-motivated due to enjoyment of the activity (Ryan & Deci, 2001). The degree to which motivation is autonomous is directly related to how much a person endorses what they are doing.

Numerous studies have found that autonomy in a course has positive effects on student motivation. Jenő et al. (2019) found that higher levels of perceived autonomy predicted higher levels of intrinsic motivation—and that the intrinsic motivation contributed to improved well-being. Similarly, Van Ryzin, Gravely, and Roseth's (2009) study of 283 adolescents found that academic autonomy has a “positive effect on engagement in learning, which in turn has a positive impact on adjustment (i.e. hope)” (p. 7). Other studies of high school students have shown similar results—Hafen et al. (2012) found that perceptions of autonomy were a strong predictor of engagement.

Just as autonomy has been found to increase motivation, lack of autonomy has been found to have negative effects on motivation (Grund, Grunschel, Bruhn, & Fries, 2015; Ryan, 1995). But offering authentic choice increases student perceptions of autonomy, which in turn supports motivation (Patall, Cooper, & Wynn, 2010). Data from this study can shed light on whether a particular level of choice is more closely related to intrinsic motivation than other levels.

Motivation and Well-being

While this study is based on interest in the well-being of students, the number of factors that influence well-being (including factors outside of educational settings) would make it problematic to attempt to analyze how students perceive changes in their well-being using existing instruments and/or quantitative methodology. While they will be asked questions that do pertain to their well-being, these questions will be framed within the context of their online course modules and be specific about the relationship between motivation and levels of choice.

Motivation itself is not the same thing as well-being, but it *is* a reliable predictor of well-being, and an essential component of engagement, which can be easy to measure by observation and with digital tools built into online courses (Abuhamdeh & Csikszentmihalyi, 2012; Henrie, Halverson, & Graham, 2015; Ray et al., 2020). Motivation is also a less nebulous concept (especially for adolescent students), so asking participants about their motivation in relation to different course modules is more likely to result in clear and accurate responses conducive to qualitative analysis. Deci and Ryan (2008) noted that autonomous motivation is associated with more positive affect and greater psychological well-being. Several other studies have also found that intrinsic motivation is linked with improved well-being (Burton, Lydon, D'Alesandro, & Koestner, 2006; Björklund, Jensen, & Lohela-Karlsson, 2013; Emadpoor, Lavasani, & Shahcheraghi, 2016; Litalien, Lüdtke, Parker, & Trautwein, 2013; Sheldon & Kasser, 1995). Not only is motivation an indicator of well-being, but intrinsic, autonomous motivation is associated with the *highest* levels of well-being, according to Sheldon, Ryan, Deci, and Kasser (2004).

Authentic choices facilitate feelings of autonomy, autonomy increases motivation, and motivation is reliably associated with well-being. Therefore, a study where participants have authentic choices and are then asked questions relating to those choices, motivation, and well-being can make a valuable contribution to our knowledge of how instructional design can be used to improve student well-being.

Rationale for Methodology

A case study approach was chosen due to the uniqueness of the situation, the uniqueness of the student population (including online students in various small and/or isolated communities), and the fact that the variables are heavily embedded in the situation (Merriam, 1998). Without understanding students' feelings and perceptions, it is impossible to know how such course design elements relate to things like motivation—asking students directly (and using other qualitative artifacts) can provide us with detailed understanding of such an issue (Creswell, 2007).

Surveying students that report different initial levels of enjoyment and motivation in ELA courses was important; Ben-Eliyahu and Linnenbrink-Garcia (2015) found that high school students showed a significantly higher level of engagement with courses they called “favorite” courses when compared with “least favorite” courses; these students also showed significantly higher achievement in those courses. Similarly, Keller (1999) noted that students in elective courses are easier to motivate. Gathering this type of data from case study participants (such as their pre-existing feelings toward ELA courses) makes for a stronger case study, as does surveying students from different courses, one of which is an elective.

Yin (2014) notes that case studies are well suited for “how” and “why” types of research questions; furthermore, case studies are ideal when the answers to those questions can be found in contemporary events (in this case, the students’ work in the online ELA courses) and focus on behaviors that are not being directly manipulated (such as they would be in an experiment). Furthermore, case studies work well when causal links may be too complex for survey or experimental methods (Yin, 2014).

Definitions of Terms

This study features a number of terms (often shortened to acronyms) that are common to both secondary English Language Arts and the theoretical foundation that underlies the study.

Adolescence: The developmental stage in which people transition from childhood to adulthood; puberty. *Adolescent* is the adjective form.

Affect (noun): Conscious, observable emotion.

Asynchronous: Not occurring at the same time. In (online) educational contexts, this mostly refers to communication, in that communication does not have to be in real-time but can be accomplished via messages (such as emails, forum posts, and videos) back and forth.

Autonomy: One’s ability to act based on their own volition (willfully); implies the ability to choose between different actions.

Canon (literary): A traditional collection of literature; pieces by which others are measured. These are commonly taught in secondary ELA courses.

Competence: The ability to meet the challenges one faces.

Extrinsic (motivation): Motivation that originates outside of an individual.

Instructional design: The practice of designing, developing, delivering, and refining instruction based on goals (i.e. educational standards) and learner needs.

Intrinsic (motivation): Motivation that originates inside the individual due to the person's interest or enjoyment of the activity in question. Behaviors that are based on intrinsic motivation are sometimes referred to as *IMBs* (intrinsically motivated behaviors).

Learning management system (LMS): Software (usually an online platform) used to administer and deliver educational coursework (usually online in nature).

Personalized learning: An approach to education that emphasizes competence-based progression, student needs, alignment to standards, student interests, student ownership, social embedding, the use of formative assessments, and/or flexible learning environments.

Relatedness: The existence of positive interpersonal relationships.

Secondary (school level): The grades of school that follow primary and/or elementary school; depending on location, secondary goes from either 6th or 7th grade and ends with 12th grade, typically corresponding to ages 11-18 (pre-adolescence and adolescence).

Self-Determination Theory (SDT): a theory of well-being based on a recognition of inherent psychological needs for competence, relatedness, and autonomy.

Synchronous: Happening at the same time. In educational contexts, this means classes in which a student or group of students meets with an instructor and interacts in real-time, often occurring in a classroom or a virtual meeting space (like video teleconference).

Well-being: Wellness; a state of being comfortable and/or happy.

Limitations and Delimitations

Limitations

As the researcher lives and works in a semi-remote location, a number of limitations were connected to this factor, including:

- The research was being conducted by a single researcher. This may impact the objectivity of the research; it was addressed by triangulation, by peer debriefing, by keeping a researcher journal for audit, and by being transparent about my role.
- The regional population (and therefore the student population) is relatively small, with some schools having very small classes. This impacts the study by making it difficult (or impossible) to have sample sizes large enough for quantitative analysis. It was addressed by a qualitative approach that is as thorough as possible.
- The COVID-19 pandemic was occurring at the same time as data for this case study was being gathered. The effects of this situation varied from student to student and cannot fully be known. This was addressed by being clear about the presence of the pandemic and by using rich description to include as much context as possible when describing qualitative data, should factors relating to the pandemic be part of that context.

Other limiting factors not related to the setting include that the study took place over a single school year and that the study focused on only one subject area.

Delimitations

Delimitation for this study are as follows:

- The research question is broad and the related (open-ended) survey questions allowed for varied interpretation and elaboration by the participants. This may impact the study by providing data that may or may not be well-suited to answer the research questions. It was addressed by the use of other data sources for triangulation.
- The theoretical foundation for the study is not the only existing theory of well-being and may be unfamiliar to some readers. This was addressed by thorough description of the theory and detailing ways in which data relate to the theory.
- The instructional design of the courses used in this study may be unorthodox compared to other online high school ELA courses. This may impact the study by limiting clarity as to how participant data relates to instructional design choices. It was addressed by thorough descriptions of all courses to be used, including visual examples (screenshots).

Assumptions of the Study

Due to this study being “backyard” research, there are assumptions in place that should be understood by all who read it. First, the research setting is a public school district in the United States—that means everyone involved (teacher/researcher, students, administrators) is part of the “western” model of education, specifically American public K-12 education. As the researcher is also involved in the study as a teacher, it should be understood that he (I) was open and honest about this with students and that participants

were aware of the dual nature of the role. The researcher's advisor administered the non-anonymous electronic surveys and kept data until the end of the school year (after final grades were recorded), giving those students an extra level of comfort that their survey responses would not have any effect on their grade in the course. It is assumed that students completing electronic surveys were comfortable with the process and honest in their responses. Furthermore, effort was made to avoid teaching participant students any differently than non-participant students; this keeps the data from being skewed (even though it is qualitative in nature). Every effort was made to ensure that the study is as transparent as possible.

Finally, it is assumed that all involved with the study were interested in improving well-being. The theory of well-being that forms the theoretical foundation of this study (SDT) was developed by professional psychologists and refined over decades of rigorous peer-reviewed research; other (cited) studies that apply the principles of SDT to real-life situations (including educational contexts) are also published in respected peer-reviewed journals. The nature of the literature shows an interest, among all researchers involved, in studying well-being with the intention of understanding it on a deeper level in order to find ways of improving well-being. Therefore, it is assumed that each study based on SDT—even those that find faults with it—come from a desire to improve the well-being of humans and further contribute to scientific understanding of it (including this study).

Chapter 1 Summary and Organization of the Study

As the well-being of adolescent students continues to decline (Curtis & Heron, 2019; Twenge, Cooper, Joiner, Duffy, & Binau, 2019), schools, governments, and NGOs are all taking steps to combat the decline and improve overall student well-being (OECD

2009; WHO 1998; WHO 2016). Adolescents themselves identify school as negatively impacting their well-being (Navarro et al., 2017). English language arts curriculum at the secondary level does not allow for much student autonomy (Morgan & Wagner, 2013), despite the fact that adolescents have a developmental need for autonomy (Eccles et al., 1997). Existing studies have shown that students in secondary ELA courses prefer more autonomy over less (Beaton, 2010; Hafen et al., 2012).

Two courses (a 9th grade ELA course and a creative writing course) were recently designed by the researcher (in 2018) and are currently in use, while the third (an existing 10th grade ELA course) was recently modified by the researcher to match the others in terms of offering the same levels of choice; all of these courses attempt to promote improved student well-being through increased autonomy. This study uses Self-Determination Theory (Ryan & Deci, 2001) as a theoretical foundation for examining ways in which students perceive their own motivation as it relates to units of study that allow different levels of autonomy (no choice, limited choice, or free choice) for both reading and writing assignments. Because of the unique student population, the small sample size, and the nature of the inquiry, a case study has been chosen (Merriam, 1998; Yin, 2014). The bulk of the data is made up of open-ended electronic surveys, though other data types are used to show evidence of motivation in different academic units and to support/triangulate findings from surveys.

Chapter 2 will detail Self-Determination Theory and ways in which it has been used to study well-being in educational contexts. It will also explore how choice and autonomy have been used in education, as well as their relationship with motivation and well-being. Chapter 3 will include detailed descriptions of the population, the courses

themselves, and the instruments to be used in the study as parts of a detailed methodology. Chapter 4 will present the data gathered during the study and provide qualitative analysis of that data. Chapter 5 will summarize the study, discuss findings in relation to the existing literature, discuss implications for practice, recommend further research related to the findings of this study, and present conclusions.

CHAPTER TWO: REVIEW OF LITERATURE

Introduction to the Chapter and Background to the Problem

This chapter begins by reviewing the problem and its current context before exploring the theory of well-being upon which this study is based: Self-Determination Theory (Ryan & Deci, 2001). The three main components of Self-Determination Theory (relatedness, competence, and autonomy) are defined, and ways in which these components relate to education and adolescents are examined. Then, the ways in which these three components are utilized in online course designs specific to this study are explained.

A very brief history of instructional design is followed by an exploration of ways in which instructional design processes have been used to address student motivation through frameworks such as ARCS (Keller, 2009) and personalized learning (Adams Becker, Freeman, Giesinger Hall, Cummins, & Yuhnke, 2016). Then, the ways in which the components or personalized learning are utilized in online course designs specific to this study are explained.

As this study focused on the relationship between levels of choice given to students and their motivation, the theoretical relationship between choice and autonomy is examined, including when choices qualify as autonomy, when they don't, how choices should ideally be used in instructional design, and how they are used in the designs featured in this study. This section links choices in the course with one of the main three components of the theoretical foundation (autonomy).

Finally, Cognitive Evaluation Theory (a sub-theory of Self-Determination Theory) is examined in order to clarify the different types of motivation, explain how they are manifested in educational contexts, and to explain how motivation relates back to well-being (Ryan, 1982). The organization is meant to connect this case study to the problem: well-being requires autonomy, autonomy requires choice, choice facilitates autonomous motivation, autonomous motivation contributes to (and is a reliable predictor of) well-being. Therefore, designing online courses to offer choices (most of which qualify as autonomous) to adolescent students should result in positive effects on student motivation, which would contribute to an improvement in well-being among adolescent students. While the course designs used in this study will be described in greater detail in chapter 3, this chapter should situate these designs in a foundational theory of well-being.

Responses to a Decline in Adolescent Well-being

Well-being is currently a salient topic in education, and promoting well-being in schools has been a global concern for decades. For example, the World Health Organization's Global School Health Initiative (WHO, 1998) defines a "health-promoting" school as one that will "...strive to provide a healthy environment...and programmes for counseling, social support and mental health promotion; implements policies that respect an individual's self-esteem, provide multiple opportunities for success and acknowledge good efforts and intentions as well as personal achievements" (p. 3). The Organisation for Economic Co-operation and Development notes that the well-being of children is high on their policy agenda (OECD, 2009). Also, the WHO's

Shanghai declaration (2016) reiterated their ongoing commitment to well-being as part of a push to promote health in the 2030 Agenda for Sustainable Development.

The importance of student well-being is also reflected in mission statements and programs in school districts all over the country. Some of the largest school districts are shifting focus to emphasize a more holistic approach to education that includes social and emotional learning in addition to academic learning. In Los Angeles, the LAUSD “...recognizes the connection between academic achievement and student wellness...Student social-emotional wellness is the critical building block of student overall well-being” (Los Angeles Unified School District, 2019). Public schools in Houston have recently made a push for improved student well-being, revising their mission and vision statements to reflect that. Their new mission statement is “...to equitably educate the whole child so that every student graduates with the tools to reach their full potential,” while their new vision statement is “Every child shall have equitable opportunities and equal access to an effective and personalized education in a nurturing and safe environment” (Houston Independent School District, 2019).

The push for improved student well-being is likely to continue, as recent studies have pointed to deteriorating mental health among young people. Based on the National Survey on Drug Use and Health, major depressive episodes among 12-17 year olds increased 52% from 2005 to 2017; in general, increases in mood disorder indicators were larger among women (Twenge, Cooper, Joiner, Duffy, & Binau, 2019). A report from the National Center for Health Statistics found that from 2007-2017, suicide rates among 15-19 year olds increased by 76%, while suicide rates among 10-14 year olds tripled (Curtin & Heron, 2019). The issues are even more pronounced in Alaska, with higher rates of

depressive episodes, suicidal thoughts, suicide attempts, and successful suicides; the suicide rate for Alaska is more than double the national average, the highest rates being for young males (HHS, 2018; State of Alaska Epidemiology, 2018). These issues have all be exacerbated by the COVID-19 pandemic, which has caused increases in overdoses, depression, self-harm, anxiety, and suicide (C.S. Mott Children’s Hospital, 2021; FAIRHealth, 2021)

The Role of Schools in Student Well-being: The Bad and the Good

Schools themselves may be contributing to student mental health problems, especially among adolescents. For example, Morinaj and Hascher’s (2019) longitudinal analysis of over 1500 students examined the effects of school alienation on student well-being. They found that alienation from learning (in which students see little relevance in learning) is directly—and negatively—related to student well-being. In general, student happiness and satisfaction with school have been found to decline beginning in the middle school years, remaining low for the remainder of secondary education (Way, Reddy, & Rhodes, 2007). Student engagement in school shows corresponding drops during the same years, remaining significantly lower through the end of high school; low engagement is linked to absenteeism, discouragement, bad grades, and lack of post-secondary plans (Gallup, 2016). Similarly, motivation wanes during secondary school years, staying at its lowest from ages 12-15 (Gillet, Vallerand, & Lefrenière, 2011). An aforementioned survey of public high school students found that a minority (39%) agree or strongly agree that they attend school because they enjoy it (NAIS, 2015). In a longitudinal mixed-methods study of ways in which adolescents view their own well-being, a majority of participants felt that school reduced their well-being (rather than

increased it): “...results show that adolescents’ perception of the education system is more related to a feeling of dissatisfaction” (Navarro et al., 2017, p. 183).

Adolescent students show a general decrease in well-being (compared with younger students), with school often being a contributor (Navarro et al., 2017). This has a direct—and negative—effect on student learning. According to Immordino-Yang and Damasio (2007), the application of cognitive skills is dependent upon emotion: students do not learn if they are not happy. They note, “the aspects of cognition that are recruited most heavily in education, including learning, attention, memory, decision making, motivation, and social function, are both profoundly affected by emotion and in fact subsumed within the process of emotion” (p. 7). Other research has supported this notion, showing that student well-being affects academic performance. Phan’s (2016) longitudinal (~10 month) study of 236 high school students found that optimism and motivation are statistically significant predictors of a mastery approach to learning. Because of the clear relationship between academic success and student well-being, schools and school systems are likely to continue pushing for improved well-being.

In a brick-and-mortar school setting, improving well-being for students includes things such as providing healthy food, ensuring enough time and adequate facilities for physical activity, providing counseling services, adjusting school and classroom discipline policies, and promoting positive classroom management techniques (WHO, 1998; WHO 2016). As many brick-and-mortar schools have been closed for extended periods since spring of 2020 (depending on prevalence of COVID-19 in an area and/or governmental decisions at the local and state level), access to these resources has been

limited, especially for some of the most vulnerable students (U.S. Department of Education Office for Civil Rights, 2021).

Some studies have shown that schools and classrooms that focus on creating a positive atmosphere can be a good thing for the mental health of students. A recent Canadian study found that students in classes they considered to be “positive learning environments” reported significantly higher life satisfaction than those in classes they considered to be negative or neutral learning environments (Zandvliet, Stanton, & Dhaliwal, 2019). The researchers note, “Our research reveals the importance of designing academic programs in ways that enhance and support student health and well-being” (p. 294). Riekie, Aldridge, and Afari (2017) found a direct relationship between school climate and student well-being, while Zullig, Huebner, and Patton (2011) found that school climate has a direct relationship with school satisfaction.

School climate elements such as positive behavioral supports and counseling services are beneficial for student well-being, but they are often unavailable to online students, and even less available to online students during a pandemic (U.S. Department of Education Office for Civil Rights, 2021). Those interested in improving student well-being in an online environment might turn to instructional designs that promote student well-being. Instructional designers can contribute to student well-being by designing programs and courses that allow students to relate to each other in a positive way, that help students build competence (and feel competent), and that respect students’ autonomy by allowing them to exercise their will. These three considerations (relatedness, competence, and autonomy) correspond to the three main elements of Self-Determination Theory (SDT), one of the dominant theories of well-being (Ryan & Deci, 2000a).

Theoretical Foundations

Self-Determination Theory: A Model for Well-being

Self-Determination Theory, or SDT (Ryan & Deci, 2000a), offers a way of measuring well-being through its components of competence, autonomy, and relatedness. Deci and Ryan (2008) note that “...all humans need to feel competent, autonomous, and related to others...social environments that thwart satisfaction of these needs yield less optimal forms of motivation and have deleterious effects on a wide variety of well-being outcomes” (p. 15). SDT has been the basis of considerable educational and psychological research since the 1970s. While studies continue to validate SDT’s effectiveness as a theory of well-being, some critics (Iyengar & Lepper, 1999) suggest that autonomy is culturally-dependent, making SDT less useful for examining well-being in more collective societies (such as traditional societies, or certain Asian cultures). However, Chirkov’s (2009) cross-cultural analysis established that SDT’s theories hold up even in cultures where autonomy is supposedly valued less than in “western” cultures, including places such as China, Korea, Taiwan, Russia, South Africa, and more. In other words, Self Determination Theory’s utility as a theory of well-being can be applied in any human situation, as the theory is based on psychological needs that are universal to all humans—even if the balance between the three elements might be shifted slightly in certain cultural contexts (Chirkov, 2009).

Relatedness

Relatedness is the existence of “warm, trusting, and supportive interpersonal relationships” (Ryan & Deci, 2001, p. 154). The capacity for relatedness is different in an online course than it is in a traditional classroom setting. While the online medium may

minimize interpersonal conflict and simplify classroom management, it can also cause students to feel isolated, and feelings of isolation can contribute significantly to dropout rates in online courses (de la Varre, Irvin, Jordan, Hannum, & Farmer, 2014).

Furthermore, lack of support from teachers and peers can make it easy for students to fall behind, further disengaging them. Weiner (2003) found that students experiencing limited instructor contact “were often frustrated and disillusioned with distance education” (p. 49). Hawkins, Graham, Sudweeks, and Barbour (2013) found that “quality and frequency of interaction had a significant impact on student completion” (p. 79). To improve students’ sense of relatedness, online instructional designers can build opportunities for peer-to-peer interaction (and even collaboration) within the course, while instructors can both facilitate interaction and build their own positive relationships with students. The importance of interaction in online courses has been well-studied and is consistently linked to student engagement, success, and satisfaction in online courses (Harmon, Alpert, & Histon, 2014; Jung, Choi, Lim, & Leem, 2002; Ryle & Cumming, 2007; Swan, 2001, 2002; Weiner, 2003).

More specific to *secondary* online education, Oliver, Osborne, and Brady (2009) found that online high school students desire and value an actively involved instructor in online courses; they also value opportunities to interact and engage with peers. Borup and Stevens (2017) found that secondary online students value attention from and communication with their instructor, preferring teachers that are nurturing, caring, and that make a point to get to know the students as individuals. McInnerney and Roberts (2004) connect social interaction and a sense of community with academic success in an online course. Hosler and Arend’s (2012) mixed-methods study of presence in an online

course found that students appreciate an instructor that gives deep feedback and even participates in discussions alongside students. Because of these studies (and many others), relatedness has been shown to be a key factor in a successful online learning experience.

Positive relationships have an effect on student success in online courses, but student success is not the same thing as well-being. Holfve-Sabel (2014) specifically studied the effects of school relationships on student well-being. In her study of 1500+ secondary students, she found that tighter and more stable peer networks were found in classes with higher levels of well-being; teacher-student relationships were also found to be a significant factor in student well-being, as well as the teacher's ability to promote positive relationships among students. While academic success can contribute to well-being, it is entirely possible for students to have limited academic success while still experiencing a high degree of well-being, with positive relationships being a key factor.

In the online courses used for this study, relatedness is built into the design in a number of ways. Positive peer relationships are promoted early on with informal online discussions at the start of each semester, followed by regular (once per quarter or more) discussions more pertinent to course content and standards. Students also work together to revise writing samples and give feedback to each other on a regular (1-2 times per quarter) basis. Student-teacher relationships are also developed through the same introductory discussions, as well as a synchronous live meeting at the start of each semester, assignment feedback in the form of comments, personal emails, course announcements, and one-on-one revision of writing samples.

Because many students involved in the online courses used in this study live in unique situations (such as living in a fly-in only village, being homeschooled, living off-grid, having injuries or chronic illnesses that make regular schedules impossible, or being homeless/transient), department policy requires that courses can be self-paced according to student needs. Regularly-scheduled synchronous group meetings do not normally take place, so relatedness in online courses is more likely to be asynchronous. Even so, relatedness is encouraged in all courses and is considered a “best practice.”

Competence

Competence, in the context of education, is when students feel able to meet the challenges or their work (Niemic & Ryan, 2009). While students are regularly expected to demonstrate competence in any number of skills, they may also be expected to be competent in things that are beyond their ability (Easley, 2013). Depending on the school and class, many students move on to new material before they have mastered existing material. This is usually done in the interest of time, often because the teacher must move on to the next section of mandated curriculum, or because the end of the school year approaches and a certain amount of material must be “covered” by that time (Easley, 2013); students may not want to speak up and request to go slower due to social stigma. Those that are moved on before mastering skills may end up paying a price for it later—Niemic and Ryan (2009) note that “students will only engage and personally value activities they can actually understand and master” (p. 139).

In the context of a personalized learning approach, students are presented with more options and greater flexibility (Adams Becker et al., 2016). The component of competence is being addressed more and more frequently in online learning, as adaptive

curriculum helps ensure that students are always being presented with content and assessments that lie within their zone of proximal development (Vygotsky, 1978). Thus, student needs for competence can be met while still reducing the social stigma associated with being held back or having to retake a class—specific skills can be targeted so that students may only need remediation in a small portion of a course, something that can easily be done during a study hall period. But not all online courses are adaptive, and lack of competence can be a contributing factor in a student’s choice to drop an online course (de la Varre et al., 2014). Competence can also work in the opposite direction. Students can become disengaged if their work is *too* easy; one survey found that 38% (a minority) of public high school students feel their classes challenge them most or all of the time (NAIS, 2015).

Competence is also closely linked with motivation. Patall, Sylvester, and Han (2014) found that perceived competence was a significant factor in whether or not choice in activity resulted in increased motivation; the more competent people *thought* they were, the more they were motivated by choices. Similarly, when people received feedback that improved their perceived competence, they were likely to have perceived higher competence after completing a task. And when a student experiences success in an academic field, it increases optimism for future academic success, which, in turn, results in greater motivation (Phan, 2016). Students are far more likely to engage with their schoolwork when they feel competent and confident.

In the courses used in this study, competence is addressed in a number of ways. With few exceptions, students are allowed multiple attempts at most assignments and quizzes. If they want to improve their grade, they can redo and resubmit the

assignment. In some cases (certain assessments, for example), they must specifically request another attempt, and these requests are rarely refused. Students are given feedback or re-taught between attempts as a way of addressing any existing lack of competence. Students are usually provided with audio versions of any text they need to read (though if they are choosing something outside of course recommended texts, finding an audio version becomes their responsibility if it is needed). Visual representations (film or stage versions) of a text are encouraged and sometimes included within the course, as are short lessons (video and/or text) that build historical or cultural context for readings in the courses. The writing process in the ELA 9 and ELA 10 courses are chunked so that students get feedback after prewriting, after writing the beginning of a piece, after adding the middle of a piece, after a first draft is completed (peer revision), and after a revised second draft is completed (revision with the teacher). Interactive documents (Google Docs) are used for writing assignments, making it possible for students to give and receive feedback of all different types and revise as much or as little as needed before turning in a final draft. If a final draft still does not demonstrate competence, the student can continue revising (with extra feedback from the instructor) until competence is met. This is considered a part of the writing process. Students that fall far behind in a course are also able to get course extensions of up to one month after the end of a semester, making it possible to finish work, redo assignments, and improve grades (and competence) so that the course can be finished with a passing grade and not have to be retaken.

Autonomy

According to Deci and Ryan (2008), autonomy means “to act volitionally, with a sense of choice” (p. 15). Students show autonomy when they voluntarily devote time and energy to their work (Niemic & Ryan, 2009). Chirkov (2009) defines autonomy as “a basic psychological need to experience self-governance and ownership of one’s actions” (p. 254). Adolescents have a developmental need for autonomy; achieving autonomy is a key indicator of a healthy, adjusted adolescent (Eccles et al., 1997).

One way to improve student well-being in schools is to offer students as much authentic choice as is feasible (Patall, Cooper, & Wynn, 2010). While this does happen in some settings, it is heavily dependent on education policy and funding; for example, some schools must focus on improving standardized test scores and, as a result, focus on remediation in the highly-tested subjects of study (Easley, 2013). In such cases, lack of autonomy only worsens the existing problems of alienation, disengagement, dissatisfaction, and de-motivation. Lack of autonomy is directly linked to negative affect in the short term—the less autonomy one feels (and the more that one would rather be doing something else), the worse the affect at that time (Grund, Grunschel, Bruhn, & Fries, 2015). Ryan (1995) noted, “Contexts where psychological needs are neglected or frustrated promote fragmentation and alienation, rather than integration and congruence” (p. 399). When students are forced to do things they don’t want to do, the results are negative—and many students are regularly required to do things they don’t want to do (Mora, 2011).

While lack of autonomy can be shown to have negative effects on engagement and well-being, providing autonomy has been shown to have positive effects. Holfve-

Sabel (2014) found that student well-being was higher in classes where students worked with computers and were given greater freedom to choose work for themselves.

Academic autonomy has been shown to increase student engagement and have a positive impact on adjustment (Van Ryzin, Gravely, & Roseth, 2009). Langhout (2004) found that students showed a preference for settings in a school that promoted autonomy, independence, choice, and potential for acting as leaders; these same students disliked places that limited their autonomy. In a Norwegian study that compared well-being of students using a textbook compared to a mobile app in a field course in biology, Jeno et al. (2019) found that students using the mobile app experienced relatively improved well-being, with the effects rooted in autonomy: “participants who used the mobile application (versus textbook) experienced higher levels of perceived autonomy, which, in turn, predicted higher levels of intrinsic motivation, which, in turn, predicted higher levels of positive affect” (p. 677); conversely, they found that use of the textbook resulted in an increase in negative affect and in decrease in positive affect. In a study of 409 high school students, autonomous motivation was found to be significantly positively related to greater implementation planning for those goals; such goals were also more likely to be met (Koestner, Otis, Powers, Pelletier, & Gagnon, 2008). Hafen et al. (2012) used Self Determination Theory to study adolescent motivation as it related to autonomy in secondary (9th-12th grade) classrooms and found that “the strongest predictor of change in both observed and student-reported engagement was adolescents’ perceptions about autonomy within the classroom” (p. 251).

The ability for online learning to increase student autonomy has been an interest of educational research for decades. An early study (research completed in 2003) of

“networked” classrooms—with enough internet-connected computers for all students to work online—found that there were significant independent associations between student satisfaction and the two psychosocial elements of autonomy/independence and task orientation (Zandvliet & Fraser, 2005). Students found that the nature of online work allowed them to focus on their tasks and work autonomously, both of which affected their overall satisfaction. Online education that offers greater autonomy can also allow students to pursue goals more closely aligned with their interests. When a person’s goals are consistent with their personal interests and values, the goals receive more effort—and they are also more likely to be attained (Sheldon & Elliot, 1999). These studies show that autonomy promotes engagement, student satisfaction, increased motivation, and improved well-being; furthermore, students with autonomous goals are also more likely to achieve academic success.

Students taking the courses used in this study exercise autonomy in a number of ways, starting with the ability to choose which courses to take. Being able to choose their own pace within a course also allows exercise of autonomy. There are further opportunities for autonomy within the Creative Writing and 9th/10th grade ELA courses. Depending on the unit of study, students have the ability to choose what they read, what they write about, and how to present their products. Different units have different levels of choice. Some units are “no choice” and feature assigned readings and writing prompts. Some units are “low choice” and allow students to choose from among 2-3 reading options or potential writing prompts/topics. Other units are “high choice” and allow students to choose from among 4 or more reading or writing options. These opportunities for autonomy are at the center of the current inquiry: the study gathered student

perspectives on the differing degrees of choice and how they relate to feelings of motivation. Even though these courses were designed with all three components of SDT in mind, only the relationships between autonomy (represented by choice) and well-being (represented by motivation) will be explored.

Instructional Design and Motivation

“A History of Instructional Design” (Reiser, 2001), notes that modern instructional design grew out of training programs developed in World War II, with B.F. Skinner soon proposing step-by-step programmed instructional materials (in the mid-1950s) and Robert Mager proposing (in 1962) that such instructional materials should identify specific objectives, as well as delineate ways in which learners can meet those objectives (though the idea of educational objectives had been in use since decades before). Robert Gagné’s work in the early 1960s also described learning outcomes and the instructional events that lead to them; he developed a system that linked task analysis, objective specification, and criterion-referenced testing, and may have been the first to label it with the term “instructional design” (Reiser, 2001).

The modern ADDIE model of instructional design (analysis, design, development, implementation, and evaluation) is based on these systems from the 1960s and remains the industry standard (Reiser, 2001). The courses used in this study were designed using an ADDIE-based process using state standards as educational objectives. While the ADDIE process has proven effective at creating courses that align with educational objectives, designs don’t always take learner motivation into account, nor do they take the *type* of learner motivation into account. As noted in Keller (2009), “Students might succeed...because of purely extrinsic rewards such as a certificate, advancement to a

higher grade or position, or avoidance of termination...instruction, like a trip to the dentist, can be very effective without being at all appealing” (p. 24-25). Because of this, John Keller began to develop a model that could be used to design courses with learner motivation in mind. This model originated in 1979 and would become known as the “ARCS” model of design (Cheng & Yeh, 2009).

In the ARCS model, “ARCS” is an acronym for attention, relevance, confidence, and satisfaction; this process is meant to work in parallel with ADDIE, and Keller outlines the ways in which elements from the two systems correspond (2009). Keller recommends various techniques for getting learner attention, making content relevant to learners, building learner confidence, and generating learner satisfaction. The design features examined in this study focus on the “attention” and “relevance” categories of ARCS, as these are the portions of the instructional cycle in which learners are presented with material and options, then decide how to continue; later portions of the cycle are affected by the choices they make and the motivation they feel. Regarding relevance, Keller (2009) notes that people “...tend to be most interested in content that has some connections to their prior experiences and interests” (p. 50). The ARCS model represents a shift toward a more learner-centered educational environment; through its development and integration with curricula, it has served as a precursor to personalized learning and many designers use it as a basis for personalized learning designs (Kim, 2012).

Personalized Learning and Instructional Design

Personalized learning, a more recent educational trend (Adams Becker et al., 2016), can provide opportunities for autonomy (as well as other elements of SDT) in online courses. As the school district (in which this study is set) is several years into a

personalized learning initiative, the recently-designed (or modified) online ELA courses used in this study include many elements of personalized learning. The personalized learning program used in these courses follows a framework developed by Education Elements (Education Elements, 2019). Education Elements provides training and a general framework, but not any particular products or curricular materials.

An exact, consensus definition of personalized learning does not yet exist; however, a study by the State of Rhode Island Office of Innovation (2016) identified eight traits common in most definitions of personalized learning: competence-based progression, student needs, alignment to standards, student interests, student ownership, social embedding, the use of formative assessments, and flexible learning environments. These common traits provide a general framework for a personalized learning program, though not all programs will have every trait listed (and some programs may have some traits that are not listed), and the balance between traits will vary depending on local needs and program providers. For example, Education Elements' personalized learning framework focuses on what they call the "Core Four" of flexible content and tools, targeted instruction, student reflection and ownership, and data-driven decisions (Education Elements, 2019).

Personalized learning influenced the instructional design of these particular online ELA courses by encouraging inclusion of flexible content choices within a course, different course pathways (including online course options for courses not available in local schools), flexible pacing within courses, and also by giving students a hand in designing their own assignments and projects—all of which can affect a student's autonomy.

Course Pathways

Today, online courses are utilized by secondary students for a number of reasons, including to fulfill graduation credits or take courses not otherwise available; they are also becoming increasingly popular due to their place in personalized learning (Freeman et al., 2017). The ability to use online courses to pursue different educational opportunities is noted as a component of learner equity—the U.S. Department of Education Office of Educational Technology (2016) officially recommends using technology in this way: “Adequate connectivity will increase equitable access to resources, instruction, expertise, and learning pathways regardless of learners’ geography, socio-economic status, or other factors that historically may have put them at an educational disadvantage” (p. 37).

Students have more course options than ever before, in both core and elective courses. The ability to choose from numerous options can, in itself, set the stage for an improvement in well-being due to a course lining up with a student’s own goals; if a student can take a course that promises to line up with a personal passion, then motivation can become intrinsic (Ben-Eliyahu & Linnenbrink-Garcia, 2015). Many online courses are designed specifically for students to move through modules with minimal teacher input and little-to-no engagement with peers; these courses are very efficient, and favor motivated students—especially those with intrinsic motivation for those types of activities (Murphy & Rodriguez-Manzanares, 2009). Intrinsic goal content (when the “what” of people’s goals come from themselves) has been found to have a significant, positive effect on well-being (Sheldon, Ryan, Deci, & Kasser, 2004).

In the case of the courses featured in this study, the online Creative Writing course is offered as an alternative way of acquiring a full ELA credit (four of which are required for high school graduation) while still giving students the chance to pursue a passion or interest not as easily fostered in a typical high school ELA course; in this way it is both an elective and a general education course. The 9th and 10th grade ELA courses are considered core, general education courses. Even so, some students in brick-and-mortar schools elect to take these courses due to scheduling reasons or even a preference for online learning. As the courses are listed and described in the distance education department catalog, some students may choose the online version of a core course because they perceive it to be more flexible and offer more choice. Ackerman, Gross, and Celly (2014) note that, “The level of choice offered within a course may influence students’ perceptions of the desirability or value of a course and influence their decision as to whether or not to enroll” (p. 221). Both Creative Writing and 9th/10th grade ELA are commonly taken by students that are enrolled in this district’s homeschool program.

Flexible Pacing

One of the defining traits of personalized learning is that it can happen in any place; in the case of brick-and-mortar schools, this might mean that students can complete coursework (especially computer-based coursework) in a variety of settings—classrooms, common areas, computer labs, or even outdoors (Adams-Becker et al., 2016). With online learning, it is assumed that settings are flexible, especially as learning platforms and content become more compatible with mobile devices. Not only is the “where” of learning more flexible than before, so is the “when”—flexible pacing allows students to work at their own pace within a given course (Adams-Becker et al., 2016).

While pacing in online courses can vary (depending on teacher or institutional preferences), online students are likely to have more autonomy than peers in brick-and-mortar classrooms; they can divide work up for an even, steady pace (often a teacher or course-recommended pace), complete coursework early, or procrastinate and cram at the end of a term. When courses are designed to be taken asynchronously, it gives students the freedom to make some of those decisions for themselves.

Flexible pacing is a key feature of personalized learning in general, and the 2016 National Education Technology Plan (U.S. Department of Education Office of Educational Technology, 2016) includes it in their definition of personalized learning: “Personalized learning refers to instruction in which the pace of learning and instructional approach are optimized for the needs of each learner” (p. 7). In many cases, teachers rely on software to determine and prescribe a pace for students, depending on subject matter and standards (Roberts-Mahoney, Means, & Garrison, 2016). While software prescriptions may take away some degree of student agency, setting a slower pace may be necessary for some students to achieve competence. Similarly, software may recommend that a student move on to the next level (Chuong & Schiess, 2016), which can ultimately free up time for that student to pursue other interests, making increased autonomy a possibility for some.

In an early experiment in flexible pacing, Wesp and Ford (1982) tested three degrees of pacing flexibility (little, moderate, and extreme) in their courses and found that strict pacing was detrimental to student scores on assessments—students with the greatest flexibility passed more quizzes and got more “A” grades in the course overall. They attributed a portion of the phenomenon to the fact that students in a strictly-paced

course would proceed to assessments because they needed to meet a deadline (but were not necessarily prepared), whereas students with flexible pacing would proceed to the assessments only when they felt ready. This type of flexible pacing is more aligned with competence-based progression and student needs, both of which are central features of personalized learning. When students are not tied to a teacher's schedule, many are more likely to achieve mastery before moving on.

Mills, Ablard, and Lynch (1992) found that flexible pacing was a benefit for accelerated students that wanted to progress through a course very quickly in order to move on to the next one—the majority of students that did so were still able to thrive in their subsequent courses (almost all of them getting an “A” in the course that followed). While such students make up a small percentage of the populace, the ability to move through coursework at their own speed can be very attractive. A student doesn't need to be officially accelerated in order to have the desire to work ahead. Competence-based progression allows students to have more control over when they complete their required credits.

In the case of the courses featured in this study, students determine their own pace, although the teacher does provide a suggested pacing plan and contact to encourage students to get back on the suggested pace if they fall behind. As previously noted, department policy requires that courses can be self-paced according to student needs, as students may be in unique locations or situations that make it impossible to do online coursework on a regular schedule or pace. In previous years, students have taken the online courses used in this study from villages with limited internet, from off-grid cabins deep in the woods, from children's hospitals, from eastern Africa, from New Zealand,

and from many other states in the U.S., even though these students (under normal circumstances) all live within school district boundaries. Because it is sometimes impossible for students to complete a semester-long course in the usual amount of time, the department offers one-month extensions at the end of each semester. In the case of fall semester courses, students may use an extension to finish up while they are getting started on their spring semester courses. Extensions are not automatically granted to any student that has not yet completed the course—students must apply for the extension, they must be working on a semi-regular basis, and the remaining amount of coursework must be reasonable enough to be completed within the extension period.

Students as Designers

Current educational trends not only include movement toward personalized learning, but also toward deeper learning, authentic learning experiences, and project-based learning (Freeman et al., 2017). These are rarely autonomous or student-initiated, however, as planning project-based units is typically the responsibility of the teacher or facilitator (Navenga, 2015). This is influenced by the fact that project-based units of study require significant time to plan and develop (MacMath, Sivia, & Britton, 2017). Most students don't have the time or expertise to design their own learning experiences (at least not in ways where it is easy to assess whether or not they have met required standards). Project-based learning has been shown to increase student motivation (Lam, Cheng, & Ma, 2009; Kaldi, Filippatou, & Govaris, 2011).

Increasing student autonomy by allowing them to design their own coursework requires that the students understand educational standards and assessments well enough to propose ways they can demonstrate proficiency; this can be an unwelcome burden. In

one study on students being involved in a curriculum design process, first-year college students found the overuse of technical language—including acronyms—by their collaborators (university employees) to be “off-putting” (Carey, 2013, p. 256). Many students go through their academic careers without being exposed to the design-side of education, and everything (including terminology) will be unfamiliar; since autonomy is less likely to increase motivation when it is not accompanied by a sense of competence (Patall et al., 2014), students expected to design their own coursework need to be shown how it is done in order for the design opportunity to successfully increase autonomy. “Self-authored” motivation results in greater interest, excitement, and confidence (Ryan & Deci, 2000b, p. 69). The opportunity to be involved in the design of projects (and the increase in autonomy and motivation) might make the difficulty of design work worthwhile to some students.

Because so few students understand instructional design, there are very few studies in which students are given the opportunity to design their own project-based work (and they are rarely done at the secondary level). In one case study, Prigmore et al. (2016) gave college students the opportunity to lead a game development project. The researchers used Self-Determination Theory as a lens when analyzing interviews with the students involved; they found that autonomy was an important factor in the students’ motivation (2016). Zou, Mickleborough, Ho, and Yip’s (2015) mixed-methods study of secondary-aged “Students as Learning Experience Designers” found that a sense of autonomy positively affected metacognitive self-regulation, leadership for learning practices, and reflective habits in the students. Kelley, Sumrall, and Sumrall (2015) describe a Louisiana State University geology field camp in which students elected to

design and execute a mapping project related to wildfires that erupted near the camp; the fires were unexpected and not part of the original plan, but the students thought that mapping the wildfires—as they were happening—would be a useful application of their skills and a way to increase safety. Survey responses collected later indicated high feelings of educational value and pride—including pride in the fact that the idea originated with the students themselves.

While some researchers have studied student-designed projects at the high-school level, most have focused on extra-curricular or service-learning projects—not projects that take place in core classes or affect whether or not a student might earn a credit toward graduation. Existing studies of high-school students as designers of project-based learning have limited value in terms of showing whether or not students can use their understanding of assessment of educational standards to prove proficiency. In the context of the ELA courses in this study, the instructional design approach has included both regular references to standards and the explanation of standards with “I can” statements (see Figure 1), giving students regular opportunities to see how assignments and activities are meant to show their proficiency in each standard. Most quizzes and assignments end with questions asking students to reflect on their performance in the standard being assessed. Later, during a unit in which ELA 9 students *are* expected to design their own projects, they are provided with the previously mentioned standards and “I can” statements, but also a set of questions students can ask themselves to see whether or not each standard has been met (Figure 1). This document is shared with the students at the start of the unit, making it so that students can refer to it as they design and execute their projects (a high-choice “novel study” project). They turn in the completed document at

the end of the unit. Teaching students how coursework relates to standards helps create opportunities for more autonomy later in a course.

<p>W.8 - Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.</p>	<p>-I can find and use multiple sources of information, both in print and digital formats. -I can determine which sources are most effective to answer a posed research question. -I can effectively integrate research in my writing, while citing that research accurately.</p>	<p>-Did I get research from more than one source? -Did I use sources with reliable information useful to my focus? -Did I combine information from sources with my own ideas? -Did I correctly cite my sources?</p>	<p>My self-grade (1-4): How I met this standard: (explain and cite):</p>
<p>SL.2 - Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source and noting any discrepancies among data or information.</p>	<p>-I can interpret details from a variety of media. -I can evaluate data and identify discrepancies.</p>	<p>-Did I use information that isn't just written words (photos, audio, interviews, graphs, maps, etc.)? -Did I make sure the information was accurate?</p>	<p>My self-grade (1-4): How I met this standard: (explain and cite):</p>

Figure 1 A portion of a standards matrix that helps students ensure their project can meet standards

Content Choices

The traditional high school ELA class is based around teaching particular books (Morgan & Wagner, 2013; Pitcher et al., 2007), leaving many students dissatisfied with the texts they have to read in order to complete their coursework. Many students, in fact, find ways around reading the books at all and prefer borrowing classmate notes and/or listening to class discussions instead of reading a text (Broz, 2003).

Forcing high school students to read certain canonical texts and respond to common essay prompts can be harmful to autonomy, motivation, and engagement, especially as canonical texts age and become less relevant to the lives of today's students (Pitcher et al., 2007). Offering choice in reading and writing content may combat a leading cause of boredom in high school students: 86% of public high school students

report being regularly bored in class, the top reason cited as “the material not being interesting” (NAIS, 2015).

The ability for secondary students to choose their own class content (in terms of reading selections) is rarely documented; while it does happen in certain courses, it is often part of a “sustained silent reading” period—not part of the regular curriculum, and rarely assessed beyond self-reported reading logs or summaries (Morgan & Wagner, 2013). Wigfield, Gladstone, and Turci (2016) found that motivation for reading decreases as students get older. To combat declining motivation, they recommend offering choice in reading material and basing social interactions around reading. The ability to choose one’s reading content has been shown to increase both student engagement and student feelings of ownership (Ivey & Broadus, 2001), making “reading choice” highly compatible with personalized learning. Barry (2013) reported that a significant number of the urban adolescents in her study (many of whom were minorities) said they would be more likely to read books that feature characters with whom they can identify. Morgan and Wagner (2013) designed a unit in which instruction focused on standards-related reading skills (such as analyzing points of view) not bound to a specific text, and students were given choices as to how they would show their competence in these skills (including which texts they would read). Student reflections revealed notably increased engagement, and reading choices increased feelings of competence, as students were able to read books that matched their interests and their reading levels.

While reading literature makes up a large portion of high school ELA courses, there are other types of assignments as well—including ones which hold opportunities for more content choices. The ability to choose assignment content has been shown to

significantly predict interest, enjoyment, perceived competence, associated test scores, and assignment completion (Patall, Cooper, & Wynn, 2010) when compared to a lack of choice. In an online course that allowed students to choose the content of their learning modules, Lindgren and McDaniel found that 91% of students said that the ability to choose module content was either “mostly positive” or “extremely positive” (2012). Beaton (2010) noted that allowing high school students to choose writing topics was effective in increasing engagement and reflection—an excellent example of the motivation experienced by adolescents when allowed to focus on topics important to them. A survey of gifted high school students found that students not only put a high value on choice, but they also value appeal, meaningfulness, and challenge in their coursework (Gentry & Springer, 2002). Jeffery and Wilcox (2014) found that secondary students prefer writing assignments that give them “capacity to act” and allow them chances for invention and subjective engagement (p. 1110). While offering choice doesn’t guarantee that coursework will be appealing, meaningful, or challenging, it does increase the chances that it will be.

It has been previously mentioned that autonomy needs to be accompanied by competence in order to be effective. Patall et al. (2014) *did* find that increased perceived competence resulted in greater motivation when presented with choices, and they also found the opposite to be true: when people who did not feel competent were presented with choices, they had lower motivation. But even when people had negative attitudes toward their competence, they still preferred choice over a lack of choice. This suggests that even if competence across an entire class of students might not be possible, *any* choice should still be more motivating than no choice at all. Furthermore, competence

can be supported by supplying audio or visual versions of a text, by supplying scaffolding (including notes templates, pacing guides, targeted lessons, etc.), and by giving regular feedback to students, all of which are regular features of the courses used in this study.

The online ELA courses in question offer reading choice in most modules, ranging from choice between two potential selections to nearly endless options—students that wish to do so can choose any piece to read so long as they contact the instructor and make the request (assuming they are able to use the piece to show proficiency in the targeted standards). In one ELA 9 module, there is only one “recommended” reading (*Romeo and Juliet*); while students can technically choose to use other pieces, the recommended piece fits perfectly with some otherwise difficult-to-meet standards, so it is likely that most students will go with the recommended reading (this is considered the “no choice” module). In ELA 10, the “no choice” reading unit features an assigned “playlist,” and the “no choice” reading unit in Creative Writing requires that students read and analyze specific poems. Two ELA 9 modules—short fiction and short non-fiction—offer choices between two pieces per lesson (“low choice” modules), and a poetry unit simply asks students to read three poems of their choice from a list of five. Finally, the novel study unit gives students a list (with descriptions and estimated reading times) of six commonly-read novels for 9th graders (a “high choice” module), though students are encouraged to choose novels that aren’t on the list if they want to. There are similar levels of choice in both the ELA 10 and Creative Writing courses. Using differing levels of choice is common in studies on the effects of choice, such as Ackerman et al. (2014), who used a “no choice,” “low choice,” and “high choice” design in their study, or Mozgalina (2015), who used a “no choice,” “limited choice,” and “free choice” design in

her study. Courses used in this study use a similar design. There are “no choice” units in which students are provided with a prompt that goes along with the “no choice” reading; if students want to pursue other reading selections, they would need to work with their instructor to come up with an essay prompt that will help them satisfy the same standards. There are “low choice” units, in which students are tasked with writing an essay about the effects of an author’s use of literary devices in a piece of their choosing (the devices themselves are also up to the student, depending on what they find when reading). The “high choice” units include the novel study project, in which they are free to present their research in any way they want, as well as the poetry and narrative writing modules, as these lend themselves to a wider variety of choices in terms of topic, content, and product. Because this study focuses on how students feel about different levels of choice, it is necessary to provide different levels of choice, and also to be open with students about those levels of choice.

Choice and Autonomy

Deci and Ryan’s definition of autonomy is “to act volitionally, with a sense of choice” (2008, p. 15). Choice itself is not necessarily the same thing as autonomy. Reeve, Nix, and Hamm (2003) found that measures of self-determination depended on whether choices provided were “option” choices or “action” choices. Option choices (such as choosing between reading article A or article B) did little to affect intrinsic motivation. However, action choices (in which a student gets to make choices about what they *do*) did affect perceived self-determination and intrinsic motivation. The difference is one of *volition*: with an option choice, the student does not have volition (they don’t have the ability to choose *not* to do the assignment or to do something else altogether, so they are

not truly free). With an action choice, students are in control of what they do. They note, “the experience of self-determination is not something that can be given to the student through the presentation of an array of teacher-determined options” (p. 388). Therefore, choices given to students in an effort to improve intrinsic motivation (and well-being in general) should ideally be *action* choices.

Many educators choose to use the word “meaningful” when describing choices that affect student motivation, engagement, and well-being. Jenou et al. (2019) suggest that CET (Cognitive Evaluation Theory) requires that choices be meaningful in order to satisfy a person’s need for autonomy. If a student is asked to choose between two things that the student doesn’t like (such as using an eBook, print book, or audiobook to read a piece by the student’s least-favorite author), the choice isn’t meaningful—either way, the student will be unhappy with the result. The lack of meaningful choice limits true autonomy, as students are usually only able to make choices regarding things such as when to complete an assignment (organizational autonomy) or what format to use in a work sample (procedural autonomy). Stefanou et al. (2004) found that these two types of autonomy (organizational and procedural) are most common in school settings, yet it is a third type (cognitive autonomy) that has the most positive lasting effect: “we suggest that organizational and procedural autonomy support may be superficially engaging, whereas cognitive autonomy support may have more long-lasting effects on engagement and motivation” (p. 105). Cognitive autonomy supports student ownership for learning—it can be seen when students are asked to generate their own paths to a solution, evaluate their own ideas (and those of other students), freely debate and ask questions, or align tasks to match with personal goals.

Hortop, Wrosch, and Gagné (2013) studied 162 college students over a period of six months and found that perceived control was a significant factor in whether or not autonomous motivation resulted in improved well-being. While students who were autonomously motivated *and* perceived a high degree of control showed large increases in positive affect (and corresponding decreases in negative affect), those students that were autonomously motivated but perceived *low* levels of control showed much smaller increases in positive affect; this suggests that autonomy alone is much less significant when a person does not feel they are the ones in control, underscoring the importance of volition as an essential element of autonomy.

Choices can be framed in ways that can alter the ways in which people make decisions, depending on risks and rewards (Tversky & Kahneman, 1981). It is important that choices are simple and that people can clearly understand the potential benefits compared to negative consequences. In an educational context, this can mean that properly framing a choice can result in a student feeling more positive about a choice because even the negative consequences are not truly negative. For example, a student choosing an elective course that wasn't a top choice might feel like it is a waste of that student's time (assuming they are passionate about a different choice), but can be seen as a positive if a student is reminded that they will still be learning something of value and potentially enjoying themselves.

It is also possible to give too few or too many choices. Reed, DiGennaro-Reed, Chok, and Broznya (2011) found that when subjects were asked to choose between possible programs, very few opted for "no choice" or a choice between two options; instead, a small cluster of options proved to be better. "When the extensive-options

scenario incorporated only three treatment options, compared to the two in the limited-options scenario, about 86% of participants chose the extensive-options scenario. When the number of options (and, presumably, search costs) doubled to six for the extensive options scenario, only about 48% of participants chose this extensive-options scenario” (Reed et al., p. 552). This study suggests that with options, 3-4 is ideal.

Mozgalina (2015) reported on classes of students studying a foreign language who were given different levels of choice (no choice, limited choice, and free choice) in both content and procedure for coursework. She found that the groups given free choice in both content and procedure would be engaged in a task for a significantly longer period of time. She also found that free choice (in general) to be less optimal for motivation and that students could be overwhelmed by choice. In the study, students in the “free choice” treatment were asked to create a presentation but were given no scaffolding about what to include; it was also concluded that “too much choice was detrimental for task motivation and task performance of beginner learners” (p. 129-130), reiterating the importance of competence as a prerequisite for a choice to be motivating.

Culture and social class can even affect whether or not a student values choice. According to Ackerman et al. (2014), for people with working-class backgrounds and people from non-Western cultures, choice carries less positive association and importance. They also found that a student’s interest in the content area affects how much they value choice, and that students who were less interested in the subject valued having no choice as much (or more) than lots of choice; they also showed less happiness and higher anxiety when given many choices (Ackerman et al., 2014). Finally, people with unique preferences (such as a passion for a particular subject or activity) prefer having

lots of choices (Ackerman et al., 2014), assuming one of those choices matches their preference—otherwise, they may find themselves preferring no choice at all. With that in mind, instructional designers can benefit from combining some of the different levels of choice in a module (as discussed earlier): offer a “highly recommended” option for those students that have little interest in investigating choices for themselves, a small number (3-4) of other options for those with *some* interest, and an open-ended option (choose whatever reading you want/design your own project to fit standards) for those students that are truly passionate about a subject.

When people are offered choices, performance may depend partially on whether or not they are actually able to pursue the choice. Weaver and Conlon (2003) found that when people were given “façade” choices (choices that made it seem like they could choose their task but were given an assigned task regardless), productivity increased when the assigned task happened to be the same as the task they chose. When the tasks didn’t line up with expectations, responses included negative affect, retributive behavioral intentions, and even anger (Weaver & Conlon, 2003). While the courses in question will not be offering “façade” choices, the study does reveal that people are more likely to put effort into tasks that they choose (and react negatively toward a teacher that offers a choice and then retracts it).

While not all choices in a course can be “action” choices that offer cognitive autonomy, other types of choice can still be useful. Giving choices can help people internalize an extrinsic motivation, as can providing rationale for doing something people find uninteresting (Deci & Ryan, 2008). According to Niemic and Ryan (2009), “Students’ autonomy can be supported...by maximizing students’ perceptions of having a

voice and choice in those academic activities in which they are engaged” (p. 139). Even if students find themselves in a course with content they don’t find interesting, offering choices—even procedural or organizational choices—allows teachers to make the most out of the situation. There are a number of ways of supporting a student’s autonomy (such as using noncontrolling language, acknowledging/accepting negative affect in the student, encouraging inner motivation, and promoting valuing), and providing choice has been found to be the most important factor in students’ perceived autonomy support (Patall et al., 2010).

Even when there are no rewards involved, people prefer having choices (Leotti & Delgado, 2011). Their study involved MRI imaging and measurement of blood oxygen levels as a way of determining how choice functions on a neurological level. They found that participants preferred having choices (as opposed to no choices), that choices showed effects in regions of the brain associated with affect and motivation, and that anticipating choice was associated with greater activity in regions of the brain associated with reward processing. They note that “simply anticipating choice recruits affective brain circuitry, and it suggests that having an opportunity to choose may be valuable in and of itself...the opportunity to choose is inherently rewarding and is independent of outcome” (p. 1316).

There are even more factors that affect how choice relates to autonomy (and the related motivation and well-being). Kouchaki, Smith, and Savani (2018) found that a person’s sense of morality can affect whether or not a choice feels like a choice. If people are presented with options but only find one of the options to be morally acceptable, they choose the moral option and don’t get the psychological benefit of feeling free to choose. While this might not often be pertinent in an online high school ELA course, it can affect

how students perceive content choices (such as what to read or what to write about). Some students might shy away from literature that deals with the “occult” (such as the element of witchcraft in J.K. Rowling’s *Harry Potter* books). Other students might not want to read older pieces in which women and minorities are not written about in a respectful manner (in previous semesters of the 9th grade ELA course used in this study, students chose to read John Steinbeck’s *Of Mice and Men* for their novel study project only to later ask if they could change their choice due to the coarse language in the book). While these situations are not common, they can have an effect on students’ feelings of autonomy.

The best summary of ways in which choice should be offered in an educational setting comes from Patall et al. (2010): “...choices need to be relevant to students’ interests and goals, provide a moderate number of options of an intermediate level of complexity, and be congruent with other family and cultural values” (p. 898).

Autonomy and Motivation: Cognitive Evaluation Theory

Cognitive evaluation theory is a part of Self-Determination Theory that focuses on motivation, and intrinsic motivation in particular (Ryan, 1982). The existing (western) model of education discourages both well-being and performance by relying heavily on extrinsic motivation as a way to get students to make their way through the system and complete their coursework (Besançon, Fenouillet, & Shankland, 2015). Sheldon et al. (2004) found a significant connection between extrinsic goal contents and well-being: when a student’s goals are not their own (they are being told what to study, for example), there is a negative effect on well-being. This is echoed by Grund et al. (2015): “...when people have the feeling that they would like to do something else besides the current

activity, then they experience affective setbacks” (p. 515). Besançon et al. (2015) studied the effects of the western school model on students’ creative potential, motivation, and well-being. They found that students in a traditional school were much more likely to be extrinsically motivated than those in an alternative (Waldorf) school; they also found that students in the alternative school showed significantly greater student life satisfaction—the degree to which they were satisfied with their lives while at school (Besançon et al., 2015).

Human motivation lies on a spectrum, from complete amotivation (a total lack of motivation) to intrinsic motivation—motivation that comes from within based on how much a person enjoys a task or activity; this spectrum is central to Organismic Integration Theory, a sub-theory of Cognitive Evaluation Theory (Ryan & Deci, 2000a). Figure 2 illustrates Cognitive Evaluation Theory in relation to common educational contexts:

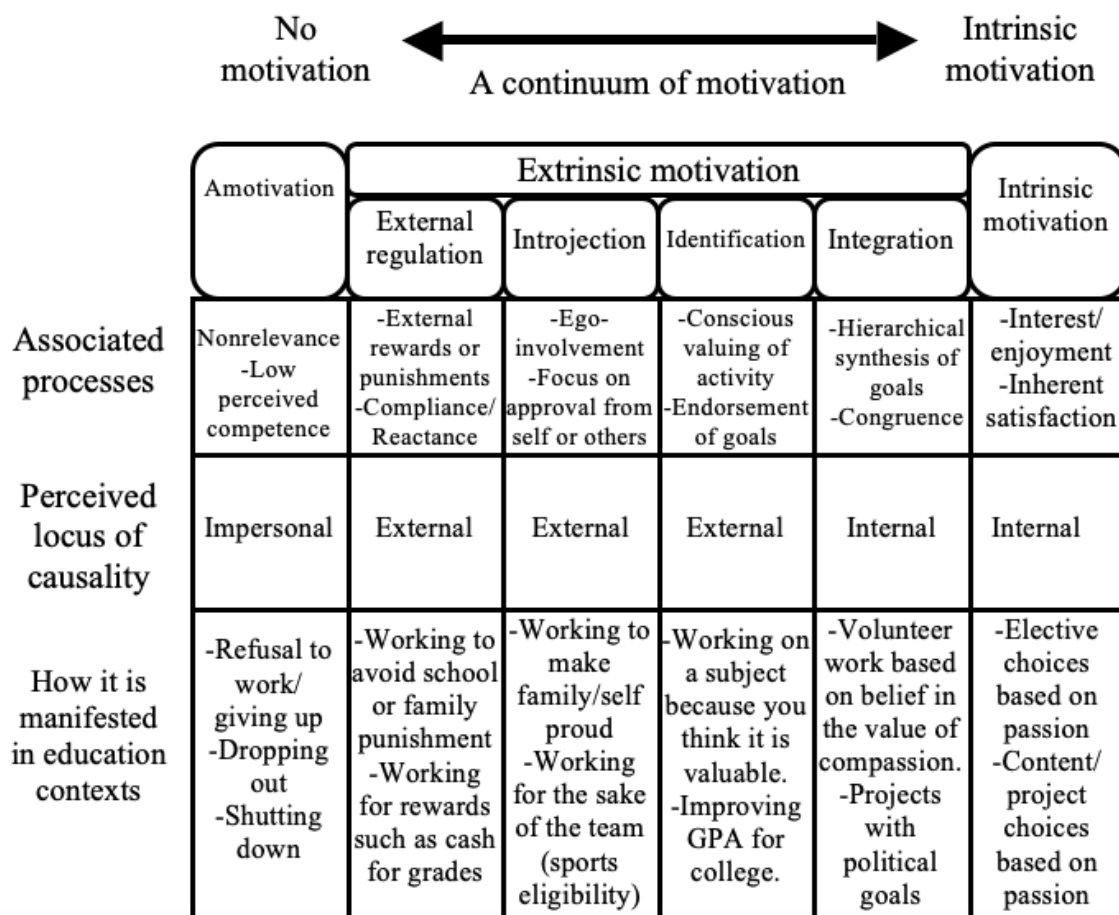


Figure 2 Organismic Integration Theory. Adapted from Ryan & Deci (2000a)

On the far left side of the diagram is amotivation, or the absence of motivation. People without motivation simply do not do things, or they abandon things they have started, largely because they don't see why they should be doing it and/or they don't feel like they are competent (and there would be little point in continuing). Most teachers will have dealt with amotivated students at one point or another—they are the students that completely shut down, give up, and perhaps even drop out of school altogether.

To the right of amotivation are a series of different types of extrinsic motivation. As the types of extrinsic motivation move further towards intrinsic motivation, they get more integrated within the individual. It is possible to have extrinsic motivation with a *perceived* internal locus of causality. The locus of causality is the place from which the

cause (of something) originates; in the case of human behavior, it can originate from inside of the person (intrinsic motivation, an internal locus) or it can come from outside of the person (extrinsic motivation, an external locus). While integrated motivation is technically extrinsic, the person *perceives* their motivation to be coming from within. This happens because they have integrated goals from outside of themselves to be a part of their selves, often due to a moral code. For example, a student may volunteer to clean pens and cages at the local animal shelter because they believe people should show compassion toward animals. If the volunteer work were truly fun and the student wanted to do it for the sheer enjoyment, it would be intrinsically motivated. But if the student doesn't like the smell of animal waste products, their continued volunteer work would be an example of integrated motivation: the values have been so integrated with the person that it becomes part of who they are, and therefore the motivation—while not technically intrinsic—*feels* like it comes from within the person. This type of motivation is often leveraged in educational settings.

On the far right of the diagram is intrinsic motivation, in which a person engages in an activity because they get enjoyment from it. In an educational context, this might be seen in a student signing up for wood shop class because of a love for woodworking, or a student with a love for basketball giving extra effort when it's time for that particular activity in physical education class. While intrinsic motivation makes it easy for students to engage with certain educational activities, it is difficult to plan for intrinsic motivation, as different students have different feelings toward different activities, and the most common assessments of many educational standards require students to spend much of their time on abstract, text-based activities (Mora, 2011).

Extrinsic Motivation

Extrinsic motivation is that which comes from outside of a person. They aren't inherently negative in terms of well-being—a person can agree with and endorse an extrinsic motivation. Extrinsic motivations are often controlling and have a negative impact on well-being due to a lack of autonomy. Extrinsic goal contents (the “what” of the goal) were previously discussed as negatively affecting well-being; similarly, extrinsic goal motivations (the “why” people are pursuing the goal) were found to have a negative effect on well-being (Sheldon et al., 2004). The spectrum of extrinsic motivation runs from controlling (and negative for well-being) to voluntary (and positive for well-being).

On the far left side of the “extrinsic” section of Figure 2 is externally regulated motivation. In educational settings, external regulation is when a student does not want to do something, but they relent in order to either avoid some kind of punishment or in order to receive a reward—usually short-term rewards like extra recess time or maybe a snack, though some teachers will also do things like keep track of a points system to work toward a class party. Externally regulated motivation is common in schools, and is often used by teachers as a way of getting a few non-motivated holdouts to join the rest of the class in an activity. This type of motivation was more popular in the past, including the time period when behaviorism (Skinner, 2014) was a more dominant learning theory. While external regulation does result in getting students to complete coursework, the learning has little staying power: “When individuals experience their behavior to be externally regulated, they typically feel controlled or alienated, such that when the external regulatory force is absent, so is the behavioral regulation” (Ryan, 1995, p. 406).

In other words, once the regulating force is no longer present, a person goes back to doing what they wanted to do to begin with.

To the right of externally regulated motivation (in Figure 2) lies introjected motivation. When motivation is introjected, students are more likely to engage with an activity than when they are externally regulated. In the case of introjection, they usually engage because they want to please someone else. This can be a teacher (the student wants the teacher to think they are smart, talented, or hard-working), a friend or group of friends, and/or family members—especially parents. Figure 2 notes the presence of “ego involvement,” as the desire for praise from these people is a key part of introjected motivation: the student wants to feel competent, valued, or even loved. Some teachers recognize this and will use it to their advantage, telling students things such as, “I will be so excited to see this when you are done!” While introjected motivation can be effective, it is also risky. When students work hard all semester to get an “A,” for example, a report card with a “B” can be devastating, and a student that promised an “A” to parents may panic as a result. Introjected motivation has indeed been found to be associated with higher levels of anxiety among students (Ryan & Connell, 1989). Introjected motivation can also be found in students wanting to prove to themselves that they can achieve something, and is similarly risky—working hard to get an “A” (but not achieving it) can be as disappointing to the student as to the parents.

Further along the spectrum of extrinsic motivation is “identified” motivation. Identified motivation marks the beginning of the *internalization* of motivation, when students start to experience motivation because they value something. In the case of identified motivation, the student often adopts societal values as a way of motivating

themselves. For example, some students might not enjoy math, but they recognize that having math skills is valuable to their future, and are therefore willing to put greater effort into mastering certain skills. Teachers will leverage identified motivation by reminding students of how a skill will be useful in the future—whether in college, in a career, or in adult life. Identified motivation can be quite effective. Burton, Lydon, D'Alesandro, and Koestner (2006) found that identified motivation is a significant predictor of academic success. With identified motivation, the students endorse the goals involved (unlike external regulation or introjection). While they may not enjoy the work, they can take comfort in doing something they believe in that will benefit their future.

Further along the motivational spectrum is integrated motivation. Integrated motivation is much like identified motivation, but the internalization of motivation goes deeper. Instead of adopting a societal value because they agree with the goals, students with integrated motivation have goals that they associate with their sense of self. In the example of the student that volunteers at the animal shelter, that student (with integrated motivation) would do it regardless of whether or not it looks good on a college application, whereas a student with identified motivation would not do it unless it helped them attain that adopted goal; both students might do it because they think it is a good thing to do, but their motivations are different. Integrated motivation functions differently in an academic setting. It is more difficult for teachers and designers to leverage because it requires either knowledge of the student (and the student's sense of identity) or the ability to mold the student's identity to integrate new values. In the case of knowing the student, a teacher might suggest an assignment or project topic to a student with that knowledge in mind, or encourage them to look into particular extra-curricular activities.

In the case of influencing a student's identity, this may happen when a teacher makes the student aware of some particular issue that is already compatible with the student's identity—these could be social, political, or environmental issues, or more (Deci & Ryan, 2008). For example, a student known for being environmentally conscious may be given a lesson on the plastic content of oceans; while the student might not have previously been aware of the issue, there is a good chance they will see it as a cause they can engage with locally, and embark on cleanup projects, raise awareness, or even lobby their school and local businesses to minimize their plastic waste. Deci and Ryan (2008) note that internalization of extrinsic motivation can be facilitated when those close to a person (i.e. family, friends, teachers) support and encourage that person to explore or engage in behaviors interesting or important to them.

While intrinsic motivation may not always be possible in an educational setting, integrated motivation still provides students with a *perceived* locus of causality. But integrated motivation requires certain conditions in order to thrive—such as the satisfaction of a student's need for autonomy, relatedness, and competence (Niemic & Ryan, 2009). Offering and supporting content choices for those lacking intrinsic motivation can result in internalized extrinsic motivation. Sheldon and Elliot's (1999) study of self-concordant goals, motivation, and well-being showed a significant interaction between the self-concordance of a goal (whether it was consistent with a student's interests and values) and semester attainment. In other words, those students whose educational goals aligned with their interests and values were more likely to achieve those goals.

Intrinsic Motivation

Intrinsic means “inward” or “belonging naturally.” It is the motivation that comes from within a person, and it is marked by inherent interest and enjoyment in an activity or subject (Ryan & Deci, 2001). In the case of intrinsic motivation, the reward for the activity is the activity itself. It has been found that intrinsic motivation *decreases* when external rewards are involved; similarly, competition and deadlines have been found to decrease intrinsic motivation (Ryan, 1982). In other words, strategies that teachers use to motivate students tend to have the *opposite* effect when students are already intrinsically motivated, and the most effective thing a teacher can do with an intrinsically motivated student is step back and offer only informational (non-controlling) feedback (Ryan, 1982); trying to encourage an intrinsically motivated student is more likely to discourage the student.

While harnessing intrinsic motivation in students may seem ideal, very few teachers can accomplish this. Keller notes, “Educators tend to promote the value and the goal of having intrinsically motivated learners...But is this feasible, or even possible? How many children would go to school if they had the choice?...there would seem to be very little intrinsically motivated activity in regard to schools” (2009, p. 18). By the time the teacher finds a way to match an assignment with a student’s passion, guidelines and deadlines have been introduced, and these counteract intrinsic motivation (Ryan, 1982). Intrinsically motivated behaviors (IMBs) need certain conditions in order to thrive. According to Ryan (1995), “IMBs are most likely to occur under conditions that support *perceived competence*, such as optimal challenges and positive feedback, and those that

facilitate *perceived autonomy*, such as opportunities for choice and an absence of salient external controls and rewards” (p. 404).

In order for intrinsic motivation to exist in an educational setting, students must be allowed to take the lead in an activity. They might only experience intrinsic motivation during portions of an assignment. For example, they may be intrinsically motivated to read a story by an author they enjoy, but not intrinsically motivated to take a quiz based on that story. Very few courses exist that offer regular opportunities for intrinsic motivation for students; these are most likely to be elective courses. Keller (1999) notes that a course being an elective satisfies the “A” portion of the ARCS model in that the content should be of high interest and worthy of the student’s attention (which can then be followed by the remainder of the ARCS model). Studies in student boredom have found that students often identify courses based on text/textbook studies (usually in abstract content) as being “boring,” including math, ELA, science, and social studies—core courses, in other words (Cockroft & Atkinson, 2017; Farrell, Peguero, Lindsey, & White, 1988; Mora, 2011). Teachers can leverage the times when it is possible for coursework to align with a student’s passion by allowing the student more freedom and by acting as a consultant or advisor on the work—having the student check in for feedback, but otherwise minimizing control (Ryan, 1982). The nature of the feedback should not be controlling—the student should not feel like the teacher is trying to get a specific result or behavior out of them—but rather *informational*, where the student is provided with relevant information, but no pressure to do anything in particular with it (Ryan, 1982).

Authentic choice is a likely way to increase intrinsic motivation. In a study of the effects of offering choice in the classroom, Patall et al. (2010) found that “the perception of having choices significantly predicted intrinsic motivation for schoolwork within classes” (p. 908). Intrinsic motivation is facilitated by choice and, by extension, autonomy. Intrinsic motivation has the strongest links to well-being (Sheldon & Kasser, 1995; Sheldon et al., 2004).

Motivation and Well-being

Motivation has clear and strong links to student engagement and academic success. But how does motivation relate back to well-being? Since surveys used in this study don’t ask students about their *overall* well-being (which consists of many factors outside of the educational setting and is beyond the scope of this research), can the existence of motivation stand in as an indicator of well-being? A number of studies have found strong links between the two, suggesting that, while motivation is not the only indicator of well-being, it does make a significant contribution, and we can reasonably assume that motivated students are more likely to have a higher level of well-being than those lacking motivation. These studies have shown links between motivation and well-being in elementary school, secondary school, college, and in adult life.

According to Deci and Ryan (2008), “autonomous motivation has been associated with greater persistence; more positive affect; enhanced performance, especially on heuristic activities; and greater psychological well-being” (p. 17). At the elementary level, Burton et al. (2006) found that elementary students who were more identified with their education had a more positive association between their report card grades and their well-being. The study also reinforced the link between intrinsic motivation and well-

being, and found that intrinsically motivated students had greater psychological well-being regardless of their academic performance. If school systems are intent on improving well-being, offering students the chance to pursue intrinsically motivated activities will work—whether the students get good grades or not.

When motivations are not autonomous, students may run the risk of increasing anxiety. Ryan and Connell's study of 355 upper-elementary school children found that their motivations for doing schoolwork were more often "identified" (adopted reasons such as "I want to understand the subject"), "introjected" (self-esteem reasons, such as for the avoidance of guilt or shame, or "external" (submitting to authority); intrinsic reasons for doing schoolwork were more rare. Furthermore, students showed increased anxiety when their motivations were introjected—when they were doing something in order to make their parents proud, for example (Ryan & Connell, 1989).

At the secondary level, Emadpoor, Lavasani, and Shahcheraghi (2016) found that academic motivation had a direct and significant effect on well-being in female high school students. In a 2-year study following German secondary school students as they graduated and afterward, Litalien, Lüdtke, Parker, and Trautwein (2013) found that "participants who had more autonomous reasons to pursue their personal goals in secondary school were more likely to report higher enjoyment of their lives and stronger self-esteem and healthier affect 2 years later" (p. 451-452). This study included three groups ("Not in education," "Vocational," and "University") and found that life satisfaction for those *not* in an educational trajectory was lower by almost one standard deviation compared to the other two groups, suggesting that motivation to continue one's education may be linked to life satisfaction.

At the college level, Sheldon and Kasser's (1995) study of 113 students found that intrinsically motivated strivings were related to overall well-being: "The degree to which strivings were engaged in for self-determined reasons was positively correlated with nearly every inventory and daily diary measure of well-being" (p. 540). The intrinsic measure was associated at a significant level as a contributor to vitality and positive affect.

Outside of the world of education, Björklund, Jensen, and Lohela-Karlsson's (2013) study of 577 of blue and white-collar workers over an 18-month period found a relationship between decreased work motivation and increased exhaustion and depression: "The relative risk of more depression was fairly high, about three to four times higher, when there was a decrease in work motivation" (p. 576). While this study did not take place in an educational context, the connection between motivation and well-being was clear.

In general, whether a goal is intrinsically motivated relates positively to well-being: "...individuals with the highest well-being were those who pursued intrinsic rather than extrinsic goals and who pursued goals for autonomous rather than controlled reasons" (Sheldon et al., 2004, p. 481). Students (and people in general) should be happier and more motivated when they are allowed (and encouraged) to pursue what they are interested in and passionate about. Even so, students are still so rarely given such opportunities, despite the abundant research to support the idea that greater autonomy should lead to improved well-being (Besançon, Fenouillet, & Shankland, 2015; Easley, 2013).

Chapter 2 Summary

As autonomy is an essential component of well-being, courses that offer greater autonomy are more likely to have a positive effect on student well-being. If student well-being is a concern for an instructional designer, then following a framework of personalized learning would guide important design decisions, as personalized learning focuses on competence-based progression, student needs, alignment to standards, student interests, student ownership, social embedding, the use of formative assessments, and flexible learning environments (State of Rhode Island Office of Innovation, 2017); all of these features have a connection to at least one component of Self-Determination Theory. As this study is focusing on the “autonomy” component of SDT, the courses involved include autonomy supports such as flexible pacing (Wesp & Ford, 1982), allowing students to design their own coursework (Kelley, Sumrall, & Sumrall, 2015; Prigmore, Taylor, & De Luca, 2016; Zou, Mickleborough, Ho, & Yip, 2015), and allowing students to choose reading and writing content within the course (Barry, 2013; Beaton, 2010; Ivey & Broadus, 2001; Morgan & Wagner, 2013; Pitcher et al., 2007; Wigfield, Gladstone, & Turci, 2016).

While these choices might represent an improvement over a total lack of choice (Leotti & Delgado, 2011), the fact that a choice exists does not equate to autonomy nor an improvement to motivation or well-being (Jeno et al., 2019; Reeve, Nix, & Hamm, 2003; Stefanou, Perencevich, DiCintio, & Turner, 2004). According to Patall et al. (2010), in order for choices (in an educational setting) to work well, they should be “relevant to students’ interests and goals, provide a moderate number of options of an intermediate level of complexity, and be congruent with other family and cultural values”

(p. 898); even so, providing choice—any choice—is an important factor in a student’s perception of autonomy.

Cognitive Evaluation Theory (part of Self-Determination Theory) focuses on motivation, including how it is related to autonomy (Ryan, 1982). The theory (and Organismic Integration Theory, a sub-theory of Cognitive Evaluation Theory) explains that human motivation lies on a spectrum from total amotivation (no motivation at all) thru extrinsic motivation (where one’s motivation comes from outside the self) to intrinsic motivation (where one’s motivation comes from within)(Ryan & Deci, 2000a). Studies of Cognitive Evaluation Theory in educational contexts have revealed that intrinsic motivation is ideal for maximum student well-being (Patall et al., 2010; Ryan, 1995); in situations where it is impossible for motivation to be intrinsic, it is best for extrinsic motivation to be identified (endorsed by student values) or even integrated (congruent with student values to the extent that the values are synthesized with the self)(Burton et al., 2006; Niemic & Ryan, 2009; Deci & Ryan, 2008). In contrast, extrinsic motivations that are not integrated or identified have negative impacts on student well-being (Besançon et al., 2015; Grund et al., 2015; Ryan & Connell, 1989; Sheldon et al., 2004). Student autonomy in the form of choice allows students to do work that aligns with intrinsic, identified, or integrated motivation.

Motivation itself is not the same thing as well-being, but it is an important part of well-being and can be reliably used as an indicator of well-being (Ryan & Deci, 2008). Both intrinsic motivation and internalized extrinsic motivations (identified/integrated) have been associated with improved student well-being at the elementary (Burton et al., 2006; Ryan & Connell, 1989), secondary (Emadpoor et al., 2016; Litalien et al., 2013),

and college levels (Sheldon & Kasser, 1995), as well as in the working world (Björklund et al., 2013). While measuring overall well-being is outside of the scope of this study, examining motivation will give insight into the ways in which autonomy relates to well-being.

If courses are designed in such a way that students (via autonomy in the form of “meaningful” choices) are able to experience intrinsic, identified, or integrated motivation, the result should be an improvement to well-being. While some studies have examined how adolescent students generally feel about being given some autonomy in ELA courses (Barry, 2013; Beaton, 2010; Ivey & Broadus, 2001; Morgan & Wagner, 2013; Pitcher et al., 2007; Wigfield, Gladstone, & Turci, 2016), there is not yet a case study that directly links these choices with well-being using a prominent theory.

CHAPTER THREE: METHODOLOGY

Introduction and Statement of the Problem

This chapter will begin with a review of the research question, followed by an explanation of how this study answers the research question. There is an overview of the methodology followed by a description of the setting (including the design of the courses used in the study) and the participants. Finally, there is a description of the data sources, collection, and analysis, and a brief note on my role as a researcher.

Two online courses (Creative Writing and 9th grade ELA) were recently designed—based on the tenets of Self-Determination Theory—to provide varying amounts of student autonomy (represented by different levels of choice) within each course. Similarly, an existing 10th grade ELA course was refined/redesigned to match. Through surveys and collection of course-related artifacts, it was possible to gain a deeper understanding of how these students perceive changes in their motivation and well-being as it related to the choices they were granted within their coursework. By answering specifically-designed questions and by producing data in the form of coursework, students were able to not only show whether or not they were most motivated by a particular level choice within their courses, but they also explained why they were most motivated by those levels of choice, explained what types of assignments they found most motivating, and gave details of how choice was connected with their senses of motivation and well-being.

Chapter three will detail the ways in which a case study approach was used to find out how students' motivation related to three different levels of choice in their online courses. For five students, we attempted to frame their survey responses and artifacts based on their background information. For 40 students, we were able to analyze their anonymous survey responses to questions focused on the relationship between choice and motivation, the most (and least) motivating reading and writing assignments, and their favorite (and least favorite) parts of the course. Analysis of these artifacts and responses gave insight into how these students perceived having different options in their online ELA courses and how those options related to motivation and well-being. A case study design allowed for deep investigation of unique students in a unique setting (Yin, 2011); deep description and total transparency allowed for maximum generalizability of this qualitative study.

Research Question

This study's research question is: How does the level of choice for an assignment relate to evidence of motivation in student work samples and student thoughts about motivation?

In order to find out if student motivation (as shown in work samples) or thoughts about motivation were related to design features that offered different levels of choice (and not due to other factors), students were directly asked about how their motivation related to level of choice; they were also asked questions about which assignments (reading and writing) they found most and least motivating. These selection questions were followed by open-ended questions asking students to explain why a certain level of choice or a certain assignment was most motivating. Open-ended survey questions allow

for flexibility, and can be especially beneficial in a cross-cultural context (Summers, Wang, Abd-El-Khalick, & Said, 2019). Students were also asked about their favorite and least favorite parts of the course—answers to such questions added context, support, and/or triangulation to the main questions.

When gathering qualitative data while working with adolescents, Mason and Ide (2014) found that adolescents expressed a preference for answering question textually as opposed to face-to-face, citing a greater degree of comfort, the ability to think about their answers in greater depth (and at their preferred time), a feeling of having more control (in terms of power balance), the ability the communicate informally, and the ability to terminate the interview without face-to-face interaction. Finally, the online nature of the course, IRB requirements, and need for flexibility in a pandemic made qualitative, electronic surveys (including open-ended questions) the best option for gathering the bulk of the data. There was an anonymous end-of-course survey distributed to students in all three courses; these were completed by a total of 40 students. There was also a series of shorter surveys distributed to five participant students at different times during the school year. All of these surveys asked questions specific to student motivation as it related to different instructional units and the levels of choice provided during those units. Work samples from five participants were also analyzed for evidence of motivation in relation to levels of choice.

Research Methodology

Yin (2011) suggests that qualitative inquiry is sometimes the best choice when other methods are constrained by the lack of proper conditions for an experiment, difficulty in getting enough respondents or a high enough response rate to do a survey

designed for quantitative analysis, or availability of existing data (p. 6). Such is the case in this situation—there are varied sizes of classes of students in a rural, cross-cultural setting. The largest class sizes in this (online) context are typically about 30 students, a sample so small that it would be difficult (or impossible) to obtain enough data for quantitative analysis.

A case study methodology was chosen specifically due to the setting, the context, the phenomena under investigation, and the types of data analyzed. According to Yin (2014), case studies have five defining features: investigation of a contemporary phenomenon within its context, unclear boundaries between the phenomenon and the context, the possibility of more variables of interest than data points, reliance on multiple sources of evidence, and benefit from “prior development of theoretical propositions to guide data collection and analysis” (p. 13). This study investigated a unique context in which multiple data types were used to examine the relationship between choice and motivation for the students within that context; the analysis was based on assumptions made using Self-Determination Theory (that increased autonomy in the form of choices should result in improved motivation) and allowed for variables beyond the theoretical foundation (competing explanations). Some of the data were numerical in nature—including scale questions allowing students to compare motivation in different contexts, or electronic records of numerical data as evidence of motivation, such as word counts, number of edits, and post counts (Henrie et al., 2015). While the presence of such data might suggest a mixed methods or quantitative study, these data were not analyzed using quantitative methods, but rather were used as evidence of student motivation in those contexts (and pertained to five students total). Yin (2014) notes, “...case studies can be

based on any mix of quantitative and qualitative evidence...case studies need not always include direct, detailed observations as sources of evidence” (p. 14).

As the research focused heavily on students’ perceptions and feelings, qualitative methods—such as surveys featuring open-ended questions—provided an efficient and direct method for obtaining detailed data that led to a deeper understanding of such an issue (Creswell, 2007). Soutter et al. (2011) investigated links between high school students’ educational experiences and their well-being, noting, “While single-item questionnaires or brief inventories have greatly advanced knowledge of youths’ quality of life, life satisfaction, happiness, or subjective well-being, the constant change and complex cultures of the classroom environment require methodologies that capture the ebb and flow of energy, focus, and emotion of the typical classroom” (p. 616). While this study did not take place in a physical “brick-and-mortar” classroom, similar flux exists in the online courses used in this study, and the context of online courses during a pandemic added another level of complexity.

Observations and artifacts can demonstrate how a student enacts their motivation, but they rarely reveal a student’s thoughts (unless the artifact is something like a written reflection); qualitative questioning, on the other hand, helps a researcher “understand a participant’s world” (Yin, 2011, p. 135). The survey instruments used in this study featured open-ended questions that asked students for explanation and elaboration in order to give extra context to their other responses. Course artifacts can also give evidence that supports or contradicts a student’s statements, and the use of these multiple sources of evidence is a key feature of qualitative research, and case studies in particular (Yin, 2011).

As participants in this study came from a variety of cultural backgrounds, the sample size was small, and the variables were heavily embedded in the situation (Merriam, 1998), a case study featuring “in vivo” responses produced data that could satisfactorily answer the research question. Furthermore, Yin (2014) notes that case studies are especially well-suited to answer “how” questions, such as the research question in this study. Prigmore et al’s case study (2016) of a student-led game development project found that Self-Determination Theory “can form an effective framework for case studies of autonomy and motivation on student projects” (p. 144).

Setting and Description of Participants

Setting

Participants either attended public schools or were enrolled in a school district’s homeschool program in the rural Northwest of the United States. The school district serves an area slightly larger than the state of West Virginia but with a total population of less than 60,000 (and a student population considerably smaller). More specifically, students in the case study were those involved in the aforementioned three courses; the small class sizes and limited number of students created a natural boundary for the case(s).

Students in these courses can attend from anywhere in the district itself—either in one of the brick-and-mortar schools or in the district’s homeschool program. Brick-and-mortar schools range in size from 11 to nearly 600 students; some are in towns accessible by road, and some are in villages accessible only by ferry and/or plane. The homeschool program serves approximately 800 students, who can be attending from anywhere within district boundaries (possibly in remote or semi-remote settings with limited Internet

connectivity). For much of the 2020-2021 school year, all brick-and-mortar schools were closed due to the COVID-19 pandemic, and students were all learning remotely.

The context (setting) of this study was three online English Language Arts courses: Creative Writing, ELA 9, and ELA 10. The ELA 9 and ELA 10 courses are considered “core” courses; while the Creative Writing is designed to meet all ELA standards (and give students an ELA credit), the emphasis on standards is shifted from literary analysis to writing standards, and there are many more writing opportunities throughout the year, making it more of an elective course.

Design Elements Common to All Three Courses

Each of the courses in this study begins with an introductory module (Figure 3); this helps familiarize students with the course structure, navigation, teacher, and classmates. There is a course navigation video, a teacher welcome video, a practice assignment (making sure students know how to turn in assignments on the LMS), a suggested pacing guide, and an introductory discussion in which students get to know their classmates by talking about their interests, their experiences, and their hopes and plans for the course. The introductory modules also have tutorial videos on how to use Google Docs, as each course uses this tool as a way for students to turn in their work and get feedback (from peers and the teacher) directly on the document.











⋮	 START HERE: How to navigate LA 9A	✓	⋮
⋮	 Instructor welcome	✓	⋮
⋮	 ELA 9A suggested weekly pacing guide/checklist [↗]	✓	⋮
⋮	 Practice Assignment Aug 20 0 pts	✓	⋮
⋮	 Distance Learning Beginning-of-year Survey [↗]	✓	⋮
⋮	 Introductory discussion Aug 27 10 pts	✓	⋮
⋮	 How to be Successful in this Course	✓	⋮
⋮	 How to use Google Docs	✓	⋮
⋮	 How to avoid plagiarism	✓	⋮
⋮	 Meet with instructor Aug 27 10 pts	✓	⋮

Figure 3 Pages in the ELA 9 introductory module

Writing samples in each course also follow a similar process. After receiving instruction on how to write a particular type of sample, students will look at examples, read examples, and complete some kind of analysis assignment. The students are then expected to complete pre-writing activities, usually by filling out graphic organizers (Figure 4). For essays, these organizers might have separate boxes for different paragraphs (and parts of paragraphs) as well as reminders and short examples as scaffolding.

5 Paragraph Essay Organizer (Make your own copy by clicking on "File," then "Make a copy.")		
Introductory paragraph (Begin with a hook and a little bit of background or context):		
Thesis statement (states your position clearly without "I think"):		
Introduce reasons for your position:		
Body paragraph 1 Choose a transition: <i>To begin with,</i> <i>First of all,</i> <i>For example,</i> <i>In the first place,</i> <i>To start with,</i>	Topic sentence (with transition)--give your first reason/claim:	Support your reason with evidence, examples, statistics, quotes: ●
Body paragraph 2 Choose a transition: <i>Furthermore,</i> <i>In addition,</i> <i>More importantly,</i> <i>Subsequently,</i> <i>Next,</i> <i>Secondly,</i>	Topic sentence--give your second reason/claim:	●
Address the opposing argument (persuasive only)		

Figure 4 **A graphic organizer used for essays in ELA courses**

For narratives, pre-writing activities consist of putting story events on a blank plot arc (Figure 5), completing a "character profile" for the protagonist of the story (Figure 6), and completing a setting description sheet. The character profile and setting description sheets both contain scaffolding in the form of examples and suggestions.

Title of narrative: _____

Climax:

Rising action

Falling action

Resolution

Exposition

Identify the main plot points including the inciting event and climax, as well as key events from the rising and falling action. Use the "text box" feature to add text to the lines on the plot arc.

Exposition

Protagonist:
Antagonist:
Internal conflict:
External conflict:

Setting

Time:
Place:
Season:
Weather:

Literary devices (optional)

Simile:
Metaphor:
Allusions:
Symbolism:
Personification:

Figure 5 A blank plot arc used for narrative prewriting in ELA courses

Character Profile (Make your own copy by clicking on "File," then "Make a copy.")

Name:	
Appearance:	Eyes: Hair: Height: Build: Clothing style: Distinguishing features: <i>Note: you do not need to include all parts of this description in your story.</i>
Personality:	Likes: Dislikes: Habits: Quirks: Hobbies: Motivations:
Goal:	What does this character want? (The action centers on working toward this)
Impediment:	What stands in the way of this character achieving the goal? <i>Note: the impediment can be another character, a flaw in the character's own personality, society or an extension of society, or a force of nature. Review types of conflict for more info.</i>
Action:	How will this character overcome the impediment?

Figure 6 A graphic organizer used to help students plan a narrative

Once pre-writing assignments are completed, students begin drafting their samples and are expected to turn in either introductory paragraphs (for essays) or the exposition of a narrative; this allows the teacher to give feedback on the early parts of the writing process. Students then add the middle portion of the sample (body paragraphs for an essay, rising action for a narrative) and turn that in for more feedback. Finally, students complete their first drafts (adding a conclusion for an essay, the climax and resolution for a narrative) and turn them in by posting the draft to a discussion board in the course and changing sharing settings on the document so that classmates can give feedback. After receiving feedback from classmates, students will incorporate that

feedback into a second draft, then turn that draft in for teacher feedback before revising again for their final draft. This “chunked” and scaffolded writing process represents a significant amount of competence support for students.

Each course also features standards-based analysis assignments in which students are asked to analyze a piece for literary devices, rhetorical devices, character development, plot development, word choice, or point of view. While these assignments can be used with assigned readings, the focus on standards allow students to meet the same standards with different pieces, making it possible to offer more reading choices. See the example below (Figure 7) for one such assignment focused on standard RI8:

Evaluating Persuasive Arguments

My name:

Standard RI8--I can:

- Identify key points or claims made in an argument or text.
- Connect key points or claims to specific persuasive techniques.
- Use specific, relevant supporting evidence to determine if an argument's key point or claim is well supported.
- Identify false statements or reasoning by their supporting evidence.

Name of speaker:

Argument topic:

Listen for at two claims and pay attention to how the claims are supported

(What is a claim? A claim is something that the speaker says is true--like a thesis statement)

Claim #1	List one of the speaker's claims:
To which does the speaker appeal? <input type="checkbox"/> Pathos <input type="checkbox"/> Ethos <input type="checkbox"/> Logos	Describe the supporting evidence used by the speaker to support their claim (feel free to use quotes):
Is the claim well-Supported? <input type="checkbox"/> Yes <input type="checkbox"/> No	Explain how the evidence supports the claim (include any false statements or faulty reasoning):

Figure 7 An analysis template used for standard RI8

This assignment goes on to include similar analysis of further claims. These analysis assignments are sometimes based on a Google Doc and sometimes take place in a Canvas quiz, as seen in Figure 8.

Question 3 6 pts

Find another example of figurative language in one of the poems, paste it, identify which it is, and explain how this affects the poem (and the reader, by extension). This should be at least a full paragraph in length.
 Suggestions: [analogy](#), [allusion](#), [metaphor](#), [simile](#), [hyperbole](#), or [personification](#).

Edit View Insert Format Tools Table

12pt Paragraph **B** *I* U A A T^2

p | 0 words |

Figure 8 A standards-focused open-ended quiz question that can be used with different reading selections

Either way, the assignment will always reference the standard being assessed and ask students to reflect on their performance in that standard (in the case of quizzes, this reflection is always the final question). Reading assessments also allow students to refer to resources such as the piece being assessed (so it is not a test of memory), dictionaries, instructional pages, and examples. These competence supports allow students to focus on their ability to meet the standard without extra pressure.

Each course also features topical discussions (relating to reading standards) at least once per quarter. These allow students to share ideas, build relationships, and also add their own ideas relating to the literature they are reading. The courses also have flexible pacing: while assignments all have due dates, there is no penalty for late work, and students are also welcome to work ahead if they want. Each course has a suggested pacing guide in the form of a weekly checklist; students are encouraged to download and/or print this guide as a way of helping them stay on pace.

ELA 9

The ELA 9 course uses programmed options to help students choose between two reading options in the “low choice” reading modules (Figure 9); after they complete a standard-focused lesson, they are given a description of the two available options for their reading, including a suggested amount of time for reading and information about the author and the time period. Their selection in a “choose your story” quiz will assign them their chosen piece of literature, a vocabulary quiz (based on vocabulary from their chosen piece), and an analysis quiz combining multiple choice and standards-focused short answer questions.











⋮	 Module 1 suggested pacing and checklist 	✓	⋮
⋮	 1.01 Central idea and structure in nonfiction narratives	✓	⋮
⋮	 1.01 Central idea and story structure: Choose your story Jan 10 2 pts	✓	⋮
⋮	 1.01 Bulls	✓	⋮
⋮	 1.01a Bulls Vocabulary Quiz 10 pts	✓	⋮
⋮	 1.01b Bulls Quiz 30 pts	✓	⋮
⋮	 1.01 from "Life on the Mississippi"	✓	⋮
⋮	 1.01a "Mississippi" Vocab Quiz 10 pts	✓	⋮
⋮	 1.01b "Mississippi" Quiz 30 pts	✓	⋮

Figure 9 Teacher view of a low-choice reading lesson in ELA 9

The “low choice” writing sample requires students to analyze one of the low-choice readings for how an author’s choices (in either plot structure or literary devices) affected the story (standard RL5); they had a low level of choice in terms of literature to write about and a low level of choice in devices to analyze. This writing unit also features tutorial videos broken into the different steps of the writing process; in these videos, I use a well-known sample piece of literature (“Little Red Riding Hood”), show how I analyzed the piece, and write an analysis essay about its plot structure; students can use these videos as competence support, as the videos show them how they can create their own similar literary analysis essay. There are two other low-choice writing opportunities for ELA 9 students—a timed writing assessment at the end of the first quarter and again at the end of the second quarter.

A “no choice” module requires students to read a canonical piece (*Romeo and Juliet*) and write an argument essay about the piece using an assigned prompt. For

competence support and scaffolding, I provide a free audio version of the piece embedded in the course, suggest watching film versions, and also include a high-quality staged version that students can watch for free online (also embedded in the course); I provide a scaffolded notes sheet focused on character development (Figure 10), as the argument essay prompt related to that standard.

Character development notes (Make your own copy by clicking "File," and "Make a copy.")

RL3: Analyze how complex characters develop over the course of the text, interact with other characters, and advance the plot or develop the theme.

Instructions: Identify and describe your character at the top. Then, as events change your character, keep track of them, describe the change, and find a quote as supporting evidence—these will come in handy on your project. Then reflect on how these changes affected the plot of the story (which is part of the standard). If you need more than 5 events, highlight the "event 5" row, then right click and select "insert row below" from the right click menu.

Name of character and piece:		
Describe the character at the start of the story (character traits, not physical traits):		
Describe event or discussion:	How did it change character?	Quote as evidence:
Event 1:		
Event 2:		
Event 3:		
Event 4:		
Event 5:		
Describe/explain how changes in this character affected the plot of the story:		

Figure 10 A scaffolded notes template based on standard RL3

The timed writing test at the end of this unit (quarter) is also a no-choice argument prompt.

For high-choice writing, students write a narrative early in the year (they can choose to write fiction or nonfiction narratives on anything they want); there is also an

optional high-choice poetry writing assignment in the middle of the year for extra credit (following a short unit on poetry reading, a literary analysis quiz on those poems, and a discussion about poetry). Their final writing sample is also “high choice”: a research project based on a novel of their choosing (high-choice reading). The unit recommends six commonly-taught novels but also notes that students can choose other novels; the recommendations come with a brief description, a little about the author, and a suggested reading time. I give instructions about how to use the state’s online library to borrow eBooks and audio books, and several of the novel descriptions also link to free .pdf versions that students could download, as well as audio versions available freely online (as schools and libraries were closed and many students were not able to get physical copies of books). Some students chose novels they had at home (i.e. *The Hunger Games*). As additional competence support and scaffolding, I provide scaffolded notes templates for analyzing the novels, a recommended pacing guide, examples of potential project types (such as videos, screencasts, slideshows, and infographics), and a “standards matrix.” The standards matrix includes the standards that the project is assessed on (including the standards written in student-friendly language), a place for students to rate their project on each standard, a place for them to explain their rating (citing their own work), and a final reflection on how they feel they did on their project overall.

ELA 10

The ELA 10 course utilizes very similar designs to the ELA 9 course. The main difference is the focus on world literature, as the course uses pieces from Latin America (Quarter 1), Asia (Quarter 2), Russia (Quarter 3), and Africa and the Middle East (Quarter 4). A low-choice unit has students choosing between two reading options for

several lessons; the low-choice writing prompt asks them to choose one of the pieces they read during the unit and compose a narrative prequel or sequel to that piece. There are two other low-choice writing opportunities for ELA 10 students—a timed writing assessment at the end of the first quarter and again at the end of the second quarter. Students exercise “high choice” in reading by choosing from among a large menu of novels to read (including many with freely available online and audio versions, added due to potential lack of access to libraries or bookstores) and they exercise “high choice” in writing by completing a research project that allows them to create a video presentation about any topic related to the course that they are interested in. The no-choice reading unit gives students a list of pieces to read for the entire quarter, including two short stories, a speech, and two collections of poetry; the no-choice writing unit gives students an assigned argument essay prompt relating to recent readings. There is one other no-choice writing opportunity for ELA 10 students—a timed argument writing assessment at the end of the third quarter. The ELA 10 course features similar competence support to the ELA 9 course, including pacing suggestions, graphic organizers, scaffolding, reflective assignments (reflecting on performance in standards), regular feedback, and electronic, audio, and film versions of readings.

Creative Writing

The Creative Writing course was developed to give students as many creative writing opportunities as possible while still requiring them to meet all ELA standards (this course is based on the 11th-12th grade standards). Instead of writing essays, they write creative nonfiction that allows them to meet argument and informative writing standards—literary journalism (a low choice writing assignment) and personal essays or

memoirs (“high choice”). Instead of a research project focusing on literature, they research the most suitable outlets for publication and write a paper on where they submitted their work and why (“no choice”). Narrative prompts (flash fiction and short stories) are high-choice, while poetry prompts range from no-choice to low-choice (the first set of poems has assigned prompts while students can choose from a short list of prompts for their second set of poems).

During each of the writing units described above, students read exemplar texts as models for that type of writing; they also complete literary analysis assignments based on these exemplars (Figure 11).

□
Question 3
4 pts

Find an example of diction (word choice) that really stands out. Paste the line that has the example of word choice and **bold** the words that you feel have the greatest impact.

Analyze the word choice by explaining how the words affect your experience of reading the poem.

Questions to consider:

Do these words have any particular connotation that is powerful to you? Do they bring to mind any kind of powerful image or symbol?

What if the poet had chosen a different word or words (synonyms) for this line--how would the piece feel different? (4 points)

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12pt ▾ Paragraph ▾ | **B** *I* U A ▾  ▾ T² ▾ | ⋮

Figure 11 A standards-focused (standard L5) open-ended quiz question that can be used with different reading selections

One of the poetry sub-units has assigned readings (“no choice”) and another features low-choice readings. For the literary journalism and personal essay exemplars, students can choose from among five pieces; for the memoir, students can choose from among four. Short fiction exemplars can be chosen from among a list of dozens.

While the Creative Writing course still uses graphic organizers and other scaffolding to help students plan and write their pieces, the writing process is slightly more involved and accelerated than in the other courses. During the pre-writing portion of each writing unit, students are expected to share and discuss the ideas they have for

their pieces and use classmate feedback on those ideas while they complete their plans. Unlike the other two courses, the writing assignments are not chunked in a way where students turn in the beginning, middle, and end of a piece; instead, they turn in a completed draft all at once, share with classmates for feedback, revise based on classmate feedback, turn in a revised draft for teacher feedback, and revise again for their final drafts. In the example in Figure 12, note that there are two “pre-write” assignments—one is the discussion while the other is where students turn in their plan based on a graphic organizer.

⋮	📄	Unit 1 Terms	✓	⋮
⋮	📄	Exemplar text: literary journalism	✓	⋮
⋮	💬	Literary journalism: prewrite Aug 31 10 pts	✓	⋮
⋮	🔗	Analyzing literary journalism Sep 3 15 pts	✓	⋮
⋮	📄	Literary journalism pre-write Sep 3 25 pts	✓	⋮
⋮	📄	Literary journalism: 1st draft Sep 9 25 pts	✓	⋮
⋮	💬	Lit. journalism revision Sep 9 10 pts	✓	⋮
⋮	📄	Literary journalism: 2nd draft Sep 14 10 pts	✓	⋮
⋮	📄	Lit. journalism: final/publish Sep 17 10 pts	✓	⋮

Figure 12 A portion of a Creative Writing Unit showing the flow of assignments relating to the writing process

This makes it possible for students to write more pieces over the course of the year, and it also closely resembles a writing workshop atmosphere where students discuss their writing ideas, literature, and each other’s work on a regular basis.

Description of Participants

Once IRB approval was granted, participants were recruited via email. The request for participants was mentioned in course announcements for each course with reminder emails sent to students individually. The school district's IT department created an online form that would allow parent consent forms to be signed electronically. Emails were sent to the families of all potential participants with information about the project and instructions for completing the online consent form. After reminder emails and announcements, six consent forms were signed and returned. The students with electronically signed completed parental consent forms were contacted, thanked for volunteering, and sent assent forms, followed by instructions on how to complete the first round of surveys (of three rounds total). Email reminders were sent to each of these students before each round of surveys was emailed; these emails also contained the survey protocol.

Five of these six participants produced enough data (for analysis) through their coursework and by completing non-anonymous surveys; three of these attended the homeschool program while two were enrolled at brick-and-mortar high schools in their respective communities (though these students were remotely schooled for most of the school year due to COVID-related closures). Three participants were female and two were male; four were in a core ELA course and one was in Creative Writing. The participants range from 9th grade to 11th grade. These five students represented a range of existing feelings toward ELA courses (including negative, neutral, and positive), making it possible to investigate potential effects of whether or not a course is a student's "favorite" (Ben-Eliyahu & Linnenbrink-Garcia, 2015) or if existing interest affects how

they perceive choice (Ackerman et al., 2014; Phan, 2016). While these five students did represent a balance of grade, gender, and different attitudes toward ELA, this was not a result of careful recruitment, but of coincidence.

As the school year drew to a close, it became clear that even though these five participants would produce enough data for valuable analysis, they would not produce enough data to sufficiently answer the research question. The three courses in this study regularly include end-of-course surveys as a departmental expectation for teacher reflection on best practices; these surveys were modified to include questions pertaining to the research question. They were also made to be completed in an anonymous way and without any associated class credit; this was communicated to potential participants so as to limit any potential coercion. With a letter of support from the head of my department, we were able to gain IRB approval for use of that survey data. A total of 40 students completed end-of-course surveys: 21 students from the ELA 9 course, 11 students from the ELA 10 course, and eight students from the Creative Writing course. The anonymous nature of the survey makes it impossible to know any demographic information other than the grade level of some of the students.

Data Sources and Collection

In order to answer the research question, this study utilized four sources of data: end-of-course surveys (anonymous, completed by 40 students across the three courses), course artifacts (student discussion posts and student work samples, including reflective assignments, and electronic observations of online behavior), non-anonymous surveys (completed by the five participants with consent forms on file), and researcher notes and journals.

Course Artifacts

Autonomy can have different effects based on different factors, such as whether or not a course is a “favorite” (Ben-Eliyahu & Linnenbrink-Garcia, 2015), if a student has previously been successful in a course (Phan, 2016), or if a student feels competent (Patall, Sylvester, & Han, 2014). Because of these factors, it was important to have participants that came with different degrees of fondness for English Language Arts and feel different degrees of competence.

One of the first exercises in each course is an introductory discussion in which students introduce themselves to classmates, share things about themselves (including goals for the course), respond to classmates, and generally get to know each other. These prompts included questions asking students about their feelings toward ELA courses, as well as their feelings toward reading and toward writing. In the case of the creative writing course, there is an extra discussion at the start of the term, called “Writing as an art,” in which students discuss one piece of literature that they love and one piece of literature that they dislike, as well as a brief analysis of why they like or dislike these pieces. Responses to classmates allow students to elaborate and to discuss what they enjoy about literature in general. While introductory discussions are common in online courses, and discussions about literature are common in ELA courses, they also provide qualitative data that help make it possible to understand a student's feelings toward online courses, ELA courses, and even specific types of literature. These introductory discussions provided the background information against which we could examine student responses to non-anonymous surveys to determine if pre-existing feelings may have been a factor in how a student’s motivation relates to a level of choice. Student

responses to other class discussions were also examined for signs of motivation such as post count, word count, and post quality (Henrie, Halverson, & Graham, 2015).

The remaining course artifacts collected for analysis were student work samples, including reflective writing assignments and formal writing samples such as narratives, research projects, poems, and essays. The samples themselves were copied and kept in my BSU password-protected Google Drive. Data *about* these samples (such as word counts, number of edits, amount of time elapsed on timed writing assessments) were also kept in a Google Doc in the same drive; while not the writing samples themselves, these data represent an indirect way of observing behavior (Yin, 2014) and are referred to (in this study) as electronic observations. Like discussion posts, these work samples and observations were examined for evidence of motivation (Henrie et al., 2015).

Researcher Notes and Journals

Because the research is reflexive in nature and because the researcher is deeply involved in the project as both course designer and teacher, the researcher's notes and journals (all digital) were collected as possible data sources. Attia and Edge (2017) note, "reflexive researchers open themselves up as one element of the phenomena that are to be investigated" (p. 36). Apart from taking notes during the coding process, the researcher kept a journal to document thoughts and feelings throughout the research process; not only does this serve as a source of additional data, but it also serves to clarify any potential biases in order to help readers evaluate the findings (Watt, 2007). Miles, Huberman, and Saldaña (2020) make a similar recommendation for using researcher reflections as part of the data management plan.

I (the researcher) took and wrote regular journal entries throughout the research process. These were kept in a Google Doc in the aforementioned Google Drive. When cited in the study, data from notes and journals are identified as such. Data from these notes and journals can be found in narrative portions of chapters four and five, and also in tables displayed in chapter four.

Non-anonymous Surveys

The five students with signed consent forms on file were sent non-anonymous surveys asking them questions about the unit they had just completed and how its level of choice related to their motivation. The surveys also asked them how that motivation related to other units with more or less choice, and to reflect on their motivation and how it related to the number of choices they were given. Emails with a link to the Qualtrics survey were sent by Dr. Perkins after the corresponding unit in each course. Participants were sent an informal email before the start of each survey to let them know to expect an email survey to begin soon, and to give them an opportunity to ask any questions of their own before beginning.

The original research plan was to interview these students directly. As it became prudent to find other ways of gathering data (due to IRB restrictions), these surveys were designed to elicit similar kinds of data that we hoped would answer the research question. More specifically, the questions were designed to find out which level of choice a student found most motivating, why that level was most motivating, and whether the reasons for that motivation related to autonomy (choice), pre-existing feelings toward subject matter, and/or other factors.

Surveys were nondirective (Yin, 2011), allowing participants to elaborate and explain their perceptions and feelings in their own words. Each survey began by providing context. For example, the first survey sent to participants in the ELA 9 course started with “You just completed (in Q2) a module in which you had a low level of choice as to what you wrote about and read—you could choose between one reading and another, and your essay prompt limited you to writing about certain literary devices in certain potential pieces. Please answer the following questions relating to the module.” The following table (Table 1) displays the surveys questions along with an explanation of how they related to the research question:

Table 1 **Non-anonymous survey questions relating to the research question**

Research question: In the context of three online ELA courses taught in the 2020-2021 school year, how do the characteristics of students' work and their thoughts about motivation relate to the degree of choice provided to them for various instructional tasks?

Survey question	Relation to research question
On a scale of 0-4, 0 being "not at all" and 4 being "a lot," how much do you typically enjoy reading/writing in this genre?	Helps us understand if a pre-existing interest or enjoyment is related to whether or not choice is valued.
Consider the level of choice you were given in this module. On a scale of [same scale description], how much more (or less) did you enjoy the assignment due to the level of choice?	Helps us understand how level of choice (representing autonomy) is related to interest or enjoyment (intrinsic motivation).
On a scale of [same scale description], how motivated do you typically feel to complete reading/writing assignments in this genre?	Helps us understand if a pre-existing aptitude relates to whether or not choice is valued.
Consider the level of choice you were given in this module. On a scale of [same scale description], how much more (or less) motivated were you to complete the assignment due to the level of choice?	Helps us understand if a level of choice increased or decreased motivation (could be extrinsic or intrinsic).
How do you think the module could be improved?	Question included for extra context/triangulation (students might elaborate on if they think it should have more or less choice and why).
How did this experience compare with other assignments that had either more or less choice?	Helps us compare this to other relationships between choice and motivation (extra context/triangulation).

The final question of each of these surveys was more of a reflective writing prompt designed to elicit information very specific to the research question, including scaffolding (examples of what questions they might ask themselves while reflecting). That final question was:

Looking back at the module you just completed, please write a reflection (in as much detail as you can) about how you felt about the activities you completed.

Please be sure to address the question, “What was your motivation to complete this assignment as you did it?” and you might also think about questions that allow you to elaborate on previous responses, like:

1. How much did you enjoy (or not enjoy) the assignment?
2. What are your thoughts about the number of choices given to you? Did you feel free? Constrained? Somewhere in-between?
3. Would you have been happier with the experience if you had more or less choice? If so, why?
4. What about your writing do you think is very good, and what do you think could be changed?

This final question was meant to allow for more student voice and for qualitative analysis of student responses, as they were asked to relate level of choice to both motivation and happiness (as a proxy for well-being). Once they finished the survey, participants were notified that the survey was complete and were thanked. Responses were kept in Dr. Perkins’s BSU Qualtrics account until final grades were recorded. At that point, Dr. Perkins shared the results with me in a Google Sheet; this sheet was viewable only by the two of us and was kept in our respective password-protected BSU Google Drives.

End-of-course Surveys

These anonymous surveys were adapted to get student feedback that would be valuable in both answering the research question and in allowing myself (the teacher/designer) to reflect on how the current designs could be improved for the following year’s courses. Much like the non-anonymous surveys, these were designed to elicit responses that would result in data similar to that which we might have gathered by doing interviews. Because different levels of choice were applied to two different types of assignments (reading and writing), most questions in this survey were separated to focus on either reading or writing assignments; this would also make it possible to explore how the relationship between level of choice and motivation might be different

depending on type of assignment. Furthermore, existing studies on student choice in ELA courses focus on either reading or writing (not both), so separating survey questions this way made it easier to discuss data and analysis in the context of the existing literature.

These surveys were linked from the course and completed by students using Google Forms. The following table (Table 2) displays the surveys questions along with an explanation of how they were related to the research question:

Table 2 **End-of-course survey questions relating to the research question**

Research question: In the context of three online ELA courses taught in the 2020-2021 school year, how do the characteristics of students' work and their thoughts about motivation relate to the degree of choice provided to them for various instructional tasks?

Survey question	Relation to research question or practice
What was your favorite part about this course?	Question included for extra context/triangulation (students might refer to choice or specific assignments with certain levels of choice). Also useful for design revisions.
What was your least favorite part about this course?	Question included for extra context/triangulation (students might refer to choice or specific assignments with certain levels of choice). Also useful for design revisions.
Which writing sample type were you most motivated to complete? (choose from list)	Preparation for follow-up question; can also show potential relationships between assignments with certain levels of choice and motivation.
What was more motivating about that writing assignment?	Responses can be analyzed for relationships between motivation and choice (or other factors).
Which writing sample type were you LEAST motivated to complete? (choose from list)	Preparation for follow-up question; can also show potential relationships between assignments with certain levels of choice and motivation.
What was less motivating about that writing assignment?	Responses can be analyzed for relationships between motivation and choice (or other factors).
Of the different pieces you read for this course, which were you most motivated to read, and why?	Responses can be analyzed for relationships between motivation and choice (or other factors).
Of the different pieces you read for this course, which were you LEAST motivated to read, and why?	Responses can be analyzed for relationships between motivation and choice (or other factors).
How do you feel about the feedback you received on your work?	Useful for teacher reflection on practice (responses not included in this

	analysis).
This course offered several levels of choice in regard to what you read: no choice [course-specific example], low choice [course-specific example], and high choice [course-specific example]. Which level of choice did you find most motivating?	Determining if a level of choice increased motivation (could be extrinsic or intrinsic).
What did you find more motivating about the level of reading choice you chose?	Determining <i>how</i> or <i>why</i> a level of choice increased motivation; qualitative analysis can help determine type of motivation.
This course offered several levels of choice in regard to what you wrote: no choice [course-specific example], low choice [course-specific example], and high choice [course-specific example]. Which level of choice did you find most motivating?	Determining if a level of choice increased motivation (could be extrinsic or intrinsic).
What did you find more motivating about the level of writing choice you chose?	Determining <i>how</i> or <i>why</i> a level of choice increased motivation; qualitative analysis can help determine type of motivation.
What suggestions do you have for improving this course for next year's students?	Useful for design revisions. May include references to certain assignments or levels of choice that can add context or triangulation (responses not included in this analysis).
Once they finished, participants were sent to a final page of the survey where they were notified that the survey was complete and were thanked. Responses were kept in my password-protected BSU Google Drive.	

Data Analysis

End-of-course Surveys

Coding followed a two-cycle process like that described by Saldaña (2013). Once end-of-course survey responses were copied into a Google Sheet, they were read through the first time to look for keywords that most clearly answered the question and to look for recurring ideas, topics, or patterns that suggest a deeper analysis was required, as well as

anything unusual or surprising (Creswell, 2007). Keywords or phrases that would get coded during this first cycle would be anything that clearly answered the survey question or further explained reasons for motivation. Because this research seeks to explore student perceptions, first round coding keywords used “In Vivo” codes (“words or short phrases from the participant’s own language”) in order to capture explanations in the students’ own words, as recommended by Miles, Huberman, and Saldaña (2020); they note, “Phrases that are used repeatedly by participants are good leads; they often point to regularities or patterns in the setting” (p. 65).

After analysis of the first round of codes, the second round used pattern coding (Miles, Huberman, & Saldaña, 2020) to group first cycle codes into “categories, themes, or concepts” (p. 79); the second cycle coded categories and themes related to Self-Determination Theory and/or Cognitive Evaluation Theory (Ryan, 1982; Ryan & Deci, 2000b), which form the theoretical foundation for the research. In regards to recoding, Saldaña notes, “Qualitative inquiry demands meticulous attention to language and deep reflection on the emergent patterns and meanings of human experience” (2013, p. 10). The table below (Table 3) illustrates an example of the coding process based on three student responses; note that responses can have more than one theme associated with them.

Table 3 An example showing how three survey responses were coded

Why was this level [of reading] more motivating?

Choice level	Student response	Round 1 (in vivo)	Round 2 (themes)
Low choice	“I didn't have to look through all the books of choices I had to read, it was so easy to just choose between 2 books I want to read.”	“easy to...choose”	Simplicity
High choice	“I chose the easiest readings which helped me a lot.”	“easiest readings” (difficulty level)	Competence
High choice	“I could find something to read that I enjoyed reading and was not forced to read.”	“something...I enjoyed” “not forced”	Intrinsic motivation; Autonomy

Once coding was complete, codes were further analyzed using tables (Miles, Huberman, & Saldaña, 2020). The tables are code frequency tables—one code frequency table per open-ended survey question. The responses to questions about most motivating level of choice were organized by level of choice chosen; responses to questions about most and least motivating assignments and favorite and least favorite parts of the course were organized by theme. Code frequency tables were used to better understand which levels of choice and which explanations of motivation were most dominant among these students. While these data are numerical in nature and the tables display numbers and percentages, this is for the purpose of exploring the relative importance of different choice levels and explanations of motivation among the students in the study. As noted by Miles, Huberman, and Saldaña, (2020), “...counting is a legitimate heuristic/tactic for exploring whether there may be some hierarchical or proportionate importance of some kind in coded data” (p. 137).

A final set of tables was created to help analyze surprising or nuanced data: when a student mentioned a particular assignment as being most motivating, I checked to see if that assignment had the same level of choice as the level that student claimed was most motivating. If they did not match, I put the data in this new table and added a column for each student's explanation of why the chosen assignment was most motivating. Analysis of those explanations aided in the understanding of other factors involved in motivation. This extra context is important when analyzing qualitative survey data; Elliott (2018) describes coding as "a decision-making process, where the decisions must be made in the context of a particular piece of research" (p. 2850).

Course Artifacts, Non-anonymous Surveys, and Researcher-Created Notes/Journals

After the end-of-course surveys were coded and further analyzed, course artifacts (including electronic observations), non-anonymous surveys, and researcher-created notes/journals were inspected for additional evidence relating to coded themes; while these sources yielded some valuable data, this was also part of the triangulation process. Writing samples (course artifacts) were analyzed for evidence of motivation. This included the word count, time spent on the assignment, number of edits, and number of drafts (electronic observations); while the samples were read for their quality, the recording of these other data is an online form of observation (Henrie et al., 2015; Ray et al., 2020). Reflective samples were analyzed for keywords or In Vivo quotes that provided insight into the relationship between choice and motivation. Discussion posts were analyzed to learn about student background (including feelings about ELA, reading, and writing) and how the student engaged with the course. These surveys, observations, and work samples were compiled as extended vignettes called "profiles," which are used

to “describe an experience over an extended time period” (Miles, Huberman, & Saldaña, 2020, 182-183). The profiles were then examined for trends and summarized.

While researcher-created journals were kept as a way of checking for bias, they also recorded reflections on what was happening in these three courses at various times. These reflections did yield useful data in regard to several student reactions to a no-choice writing module (referenced in the “‘No Choice’ and Motivation” section of Chapter 5). Researcher notes were kept during the coding process and (when pertinent) added to data tables to provide pertinent contextual information.

End-of-course survey responses were triangulated with course artifacts, observations, and other responses within the surveys for consistency. According to Lincoln and Guba (1985), triangulation with different modes of data collection is one way in which naturalistic inquiry can establish credibility. Creswell (2007) notes that “corroborating evidence from different sources” can “shed light on a theme or perspective” (p. 208).

Role of the Researcher and Addressing Biases

I have been a teacher for the school district in which the study took place since 2012 and have previously served on three of the district’s curriculum committees. My role on the ELA (English Language Arts) curriculum committee included leading the design of the 9th grade English and Creative Writing curriculums, both of which I now teach through the district’s distance learning program (other teachers in the district use the same curriculum). I currently teach both classes (Creative Writing and 9th grade ELA) online in addition to 10th grade ELA (online).

Being the curriculum designer, course developer, and the teacher for these courses gives me a deep understanding of the creation and implementation of these projects. Because of this, I took great care in wording questions and conducting surveys in a way that “reduces information shared by participants in case studies” (Creswell, 2007, p. 142). This means that survey questions aimed at answering the research question were worded in a formal way so that students being surveyed would be more likely to answer as if I had not been privy to any knowledge of the projects beforehand, otherwise readers of this study may be confused due to important elements being left unsaid as a result of my pre-existing involvement. Non-anonymous surveys being distributed by Dr. Perkins also aided in this. The addition of contextual survey questions aided in the analysis by giving me a more thorough understanding of the factors involved in motivation for each student; I was able to apply this context to the analysis and also include it in thick description when needed.

Conscious effort was made to avoid exploiting a power balance between myself and any student; similarly, I made a conscious effort to avoid teaching participants with any greater care or attention than classmates that didn't have signed consent forms on file. This helped prevent skewing of data. Per Lincoln and Guba's (1985) recommendations for credibility, I practiced prolonged engagement (a full school year), persistent observation, and triangulation; Lincoln and Guba also note that, “Objectivity exists when inquiry is value-free” (p. 300). With this in mind, the research design itself takes into account that there might not be such a thing as any ideal amount of choice by having a variety of participants and by gathering their perceptions (in their own words) of different levels of choice and how those levels relate to motivation. This helped ensure

that I was not be able to force the data to fit any preconceived ideas as to the value of choice in online courses—the data will show what it shows, or, as Lincoln and Guba (1985) say, it “is possible to allow Nature to ‘speak for itself’ without impact from the values of the inquirer” (p. 300).

By following several of Lincoln and Guba’s (1985) other recommendations for credibility (keeping a journal for audit, peer debriefing, and triangulation), any remaining bias I have not already corrected should be detectable by third parties.

Summary

This case study explored the relationship between motivation and levels of choice in three online high school ELA courses. This was accomplished by surveying students, examining their work, observing their (online) behaviors, creating researcher notes/journals, and analyzing those data. A case study design was chosen due to the nature of the setting, circumstances, and research questions (Creswell, 2007; Merriam, 1998; Yin, 2011; Yin, 2014).

Participating students came from a district in the rural Northwest of the United States and took one of the three online courses involved in this study (ELA 9, ELA 10, or Creative Writing) during the 2020-2021 school year. While some students were part of the district’s homeschool program, others began the school year in brick-and-mortar schools, though all students were eventually out of the school buildings due to the COVID-19 pandemic. The three online ELA courses were designed according to a personalized learning framework (Adams Becker et al., 2016; Education Elements, 2019) using principles of Self-Determination Theory (Ryan & Deci, 2001) to offer students an environment supporting competence, autonomy, and relatedness.

Forty students anonymously completed end-of-course surveys that asked them questions about which level of choice they found most motivating (for reading assignments and for writing assignments), which specific assignments they found most and least motivating, and what their favorite and least favorite parts of the course were. Five students (with signed consent forms on file) also contributed data by completing assignments (to be analyzed as artifacts), by being observed (through their online course activity), and by filling out other surveys asking them about their motivation. I (the researcher) also kept notes and journals for reference, triangulation, and to examine for evidence of bias.

Most data came from the end-of-course surveys, and these were analyzed using a two-cycle coding process (Saldaña, 2013); the first round used “in vivo” codes, while the second round grouped codes under themes relating to Cognitive Evaluation Theory and Self-Determination Theory (Miles, Huberman, & Saldaña, 2020; Ryan, 1982; Ryan & Deci, 2000). The codes were analyzed using a series of code frequency tables that displayed the frequency of codes in relation to a most motivating level of choice, to why a particular assignment was most or least motivation, or to a student’s most or least favorite part of the course; further analysis used tables to investigate student explanations about most motivating assignments when those assignments didn’t have the same level of choice that the student previously said was most motivating (Miles, Huberman, & Saldaña, 2020).

Data from students with consent forms on files were compiled into “profiles,” examined for trends, and summarized; these other data were used for triangulation with the end-of-course survey data, as were responses in the end-of-course survey itself that

didn't directly address motivation, such as questions about a favorite part of the course (Lincoln and Guba, 1985; Creswell, 2007). Finally, I described my role as a researcher and explained steps I am taking (including prolonged engagement, persistent observation, triangulation, keeping a journal for audit, and peer debriefing) to ensure credibility and to address potential bias. The next chapter will present and analyze data.

CHAPTER FOUR: PRESENTATION AND ANALYSIS OF DATA

Introduction

This study explored the relationship between levels of assignment choice in three online ELA courses and evidence of motivation in student work and student thoughts about motivation. Each course was developed to feature different units with different levels of choice for both reading and writing assignments: no choice (an assigned reading or an assigned writing prompt/topic), low choice (2-3 reading options or potential writing prompts/topics), and high choice (four or more reading options or potential writing prompts/topics).

Data was gathered in three ways: an anonymous end-of-course survey, non-anonymous surveys with five participant students, and work samples (including written reflections) from the participant students; researcher journals were kept throughout the study, while researcher notes were produced during the analysis process. The end-of-course survey asked students to reflect back on the different units in the course and explain which level of choice they found most motivating; students were also asked to explain which reading/writing samples they were most motivated to complete and what they thought were their favorite and least favorite parts of the course. The non-anonymous surveys took place immediately after the completion of a unit and asked participant students how the level of choice affected their enjoyment and motivation, and how their level of motivation during the unit compared to other units with either more or less choice. Finally, student work was examined for evidence of motivation in relation to

different levels of choice offered throughout the courses. This chapter will present the data from these sources, as well as analyses of that data.

Research Question

How does the level of choice for an assignment relate to evidence of motivation in student work samples and student thoughts about motivation?

End-of-Course Survey Data

A total of 40 students completed anonymous end-of-course surveys, including 21 students from the 9th grade ELA course, 11 students from the 10th grade ELA course, and eight students from the Creative Writing course. The students answered questions about which level of choice they found most motivating for both reading and writing (and why). Their answers give insight as to how a level of choice may be related to motivation. They were also asked specifically which writing samples they were most and least motivated to complete (and why), as well which reading they were most and least motivated to complete (and why). Those answers give insight as to what other factors might contribute to motivation and how those factors might be related to choice (autonomy) and possibly other elements of Self-Determination Theory. Students also answered questions as to what their favorite and least favorite parts of the course were. While those answers do not specifically address motivation, they provide valuable context that supports other student responses and may also specifically reference instructional design elements that are related to their motivation or well-being in general.

Most Motivating Levels of Choice

Students were asked which level of choice (“no choice,” “low choice,” or “high choice”) they found most motivating for reading assignments (Table 4). The question was

customized for each end-of-course survey to include examples of each level as they were found in that course.

Table 4 Most motivating levels of choice for reading assignments

“This course offered several levels of choice in regard to what you **read**: no choice ([course specific example]), low choice ([course specific example]), and high choice ([course specific example]). Which level of choice did you find most motivating?”

	No choice	Low choice	High choice
ELA 9	2	5	14
ELA 10	1	2	8
Creative Writing	1	1	6
Totals	4 (10%)	8 (20%)	28 (70%)

A majority of students in all three courses responded that they found the “high” level of choice in reading options to be most motivating, 70% of respondents in all (n=28). An additional 20% (n=8) said they found the “low” level of choice to be most motivating, while the remaining 10% (n=4) claimed “no” choice to be most motivating.

The above question was followed with “What did you find more motivating about the level of reading choice you chose?” Of the 40 students that completed the survey, 34 gave responses that clearly answered the question, while six either did not respond or gave a response that did not clearly address the question, one example being “I don’t really know.” Responses varied in length, with some only long enough to contain a single code while others contained 2-3 codes. The code frequency table below (Table 5) displays the results:

Table 5 Coded results of explanations of most motivating level of reading choice

What did you find more motivating about the level of reading choice you chose?

	Theme	Frequency
No choice	Simplicity	2
Low choice	Simplicity	6
High Choice	Autonomy	23
	Intrinsic motivation	15
	Competence	2

For the students that found “no choice” and “low choice” to be most motivating for reading assignments, responses all fell under the theme of “simplicity.” These responses included codes related to wanting to save time, having difficulty deciding, and/or feeling less pressure to decide; each of these codes directly relate to making things simpler for that student. For students that found a high level of choice to be most motivating for reading assignments, autonomy was cited most often; codes within the autonomy theme included having options or choices and an appreciation for being able to “explore” the literature options. Several of these students specifically mentioned that they found not being “forced” to be a motivating factor. There were also 15 codes categorized under the theme of “intrinsic motivation.” These codes noted that students found the reading content interesting or enjoyable. There were also two codes that fell under the theme of “competence.” These codes specifically dealt with the ability to choose a piece of reading at an appropriate level of difficulty.

Below (Table 6) are samples of some of the student responses to the question above (all written responses to this question can be found in the appendix):

Table 6 **Sample of responses explaining most motivating level of reading choice**

Sample responses to “What did you find more motivating about the level of reading choice you chose?”

No choice	“I don't make decisions very well; I'm very indecisive. Sometimes, it's hard to find appropriate stories from a vast reading list that meets the requirements for quizzes etc. I enjoy having a selected set of stories for me to read just so I don't have to spend time on finding a story that will fit the assignment best.”
Low choice	“I found low choice more motivating. I really enjoy and appreciate the list in high choice; it was really cool to look through them and pick which ones I wanted to read. Although, it was a little less overwhelming to search through the low choice options than being able to search through lots of potential stories to read.”
Low choice	“I didn't have to look through all the books of choices I had to read, it was so easy to just choose between 2 books I want to read.”
Low choice	“I like having options, but I'm way too indecisive to have a high choice.”
High choice	“I could find something to read that I enjoyed reading and was not forced to read.”
High choice	“I chose the easiest readings which helped me a lot.”
High choice	“I just felt that when I found a reading example that was interesting it was easier to finish the assignment.”
High choice	“I feel like it is easier to read something you picked out or want to read. If you are forced to do something or feel like you are forced to do something then you won't want to do it.”

Students were also asked which level of choice (“no choice,” “low choice,” or “high choice”) they found most motivating for writing assignments (Table 7). The question was customized for each end-of-course survey to include examples of each level found in that course.

Table 7 Most motivating levels of choice for writing assignments

“This course offered several levels of choice in regard to what you **wrote**: no choice ([course specific example]), low choice ([course specific example]), and high choice ([course specific example]). Which level of choice did you find most motivating?”

	No choice	Low choice	High choice
ELA 9	4	6	11
ELA 10	2	1	8
Creative Writing	0	2	6
Totals	6 (15%)	9 (22.5%)	25 (62.5%)

A majority of students in all three courses responded that they found the “high” level of choice in writing options to be most motivating, 62.5% of respondents in all (n=25). An additional 22.5% (n=9) said they found the “low” level of choice to be most motivating, while the remaining 15% (n=6) claimed “no” choice to be most motivating. Compared to the responses to the corresponding question for reading, there was a slight shift toward a preference for less choice in writing, though a majority still preferred high choice for writing assignments in each class.

The above question was followed with “What did you find more motivating about the level of writing choice you chose?” Of the 40 students that completed the survey, 33 gave responses that clearly answered the question, while seven either did not respond or gave a response that did not clearly address the question, one example being a response that read “Nothing.” Responses varied in length, with some only long enough to contain a single code and with others containing 2-4 codes. The code frequency table below (Table 8) displays the results:

Table 8 Coded results of explanations of most motivating level of writing choice

What did you find more motivating about the level of writing choice you chose?

	Theme	Frequency
No choice	Simplicity	4
	Competence	1
Low choice	Simplicity	6
	Autonomy	2
	Intrinsic Motivation	1
High Choice	Autonomy	20
	Intrinsic Motivation	15
	Competence	3
	Simplicity	1

Students that chose “no choice” and “low choice” as most motivating for writing assignments cited simplicity most often, including codes related to wanting to save time, having difficulty deciding, and/or feeling less pressure to decide; specific to writing, several students also noted that they felt it was easier to focus or to begin the assignment with fewer choices. One student in the “no choice” category cited competence, as they were concerned about avoiding content that would be too difficult. Some students in the low choice category specifically noted that they appreciated having some level of choice, one including that it allowed them to still pursue something they found interesting.

Students that found “high choice” as most motivating for writing assignments cited autonomy most often. There were many responses citing an appreciation of having options or choices, more direct references to not being “forced” as more motivating, plus themes relating to individuality and self-expression, and several specific mentions of the word “freedom” in responses. There were 15 coded references under the “intrinsic motivation” theme. In addition to interest and enjoyment, students specifically mentioned passion, fun, love, and creativity in their responses. Responses under the theme of

“competence” specifically referred to improving writing skills or choosing a writing topic that played to the student’s strengths. One student’s response was coded under the theme of “simplicity,” as they found it less stressful to write about any topic of their choosing: “I got to write about anything I wanted and it took the least amount of thought. It was the only assignment that had the potential to ease my stress.”

Below (Table 9) are samples of some of the student responses to the question above (all written responses to this question can be found in the appendix):

Table 9 **Sample of responses explaining most motivating level of writing choice**

Sample responses to “Why was this level [of writing choice] more motivating?”

No choice	“If I am given a topic to write about it is easier for me to focus on the one topic.”
No choice	“No choice was most motivating because I didn't have to worry about choosing a too complicated topic or choosing the wrong one.”
No choice	“It's straight forward. Something that's harder to procrastinate on.”
Low choice	“Sometimes I have a hard time narrowing ideas down. For both short stories I looked up a random idea generator and went on from there.”
Low choice	“I can choose which choice looks best to me without having to go find them myself, letting me save time while still being interested in what I'm writing about.”
Low choice	“I enjoyed low choice because it didn't leave me to make everything myself, but it still gave me options.”
High choice	“When it comes to writing short stories, I like to be able to write about what I am passionate about, not some randomly selected topic that I have zero interest in. I'm happy that this course allows me to write what I feel like writing.”
High choice	“I enjoyed the lack of limitations, it is more fun for me when I am allowed to be more creative.”
High choice	“I really loved the high choice because we could write about anything that interested us, but it had to be in the range of things we were learning about.”

Compared to responses to the question about why a particular level of choice in reading was more motivating, most of those that chose “no choice” or “low choice” for writing mentioned that having fewer options made it easier to get started and/or focus on the writing topic, as well as saving time or relieving some of the stress associated with choosing a topic to write about, all of which fell under the theme of “simplicity.”

Most and Least Motivating Assignments

The survey also asked students which pieces they were most motivated to write and to read, as well as why they chose that piece. In response to the question, “Of the different pieces you read for this course, which were you most motivated to read, and why?”, 33 students gave responses that clearly answered the question, while another four students responded with either the name of a piece or an author (but not an explanation). The code frequency table below (Table 10) displays the results of the “why” portion of the responses:

Table 10 Coded results of explanations of most motivating reading assignment

Of the different pieces you read for this course, which were you most motivated to read, and why?

Theme	Frequency
Intrinsic motivation	28
Simplicity	4
Extrinsic motivation	1

Most respondents (n=28) noted that they were more motivated to read a particular piece because they found it interesting, enjoyable, or fun—all of which are associated with intrinsic motivation. For example, one student noted, “I was most motivated to read the poetry pieces! I love some fun, quality play on words, and it was so fun to read

existing poems and my classmates' pieces. They're all so creative, and it really inspired me while reading them!" Many students responded in similar ways, noting that a piece was related to their interests or enjoyable in different ways. Other students noted that they were most motivated to read pieces that were shorter in length, in this case falling under the theme of "simplicity." Some of those responses were nuanced, noting (for example) that saving time in a reading is related to one's level of interest: "I was most motivated to read the poems in the lessons because it's really hard for me to sit and read a bunch of pages especially if I am not interested in the topic." Another student that was motivated by the length of the reading noted different reasons: "I was most motivated to read the poetry and the flash fiction. They were short so I could read more of them." Finally, one student noted entirely extrinsic reasons for being motivated to read a piece: "I disliked having to read pages of the short stories, but I was motivated to keep going by the fact that after I finished reading and writing about it, I would never have to do that specific assignment again."

While most students were intrinsically motivated to read (usually a result of being provided with choice), the minority of students motivated by simplicity were also benefiting from choice in that they had the ability to choose shorter or simpler texts to read in order to satisfy the assignment requirements.

In response to the question, "Of the different pieces you read for this course, which were you LEAST motivated to read, and why?", 33 students gave responses that clearly answered the question, while another six students gave responses that either did not answer the question or noted that they enjoyed all of the readings. Some responses

contained more than one code. The code frequency table below (Table 11) displays the results of the “why” portion of the responses:

Table 11 Coded results of explanations of least motivating reading assignment

Of the different pieces you read for this course, which were you LEAST motivated to read, and why?

Theme	Frequency
Lack of interest	13
Lack of time	13
Competence	10
Depressing content	1

When students were asked what reduced their motivation for reading a piece, answers were split among a lack of interest in the content, a lack of time for reading, a lack of ability to read the piece (competence), and sometimes a combination of those. For example, one student responded, “I didn’t really enjoy *Romeo and Juliet* because it was hard to understand and incredibly long,” referring to both a lack of time and a lack of ability to read the piece fluently. In the 9th grade class, 15 students responded to this question, 12 of them specifically choosing the no-choice assignment *Romeo and Juliet*. The two most oft-cited themes—lack of interest and lack of time—are both related to autonomy, in that students are unmotivated when required to read content they find uninteresting or having to spend a lot of their time reading it. In addition to the responses citing lack of competence and a desire for less depressing reading content, all of the responses relate directly to an element of Self-Determination Theory and to well-being in general.

Students were also asked “Which writing sample were you most motivated to complete?” As a follow-up question, they were asked “What was more motivating about that writing assignment?” Thirty-seven students gave responses that clearly answered the question. Some responses contained more than one code. The code frequency table below (Table 12) displays the results:

Table 12 Coded results of explanations of most motivating writing assignment

What was more motivating about that writing assignment?

Theme	Frequency
Intrinsic motivation	21
Simplicity	10
Competence	9
Autonomy	6
Extrinsic motivation	1

A slight majority of respondents (n=21) explained that they found a writing sample to be more motivating for intrinsic reasons, such as being interested or passionate about the content of their writing, or enjoying a particular type of writing. One student said, “I like poetry, so it was fun for me.” Another noted, “I feel I can be more creative with fiction,” while others (ones that chose an argument essay as their most motivating writing sample) explained that they enjoy arguing. Others chose a particular writing sample as motivating because they felt they were good at it, falling under the theme of “competence.” For example, one student said, “I’ve been told I’m very good at debating and I’m more passionate about this category of writing than any other,” showing a relationship between competence and intrinsic motivation. Others noted, “It was just

easier for me,” or “I’ve always been good at arguing.” One student gave an extrinsic reason for being motivated to complete a writing sample: “I think trying to be eligible for sports and not having to write a full essay motivated me to do it.” This response was also coded under the “simplicity” theme due to the reference to the short length of the writing sample being a factor in motivation.

While most students cited intrinsic reasons for being motivated to complete a writing assignment, the majority was smaller when compared to those that cited intrinsic reasons for being motivated to complete a reading assignment; also, the citations of simplicity and competence increased. There were also mentions of autonomy being a motivating factor in writing assignments (autonomy wasn’t mentioned in the corresponding responses for reading). All but one of these responses of “autonomy” were double-coded along with “intrinsic motivation,” as the students noted they appreciated the ability to choose to write about what they enjoyed or were interested in. One student explained, “It’s just fun, like a game you sometimes have to follow the rules but you get to be creative! And write how you feel and what you want.” Another explained, “I find that writing a narrative is easy and fun, especially because there weren’t really strict guidelines about what we could and couldn’t write about. I also surprisingly enjoyed the research project” (note: the research project was also a “high choice” writing assignment). The one student that cited autonomy without specifically mentioning links to intrinsic motivation explained that the reason they found the narrative (high choice) to be more motivating was “that I could think freely.”

As a follow-up to the question, “Which writing sample were you LEAST motivated to complete?”, students were asked “What was less motivating about that

writing assignment?” Of 35 total written responses, 32 students clearly answered the question, while three students gave responses that either did not answer the question or indicated that they had enjoyed all of the writing samples. Some responses contained more than one code. The code frequency table below (Table 13) displays the results of those responses:

Table 13 Coded results of explanations of least motivating writing assignment

What was less motivating about that writing assignment?

Theme	Frequency
Competence	19
Lack of interest	16
Lack of time	1
Sharing	1
Exhaustion	1

Students responded with explanations similar to those as to why they found a piece of reading less motivating; when writing, a lack of interest and/or ability negatively affected their motivation. Students citing a lack of ability would note that they struggle with that particular genre or format of writing. For example, one student said, “I’m less of a creative writer and more of a factual, evidence based, logical writer,” and another noted, “I don’t think I am very good at argumentative essays so I don’t like to do them. I think lack of confidence was the problem.” However, a lack of time was only cited once: “It takes a lot of time and is not nearly as fun to me as the rest.” Another student was demotivated by having to share their writing work with the rest of the class, and another noted, “It was really hard to finish because my brain felt empty,” which was coded (uniquely) under the theme of “exhaustion.”

When the Most-motivating Level of Choice is Not the Most Motivating

The end-of-course surveys asked students to identify both the most motivating levels of choice (for reading and writing assignments) and the specific pieces they were most motivated to read and write. In most survey responses, the most motivating reading and writing assignments were found in units with the same level of choice that the student found to be most motivating. For example, a student citing high choice as the most motivating level for writing assignments would also cite a narrative sample (from a high choice module) as the piece of writing they were most motivated to complete.

However, in some situations the piece that a student was most motivated to read or write had a level of choice *different* from the level they claimed to be most motivating. For example, a student might have said that they find “high choice” to be most motivating when it comes to writing assignments, yet the piece of writing they were most motivated to complete had an assigned prompt and offered no choice at all. These instances were examined along with each student’s explanation of why they were most motivated to read or write the piece they referred to. The written explanations were coded in order to explore possible reasons for a particular reading or writing assignment being more motivating even when the level of choice available in the assignment was not the student’s ideal.

There were 10 students (out of 40 respondents) whose preferred level of choice for reading assignments did not match with the choice level of the piece they identified as being most motivating to read. The table below (Table 14) displays a sample of the analysis based on student responses to the question of which piece they were most motivated to read and why; one of the 10 students named the piece they were most

motivated to read but did not give any explanation as to why. In the first row of Table 14 (below), for example, a student that said they found “no choice” to be the most motivating level of choice for reading assignments also claimed that they were most motivated to read a short story selected from a “high choice” list, explaining that they found it to be enjoyable and relatable.

Table 14 Sample analyses of incongruence between most motivating level of reading choice and most motivating reading assignment

Sample analyses of students whose most motivating level of reading choice did not align with the piece they were most motivated to read

Preferred choice level	Most motivated to read	Explanation	Coded themes
No choice	Short story (high choice)	“I really enjoyed the moral behind this story and I feel that it is quite relatable for some people.”	Intrinsic motivation (enjoyment)
High choice	Short story (no choice)	“...because it was overall a good story and had a life lesson message in it.”	Intrinsic motivation (“good,” enjoyment)
No choice	Short story (low choice)	“Very catching with a great plot.”	Intrinsic motivation (enjoyment)
Low choice	Novel (high choice)	“...great story to read and I was in a need to read something different.”	Intrinsic motivation (enjoyment)

For reading assignments, nine of the 10 instances came with explanations that cited intrinsic reasons when asked why the piece they chose was most motivating (the other was that which offered no explanation at all); six of the 10 were also pieces that were chosen (as a result of being a “low choice” or “high choice” assignment). That means that there were a total of four instances in which respondents were intrinsically motivated to complete a reading for which they had no choice.

There were 10 students (out of 40 respondents) whose preferred level of choice for writing assignments did not match with the choice level of the piece they identified as being most motivating to write. The table below (Table 15) displays a sample of the analysis based on student responses to the question of which piece they were most motivated to write and why. In the first row of Table 15 (below), for example, a student that said they found “high choice” to be the most motivating level of choice for writing assignments also claimed that they were most motivated to write poems that either had assigned prompts (no choice) or a low level of choice, explaining that they found it to be an easier assignment.

Table 15 Sample analyses of incongruence between most motivating level of writing choice and most motivating writing assignment

Sample analyses of students whose most motivating level of writing choice did not align with the piece they were most motivated to write

Preferred choice level	Most motivated to write	Explanation	Coded themes
High choice	Poetry (no/low choice)	“It was easier for my brain to work through creating a poem.”	Simplicity (easier process)
High choice	Poetry (no/low choice)	“I was passionate about it.”	Intrinsic motivation (passion)
Low choice	Argument (no choice)	“I’ve been told I’m very good at debating and I’m more passionate about this category of writing than any other.”	Competence (ability); intrinsic motivation (passion)
Low choice	Narrative (high choice)	“It’s more fun and not hard.”	Intrinsic motivation (fun); competence (level of difficulty)

For writing assignments, five of the 10 instances came with explanations that cited intrinsic reasons when asked why the piece they chose was most motivating, four cited simplicity, and three cited competence; eight of the 10 were writing samples resulting from a lower level of choice than the student claimed was most motivating to them. There were a total of four instances in which respondents were intrinsically motivated to complete a writing sample for which they had no choice.

Overall, for students whose preferred levels of choice did not line up with the levels of choice associated with the reading and writing assignments they found to be most motivating, most cited intrinsic motivation, even if the associated assignment offered no choice (assignments with no choice can still be interesting or enjoyable to students). Similar to what has been seen in other responses from this survey, intrinsic motivation becomes a less dominant factor in writing assignments when compared to reading assignments; simplicity and competence are mentioned more often as reasons students are motivated to complete a writing assignment, though intrinsic motivation is still mentioned most often.

Some students were still able to find interest or enjoyment in assignments that were not directly the result of choice. This could be related to class culture, as student perception of teachers as being autonomy-supportive has been found to predict intrinsic motivation for schoolwork (Hafen et al., 2012; Patall et al., 2010; Wallace & Sung, 2017). Ackerman et al. (2014) also found that students who are already interested in a subject can value less choice just as much as (or more than) a high level of choice.

Favorite and Least Favorite Parts of the Course

Students were asked “What was your favorite part of this course?” Thirty-seven students gave responses that clearly answered the question. Some responses contained more than one code. The code frequency table below (Table 16) displays the results:

Table 16 Coded results of explanations of favorite parts of course

What was your favorite part of this course?

Theme	Frequency
Instructional design features	21
Writing	18
Reading	8
Intrinsic motivation	7
Personal enrichment	4

Instructional design features were most often cited as being a student’s favorite part of the course; these citations were dominated by content variety/choices (9) and flexible pacing (5), but also included scaffolding (2), teacher feedback (2), collaboration (1), workload (1), and easy navigation (1). There were 18 mentions of writing being the favorite part of the course, most of which (12) referred to a specific writing assignment, while others referred to a type of writing or to writing in general. Of the eight references to reading being their favorite part of the course, six cited reading in general while two cited specific readings. There were seven responses with codes falling under the theme of “intrinsic motivation,” referring to fun, enjoyment, or interests. Four responses referred to personal enrichment, such as improving their skills or learning something new.

The vast majority of responses related to autonomy (in either content choices or pacing) or intrinsic motivation. While only six responses to this question were

specifically coded with “intrinsic motivation,” 18 students in total refer to pieces they had mentioned elsewhere in the survey as being intrinsically motivating. For example, one student said their favorite part of the course was “The poetry section,” not specifically stating (in that response) that they found poetry to be intrinsically motivating. Elsewhere in the survey, that same student says they were most motivated to complete the poetry writing assignments because they were passionate about it. So while the student’s response to “What was your favorite part about the course?” didn’t get coded with “intrinsic motivation,” it was still due to something they found intrinsically motivating. The responses referring to autonomy and/or intrinsic motivation as being a student’s “favorite” part of the course triangulate with those responses specifically mentioning which levels of choice and which assignments the students found most motivating.

Students were also asked “What was your least favorite part of this course?” Thirty-five students gave responses that clearly answered the question. Some responses contained more than one code. The code frequency table below (Table 17) displays the results:

Table 17 Coded results of explanations of least favorite parts of course

What was your least favorite part of this course?

Theme	Frequency
Interaction	7
Reading	7
Writing	6
Skill use	6
Instructional design	3
Work in general	2
Personal fault	2
No least favorite part	2

Seven students cited some form of interaction as their least favorite part of the course—the two codes under this theme were class discussions and assignments in which students were expected to share their work (sometimes via audio or video recording).

There were also seven mentions of reading being the least favorite part of the course, six of which referred to a specific reading, one referring to reading in general. Of these, five referred to assignments in which they had no choice in what they read; another said, “I didn’t enjoy reading all the stories but that’s just personal preference,” not referring to any piece in particular. There were six references to writing, each of which also mentioned a specific writing assignment as being a student’s least favorite part of the course. Of these, four referred to assignments in which they were given prompts and did not have choice in what they wrote about; another response simply referred to “The essays” as their least favorite part of the course. Six students mentioned the use of specific skills as being their least favorite; these skills include analysis, reflection,

brainstorming, researching, and critiquing. Three students referred to instructional design elements (including content), two students referred to work in general, two referred to personal faults (procrastinating and skipping instructions, having to then redo assignments), and two more said that they had no least favorite part.

The themes cited in student explanations of their least favorite part of the course are dominated by a *lack* of autonomy (followed by a lack of competence, in the case of skill use; competence may have also been an issue in specific pieces of reading and writing mentioned here). A majority of respondents did not like situations in which they had no choice. For 19 of the 33 students that noted a least favorite part of the course, it was in reference to a piece they had no choice but to read or write, a discussion they had no choice but participate in, work they had no choice but to share, thematic content they had no choice but to learn, or a pacing structure they had no choice but to follow (in this case, the student objected to the entire quarter being dedicated to a single piece of literature and its associated assignment/project, not the course's flexible pacing). For example, three students in the ELA 9 course specifically mentioned having to read *Romeo and Juliet* (a "no choice" assignment) as their least favorite part of the course; this piece was also the most often cited in ELA 9 survey responses to the question of which piece they were least motivated to read. Generally, in these courses, situations in which students lacked autonomy were most often cited in survey responses as being their least favorite part of the course.

Individual Participant Data

Six students total agreed to participate in the research by responding to individual (not anonymous) surveys and allowing observations of their work in the course. Of these six, five produced enough valid data to be considered for inclusion.

Student 1

Background

At the start of the school year, student #1 expressed positive feelings toward ELA courses and toward reading in general, a fondness for reading and writing in the “fantasy” genre, and a general motivation to be successful in every course (not just in ELA courses). In an introductory class discussion, they shared a desire for an “A” and to improve their writing skills. This student also reported low motivation to write.

Student Written Reflections and Survey Responses

Student #1’s reflections revealed lower motivation in reading and writing during the “no choice” module, specifically citing personal difficulty in understanding works in the associated genre. Their reflections revealed higher motivation for writing during the “low choice” module, citing ease in getting started when scaffolding helps guide writing options, as well as a smaller time investment. In regard to reading, motivation was greatest in the “high choice” module, as the reading options in this particular module included a piece that the student had already heard good things about and was planning on reading.

Student Work

During the (high choice) narrative writing module, course instructions suggested two to three pages as an ideal length for a narrative, with five being the maximum, the

instructions noting that longer pieces make it more difficult to get quality feedback from peers and the instructor; student #1 wrote a fantasy (self-reported favorite genre) narrative of 5 pages (2711 words). This student's (low choice) expository essay was 866 words long and featured a total of 106 edits (suggested length: 400-900 words), the (no choice) argument essay was 1040 words long and featured 41 edits (suggested length: 400-900 words), and the (high choice) research project was 1177 words long (suggested length: 1000 words).

The course featured three timed-writing tests (one for narrative writing, one for expository writing, and one for argument writing). Both the narrative and expository tests featured low-choice prompts asking the student to write about a personal experience. In both of these situations, student #1 used the entire allotted time (60 minutes) and wrote pieces of 651 words each. The expository prompt asked students to write about a problem they recently solved, and this student chose to write about how they were able to raise a grade to an "A" in another course. The argument test featured a no-choice writing prompt that asked students to review source documents and construct an argument about that topic. The student used most of the allotted time (56 minutes) and wrote an essay of 368 words.

Table 18 **Table describing Student #1's writing samples**

Writing sample	Level of choice	Suggested length (word count)	Total word count	Notes
Narrative	High choice	800-1400	2711	Fantasy genre (favorite)
Expository	Low choice	400-900	866	106 edits
Argument	No choice	400-900	1040	41 edits
Research	High choice	1000	1177	4 citations

Table 19 Table describing Student #1's timed writing tests

60-minute timed writing test	Level of choice	Time used	Word count	Notes
Narrative	Low choice	60 minutes	651 words	Wrote about a book/series important to them
Expository	Low choice	60 minutes	651 words	Wrote about solving a problem by raising grade to "A" in another course
Argument	No choice	56 minutes	368 words	

In a reflection at the end of the research module, student #1 noted that they tried their best to meet all expectations throughout the year and felt that they had been successful in both research writing and in the course overall.

Student #1 Summary

Student #1 came into the course with a high motivation for reading, low motivation for writing, a fondness for the "fantasy" genre, and motivation to be successful. The student expressed a preference for high choice in reading work and low choice in writing work, citing the low choice writing module's limitations as a way to save time and effort. They met or exceeded requirements on all writing assignments.

Student 2

Background

At the start of the school year, student #2 expressed positive feelings toward ELA courses and toward reading, though with the caveat that they did not like old or historical books; they also expressed a higher degree of positive feelings toward writing (specifically fiction or stories from their personal life) and a general motivation to be successful in ELA, citing ELA as a strength and their fondness for writing. In an

introductory class discussion, they expressed passion for a very specific (and somewhat unique) hobby and a desire to improve their reading and writing skills.

Student Written Reflections and Survey Responses

Student #2's reflections revealed lower motivation in reading and writing during the "no choice" module. Their reflections revealed higher motivation for writing during the "high choice" module, though no explanation was given other than it being easier for the student. In regard to reading, motivation was greatest in the "high choice" module, as the book they chose was found to be interesting with enjoyable characters. They specifically mentioned a preference for more choice, saying, "I'm better when I can make my own choices and think of my own ideas usually."

Student Work

Student #2's first sample (narrative) focused on the hobby the student had reported being passionate about. The (next) expository sample followed one of the suggested prompts. For the argument sample, however, the student was interested in pursuing an argument other than the assigned topic (which related to character development in the assigned reading: choose a main character and argue that the character's development had more of an effect on the plot than the development of the other main character). This student noted a passion for arguing the desired topic and also expressed a willingness to do extra literary analysis assignments in order to meet the character development standard, as the desired topic was not literary in nature (it was a social topic).

Table 20 Table describing Student #2's writing samples

Writing sample	Level of choice	Suggested length (word count)	Total word count	Notes
Narrative	High choice	800-1400	608 words	101 edits; autobiographical narrative
Expository	Low choice	400-900	352 words	38 edits
Argument	No choice*	400-900	592 words	22 edits *requested special permission to change topic
Research	High choice	1000	539 words	2 citations

For the narrative and expository timed writing tests (low-choice prompts asking the student to write about a personal experience), the student wrote essays focused on personal stories involving the hobby they had reported being passionate about. The student followed the provided prompt for the argument timed-writing test.

Table 21 Table describing Student #2's timed writing tests

60-minute timed writing test	Level of choice	Time used	Word count
Narrative	Low choice	36 minutes	598 words
Expository	Low choice	38 minutes	478 words
Argument	No choice	46 minutes	341 words

Student #2 Summary

Student #2 came into the course with high motivation for reading and writing and reporting a hobby around which they focused most of their time. The student expressed a preference for high choice in both reading and writing assignments. They met requirements on all writing assignments (though one was shorter than the recommended

length, it was still complete); three of the seven writing samples (including formal writing samples and timed writing tests) focused on the student's passion, while a 4th focused on a social topic the student was passionate about arguing.

Student 3

Background

At the start of the school year, student #3 expressed ambivalence toward ELA courses and toward reading; they also expressed positive feelings toward writing and a general motivation to be successful in ELA, citing a desire to improve in the subject. In an introductory class discussion, they expressed a desire to improve at writing in particular.

Student Written Reflections and Survey Responses

Student #3's reflections revealed lower motivation in writing during the "no choice" module, noting that they do not like writing in that style. They expressed lower motivation in reading during the "low choice," module, specifically due to the older language in the chosen story making it difficult to understand. Their reflections revealed higher motivation for both reading and writing during the "high choice" module, citing an ability to choose to switch to an easier reading if needed, and the use of free will in choosing what to write. This student specifically noted a fondness for the narrative and creative writing portions of the course.

Student Work

While student #3's narrative sample resembled stories from television crime dramas, the remainder of the main samples focused on literary analysis.

Table 22 **Table describing Student #3's writing samples**

Writing sample	Level of choice	Suggested length (word count)	Total word count	Notes
Narrative	High choice	800-1400	2957 words	33 edits
Expository	Low choice	400-900	679 words	114 edits
Argument	No choice	400-900	947 words	
Research	High choice	1000	2044 words	9 citations

The student's narrative timed-writing test told a personal story about an injury, and the expository timed-writing test was about a favorite TV show, also in the crime drama genre. The argument test used the assigned prompt.

Table 23 **Table describing Student #3's timed writing tests**

60-minute timed writing test	Level of choice	Time used	Word count
Narrative	Low choice	59 minutes	804 words
Expository	Low choice	60 minutes	513 words
Argument	No choice	81 minutes	600 words

Student #3 Summary

Student #3 came into the course feeling ambivalent about reading and ELA in general, but with a fondness for writing and a desire to improve as a writer. The student expressed a preference for high choice in both reading and writing assignments. They met or exceeded requirements on all writing assignments, most notably exceeding requirements in narrative and research writing (both high choice modules).

Student 4.Background

At the start of the school year, student #4 expressed positive feelings toward ELA courses and toward writing (notably in the “fantasy” genre); they also expressed a higher degree of positive feelings toward reading (also in the “fantasy” genre) and a general motivation to be successful in ELA, citing a desire to get deeper enjoyment out of reading due to the high amount of reading that the student does.

Student Written Reflections and Survey Responses

Student #4’s reflections revealed lower motivation in reading and writing during the “no choice” module, noting that they did not find the reading to be interesting (due partially to existing familiarity with the story) and that they did not like writing about the same topic as everyone else in the class. Their reflections revealed higher motivation for both reading and writing during the “high choice” module, citing an ability to explore texts that sounded interesting and (in terms of writing) the ability to create a fantasy-genre story that allowed the student to be, as they noted, “myself.”

Student Work

Student #4 did choose to either write in the fantasy genres or about the fantasy genre whenever possible; they did use the provided prompts for both the main argument essay and the argument timed-writing test. When it came to choosing a novel for the research project, this student chose a sci-fi novel that was on the list of recommended books (it would have been possible to choose a fantasy genre book, though none were on the recommended list).

Table 24 Table describing Student #4's writing samples

Writing sample	Level of choice	Suggested length (word count)	Total word count	Notes
Narrative	High choice	800-1400	2724 words	10 edits Fantasy genre
Expository	Low choice	400-900	445 words	5 edits
Argument	No choice	400-900	607 words	
Research	High choice	1000	918 words	Chose a sci-fi novel from recommended list

Table 25 Table describing Student #4's timed writing tests

60-minute timed writing test	Level of choice	Time used	Word count	Notes
Narrative	Low choice	55 minutes	776 words	Essay about favorite fantasy novel series
Expository	Low choice	46 minutes	655 words	Expository essay on another fantasy series
Argument	No choice	50 minutes	591 words	

Student #4 Summary

Student #4 came into the course feeling positive about reading, writing, and ELA in general, noting a high degree of preference for the fantasy genre in both reading and writing. The student expressed a preference for high choice in both reading and writing assignments. They met or exceeded requirements on all writing assignments, most notably exceeding requirements in narrative writing.

Student 5Background

At the start of the school year, student #5 expressed negative feelings toward ELA courses, yet extremely positive feelings toward both reading and writing; they also expressed a general motivation to be successful in ELA, noting that the negative feelings reported toward ELA courses resulted from previous ELA courses being boring and focusing too much on technical aspects of language rather than expressive writing (note: this student enrolled in the creative writing course and was not in a core ELA course).

Student Written Reflections and Survey Responses

Student #5's reflections revealed high motivation in reading and writing in all modules. While they notably preferred writing fiction (high choice), noting that they can create their own story in fiction, they also noted remaining motivated even in the no choice module: "On the one hand, if you are given a very strict prompt, it can restrict your writing to something you probably wouldn't otherwise want to write. On the other hand, if you have a very broad prompt it can be hard to decide what exactly to write about, which could lead to writer's block...I was motivated to complete the assignment because of my passion for writing, and showing others my writing. I really enjoyed the assignment because it allowed me to create some fairly good poems that I otherwise may not have made."

Student Work

As this student was enrolled in the creative writing course (not a core ELA course), the formal writing samples focused less on literary analysis (those standards were met in quiz and short essay-response assignments rather than in writing samples)

and more on samples that would allow students to write creatively in fiction, non-fiction, and poetry. As the course was built around 11th/12th grade ELA standards (grades that come after standardized ELA tests), there is no timed essay writing requirement.

Student #5 wrote very actively and published every piece in a creative writing group on a social media site. They also rewrote the “flash” fiction assignment due to a desire to flesh out the plot and characters and add more details (both versions were published to the same site and also in a course discussion). Student #5 also contributed heavily to literary discussions in the course and gave abundant and detailed feedback to classmates on their writing samples.

Table 26 **Table describing Student #5’s writing samples**

Writing sample	Level of choice	Suggested length (word count)	Total word count	Notes
Literary journalism	Low choice	800-1400	943 words	
Personal essay	High choice	800-1400	860 words	
Flash fiction	High choice	Maximum 400 (ideally as few as possible while still telling a complete story)	12 words	Re-wrote a more developed version and published both versions to social media.
Fiction	High choice	800-1400	2530 words	
Poetry (set 1)	No choice	N/A	116 words	
Poetry (set 2)	Low choice	N/A	200 words	One low choice prompt ignored

Student #5 Summary

Student #5 came into the course with negative feelings toward ELA courses, but a high degree of fondness for both reading and writing. The student expressed a preference for fiction writing and motivation to write regardless of the level of choice offered. They met or exceeded requirements on all writing assignments, most notably exceeding requirements in narrative writing.

Summary of Individual Participant Data

The five students that participated by completing non-anonymous surveys and allowing their course artifacts to be examined made it possible to examine (on a small scale) how a student's thoughts on motivation were consistent with the way their motivation was enacted in the work that they produced. Four of the five students indicated more motivation during "high choice" writing modules. Examination of their writing samples from those modules show evidence of motivation such as higher word counts, more edits, or both, as well as high quality writing relative to their other assignments. The remaining student indicated more motivation during the "low choice" writing module. Examination of the related sample shows evidence of motivation, as the writing sample had more than twice as many edits as a different essay of comparable (suggested) length.

Apart from these assignments, other indicators of motivation can be seen in decisions these students made. Student #5, for example, chose to turn a flash fiction (micro-narrative) piece into a longer piece of fiction, despite there being no associated course credit for doing so; this same student indicated that they were most motivated to write fiction compared to other types of writing. Both versions of the narrative were

published to a social media outlet. This same student also chose to ignore one of the prompts (low choice) in a poetry module. Student #2 requested a different argument topic in the “no choice” writing module. This student was passionate about making an argument about a current event (COVID-related) and was willing to take on extra literary analysis assignments in order to be able to write about that topic. This student indicated more motivation for high-choice writing, and that motivation turned a no-choice assignment into a high-choice one.

When given the option, all five of these students opted to write about preferred themes or passions, or in favorite genres, and one student even did so when the option was not given (though it was negotiated). Student #1, who indicated more motivation during the low-choice writing module, still exemplified this: while that student *did* demonstrate motivation in their low-choice essay (compared to essays of comparable suggested length), their high-choice writing assignments went beyond suggested lengths, the narrative sample in particular being more than 1000 words more than the recommended length (and also in the student’s favorite genre). These five students enacted their motivation by creating course artifacts in the form of assignments; the motivation shown in the course artifacts was consistent with the levels of choice that the students indicated were most motivating to them.

Triangulation

Two recognizable themes persisted through all data types: a majority of participants claimed that “high choice” was the most motivating level of choice, usually citing reasons relating to intrinsic motivation and autonomy, and a minority of participants claimed that “no choice” or “low choice” was the most motivating level of

choice, usually citing reasons relating to simplicity. The following tables (Table 27 and Table 28) show how the different data types align with those trends.

Table 1 **Triangulation data for themes relating to “high choice”**

Theme: A majority of participants claimed that “high choice” was the most motivating level of choice in their course, usually citing reasons relating to intrinsic motivation and autonomy.

Data source	Data description
Primary: End-of-course survey responses to the questions, “Which level of choice did you find most motivating?” and “What did you find more motivating about the level you chose?”	Twenty-eight of 40 responses claimed high choice was the most motivating level for reading assignments. Of 34 explanations, autonomy was coded 23 times and intrinsic motivation was coded 15 times. Twenty-five of 40 responses claimed high choice was the most motivating level for writing assignments. Of 33 explanations, autonomy was coded 20 times and intrinsic motivation was coded 15 times.
Secondary: End-of-course survey responses to questions asking about the most motivating assignments and what was more motivating about that assignment.	Twenty-eight of 33 responses explaining the most motivating reading assignments cited reasons relating to intrinsic motivation; 21 of 37 responses explaining the most motivating writing assignment cited reasons relating to intrinsic motivation.
Tertiary: Non-anonymous survey responses and/or student reflections Quaternary: Student work samples	Four of five students claimed more motivation during high choice modules. Student work samples show evidence of high motivation in high choice modules (e.g. word counts for narratives) and intrinsic motivation in topic choices (aligning with personal interests and/or preferred genres).

Table 2 **Triangulation data for themes relating to “no choice” and “low choice”**

Theme: A minority of participants claimed that “no choice” or “low choice” was the most motivating level of choice in their course, usually citing reasons relating to simplicity.

Data source	Data description
Primary: End-of-course survey responses to the questions, “Which level of choice did you find most motivating?” and “What did you find more motivating about the level you chose?”	Twelve of 40 responses claimed “no” or “low” choice was the most motivating level for reading assignments. Of 34 total explanations, eight were given in relation to these levels, all of which cited simplicity. Fifteen of 40 responses claimed “no” or “low” choice was the most motivating level for writing assignments. Of 33 total explanations, four of four explanations for “no choice” cited simplicity, while six of six explanations for “low choice” cited simplicity.
Secondary: End-of-course survey responses to questions asking about most motivating assignments and what was more motivating about that assignment.	Four of 33 responses explaining the most motivating reading assignment cited reasons relating to simplicity; 10 of 37 responses explaining the most motivating writing assignment cited reasons relating to simplicity.
Tertiary: Non-anonymous survey responses and/or student reflections	One of five students claimed more motivation during low-choice modules, citing simplicity.
Quaternary: Student work samples	The student claiming more motivation in the “low choice” module demonstrated motivation in that writing sample (more than double the edits compared to essays of comparable length).

Chapter Summary

This project featured data from three main sources: an anonymous end-of-course survey (completed by 40 students across three different classes: ELA 9, ELA 10, and Creative Writing), work samples (including reflective assignments) from five participant students, and individual surveys (not anonymous) completed by participant students.

Students taking the end-of-course surveys were asked whether they found “no choice,” “low choice,” or “high choice” to be most motivating for reading assignments

and for writing assignments. A majority of students (70% for reading assignments, 62.5% for writing assignments) were most motivated by high levels of choice, citing a preference for autonomy and for assignments they found intrinsically motivating (which were more likely to be found in high-choice units). A minority of students preferred no choice or low choice, most often citing simplicity as what they found to be more motivating about these levels of choice.

Students were also asked which reading and writing assignments they were most and least motivated to complete and why. Most students cited intrinsic reasons (such as interest, enjoyment, fun, or passion) when explaining what was most motivating about a particular assignment, though this was less pronounced in writing, as simplicity and competence were also cited. Students most often cited reasons relating to autonomy (a lack of interest and/or time) and competence (a lack of ability) when explaining what was less motivating about other assignments. Sometimes a student was most motivated to complete assignments that had a different level of choice than the level the student found to be most motivating. In these cases, students still cited intrinsic reasons most often when explaining their motivation to complete these assignments.

Students also answered questions asking them about their most and least favorite parts of the course. When asked about their favorite part of the course, most students responded by mentioning instructional design elements related to autonomy and/or assignments that they were intrinsically motivated to complete. When asked about their least favorite part of the course, most students responded by mentioning portions of the course in which they lacked autonomy, such as specific assignments that lacked choice,

not being able to work at their desired pace, or being required to share their work or interact with classmates in order to meet certain standards.

Five students (and their parents) granted permission to participate in the research by answering non-anonymous surveys and allowing observations and analysis of their work (which included reflective assignments). Each student began the year with different degrees of fondness for reading and writing, and for ELA courses in general, as well as different degrees of pre-existing motivation. In general, these students reported being most motivated in the “high choice” modules and less motivated in the “no choice” modules, though there were two exceptions—one student was less motivated in a “low choice” reading module due to difficult language in the chosen short story, and another student was most motivated in the “low choice” writing module due to a smaller time investment resulting from scaffolded writing options.

Each of these students met or exceeded requirements in all of the associated modules. Four of the five students wrote far more than required (an extra 1000 words or more beyond the suggested length) for their narrative writing samples. When given options, each of these five would choose either topics personally important to them or to write in their favorite genre, even in the case of timed writing tests. One student wrote more pieces than necessary, taking a short piece and expanding on it to publish an extended version on social media (there was no associated grade for this). Another student was willing to take on extra literary analysis assignments in order to make it possible to choose their own argument essay topic, which otherwise would have been a “no choice” writing prompt. These data support the data from the end-of-course surveys: a majority of participants claimed that “high choice” was the most motivating level of

choice, usually citing reasons relating to intrinsic motivation and autonomy, and a minority of participants claimed that “no choice” or “low choice” was the most motivating level of choice, usually citing reasons relating to simplicity. Triangulation tables explored how different data types supported these themes.

CHAPTER FIVE: DISCUSSION

Introduction

The previous chapter presented data and analysis resulting from anonymous end-of-course surveys, individual (non-anonymous) surveys from five participating students, and observations of work samples from the same five students. The survey data focused on questions specifically asking students about how their motivation in ELA course activities (reading and writing assignments) related to the level of choice they had been given, and student work samples provided other evidence of motivation in relation to different units with different levels of choice.

This chapter will contain a summary of the study, a discussion of the findings in the context of the existing literature, implications for practice, recommendations for further research, and the study's conclusions. While the preceding chapter contained analyses of the qualitative data, this chapter will attempt to connect those analyses to student well-being using the framework of Self-Determination Theory (Ryan & Deci, 2001) and also offer commentary on how this study was impacted by educational changes brought about by the COVID-19 pandemic, as well as how the study was adapted as a result of those changes.

Summary of the Study

Student well-being is an issue of interest at a number of levels--school, district, state, national, and even global (Los Angeles Unified School District, 2019; OECD 2009; WHO 1998; WHO 2016). As recent research shows a continuing decline in adolescent

mental health, exacerbated by the COVID-19 pandemic (C.S. Mott Children's Hospital, 2021; Curtis & Heron, 2019; FAIRHealth, 2021; Twenge et al., 2019), and as more and more students are taking online courses than ever (Lieberman, 2020), research into ways in which online instructional design can be used to improve student well-being should be of interest to all stakeholders. This case study explored how different levels of choice in assignments among three online high school ELA courses related to evidence of motivation in student work and student thoughts about motivation.

The courses used in this case study were designed using Self-Determination Theory (SDT) as a guide (Ryan & Deci, 2001). Self-Determination Theory is one of the leading theories of well-being and has been used consistently in educational research since the 1970s; the theory features three main components of well-being: competence, relatedness, and autonomy. Each of the courses in this study offer opportunities for students to feel competent, relate to one another and to their instructor, and act with autonomy. Adolescents have a developmental need for autonomy (Eccles et al., 1997), yet many adolescents consider school to have a negative impact on their well-being (Navarro et al., 2017). Offering choice in coursework gives students an opportunity to exercise autonomy (Beaton, 2010; Hafen et al., 2012), and autonomy in classes has been shown to significantly predict autonomous motivation (Patall, Cooper, & Wynn, 2010). Autonomous motivation, in turn, is associated with greater well-being (Deci & Ryan, 2008). Online courses designed to give choice to adolescent students should result in autonomous motivation, which would have a positive effect on student well-being.

The study focused on this question: How does the level of choice for an assignment relate to evidence of motivation in student work samples and student thoughts

about motivation? A case study research design was used to answer the question through different surveys and through document analysis, as a review of the literature found very few examples of existing studies that use student perspectives and work to examine the relationship between choice and motivation, and no studies were found that did this in the context of a secondary online ELA course designed using Self-Determination Theory. A case study seemed to be the best research approach for this situation, as the population and situation were very unique, and the variables embedded within the situation (Merriam, 1998). Case studies also work well with “how” type research questions, when the answers can be found in contemporary events, and when causal links may be too complex for other methods (Yin, 2014).

Originally, the plan was to conduct interviews via email with recruited students to provide student perspectives on how their motivation related to choices given in the course; due to IRB recommendations, such a plan would have required that the interviewer not be a person who had any control over a student’s grades so that participants did not feel coerced to participate or to give different answers, and also that I (their teacher) not be able to see student response data until after final grades had been recorded so that there would not be any way that student participation or responses could affect grading. While this recommendation was reasonable, it also made it impossible to ask the students any follow-up questions for clarification, or to know if there would be enough data to complete the study.

Instead, we chose to design multiple, periodic electronic surveys to take the place of interviews and to emphasize (to potential participants) that their identities would be anonymized, their survey data would not be available to their teacher until after final

grades were recorded, and that their coursework would not be directly quoted in the final product, but rather summarized. Upon receiving IRB approval for this plan, students and parents were contacted with consent forms and a description of the study. While a sudden shift to online learning (due to the COVID-19 pandemic) created a larger pool of potential participants, the shift also created tension between many parents and the school district, as many parents resented that shift and were vocal about their dissatisfaction. Furthermore, many students were overwhelmed with the changes. Only six consent forms were returned; of those six, only five students produced enough valid data to be included. Only three of the five answered each of the surveys (there were meant to be three surveys total per student), and some answers provided very little usable data. Student coursework was collected and examined in depth in an attempt to glean as much usable data as possible to make up for the shortcomings in other data.

An end-of-course survey was designed that would allow all students to anonymously answer questions similar to those found in the other surveys; as these online courses are expected to conduct end-of-course surveys annually, and the questions were compatible with the personalized learning designs adopted by the department, the surveys were accepted by department leadership, who provided an additional letter of support for the research that helped get IRB approval to use the end-of-course surveys as a source of data for this study. A total of 40 students across the three courses completed the end-of-course surveys, providing a substantial amount of pertinent data.

Some survey questions asked students to select a level of choice they found most motivating, and these were analyzed simply by listed totals in a table, along with percentages indicating what portion of a class chose which level of choice to be most

motivating. The remaining survey questions asked for written responses, and these were analyzed by using a two-step coding process. The first step used keywords pulled from In Vivo quotes to answer the “why” portion of a question (such as why they were more motivated to complete a specific assignment); these keywords made up the first level of codes: those which explained why they chose a specific piece, a level of choice, or why an element of the course was their favorite (or least favorite). The second pattern coding step grouped these codes together under recurring categories and themes that emerged from the examination of the first round of coding (Saldaña, 2013). Student work samples were analyzed for characteristics showing evidence of motivation that could be related to different levels of choice given in different course units. Some of this evidence consisted of background information shared by the student during graded discussions, student reflective writings, and student writing samples; the writing samples themselves were analyzed for indicators of motivation, such as word count, time spent, thematic content (and if it related to background information on the student, such as favorite genres), and number of edits (Henrie et al., 2015; Ray et al., 2020). The surveys and the characteristics of work samples from these participants were summarized as extended vignettes called “profiles” (Miles, Huberman, & Saldaña, 2020, 182-183).

The end-of-course surveys found that a majority of students in each course preferred a high level of choice for both reading and writing assignments (this majority was more pronounced for reading assignments), and most students cited reasons relating to autonomy and/or intrinsic motivation (such as interest or enjoyment) when asked why they were more motivated by that level of choice. The minority that preferred a low level of choice (or no choice) usually cited reasons relating to simplicity, such as saving time

or having less pressure to choose. When asked which specific assignments they were most motivated to complete (and why), a majority chose assignments that held intrinsic value for them and noted this in their explanations. When asked which specific assignments they were *least* motivated to complete (and why), most responses referred to a lack of interest in the content, a lack of time, or lack of ability (competence). Student responses to these main survey questions are supported by their responses to additional questions about what they considered to be their favorite and least favorite parts of the course: “favorite part” responses mostly referred to themes relating to instructional design features, autonomy, and/or intrinsic motivation, while “least favorite part” responses referred to themes relating to a lack of autonomy.

Individual student profiles provided data that allowed more in-depth analysis at the student level, and also provided triangulation for the main end-of-course survey data. Most expressed a preference for high choice in both reading and writing assignments, though a minority of one student cited simplicity as a reason for preferring a low level of choice. Most also explained the “no choice” assignments to be least motivating. All students met requirements for all of their writing assignments, with four of the five students exceeding length requirements in narrative writing (a “high choice” assignment) by 1,000 words or more. Furthermore, each student chose topics important to them or to write in a favorite genre when given a choice in their writing prompts, and one student was willing to take on extra classwork in order to be given more choice on the topic of their argument essay.

Discussion of the Findings

The Most Motivating Levels of Choice (and why)

The following tables summarize student responses to the end-of-course survey questions asking them which level of choice they found to be most motivating for reading (Table 29) and for writing (Table 30), as well as the coded themes explaining why they chose the level that they did. While all 40 respondents did choose a most motivating level of choice, not all respondents gave an explanation for their choice. Some respondents gave explanations with enough detail to result in multiple coded themes from a single response.

Table 3 Most motivating level of reading choice with coded explanations

Reading

Most motivating level of choice	Total count (n=40)	Coded at (frequency)
No choice	4	Simplicity (2)
Low choice	8	Simplicity (6)
High choice	28	Competence (2) Intrinsic motivation (15) Autonomy (23)

Table 4 Most motivating level of writing choice with coded explanations

Writing

Most motivating level of choice	Total count (n=40)	Coded at (frequency)
No choice	6	Competence (1) Simplicity (4)
Low choice	9	Intrinsic motivation (1) Autonomy (2) Simplicity (6)
High choice	25	Simplicity (1) Competence (3) Intrinsic motivation (15) Autonomy (20)

“High Choice” and Motivation

In these courses, most end-of-course survey respondents noted that choice contributed to their motivation (Ryan, 1982); a majority of respondents in each class claimed that a high level of choice was the most motivating: 70% were most motivated by the “high choice” level for reading assignments and 62.5% were most motivated by the “high choice” level for writing assignments. Most often, choices led to intrinsic motivation in particular (Jeno et al., 2019). When asked why this level of choice was most motivating to them, many students specifically noted that having a high level of choice was directly linked to their ability to choose an assignment that held intrinsic value for them; one respondent explained, “You really had a big option of stories to choose from. So then you could choose which book was most interesting to you and then you could actually enjoy reading it and doing an essay on it.” Thirteen students made this connection in their explanation about why a level of choice was most motivating for reading assignments, and 15 made the connection in their explanation about why a level of choice was most motivating for writing assignments. These student responses fit with Ivey and Broadus’s (2001) findings showing that choosing content can increase engagement and feelings of ownership in students.

Not every student made an explicit connection between choices and intrinsic motivation. When asked why a level of choice was more motivating, some students that chose “high choice” simply explained that they liked having options and did not note the link between those options and an assignment that they enjoyed for intrinsic reasons. For example, a student explained that they were most motivated by high choice in writing assignments because “It was just nice to have the option and to not be forced to one

thing,” while another explained that they were most motivated by high choice in reading because “I liked that you gave a lot of different choices of things to read.” Neither specifically mentioned that the options led to intrinsic motivation. Ryan (1982) noted that opportunities for choice facilitate perceived autonomy, which is an essential component of intrinsic motivation. Patall, Cooper, and Wynn (2010) noted that perceived choice was a significant predictor of intrinsic motivation, and the ability to choose content could also significantly predict perceived competence and student performance. Choice itself was often perceived as valuable even if intrinsic motivation wasn’t specifically mentioned.

Similarly, when asked which reading or writing assignment they were most motivated to complete, many respondents (who had also noted “high choice” as being the most motivating level) went on to explain that their choice was intrinsically motivating, such as being interesting or enjoyable. For students explaining the reading assignment they were most motivated to complete, 28 explanations referred to something intrinsically motivating; for students explaining the writing assignment they were most motivated to complete, 21 explanations referred to something intrinsically motivating. The specific question did not ask them about the role of choice in arriving at these intrinsically-motivating assignments, but many of the choices mentioned were writing prompts/assignments or readings that are not commonly used in ELA courses, and would not have been available to them without a high level of choice. These writing samples were often personal in nature or focused on topics the students found important; Beaton (2010) and Falkner (2011) noted that the ability to choose writing topics deemed important can increase engagement in high school students.

There were also situations in which a high level of choice was related to extrinsic motivation. For example, two students in the ELA 10 course said they were most motivated to write their research project (a high-choice assignment) for extrinsic reasons. One, quoted earlier, noted that they were focused on getting their grades up to be eligible for sports (which requires a passing grade in each course and a minimum GPA overall). Another chose it as most motivating because they found it easy as a result of having recently done similar projects in a history course. The situations in which respondents noted preferring a high level of choice for extrinsic reasons were very few.

Some students found a high level of choice to be overwhelming, and even directly stated so. For example, one student said, “I found low choice more motivating. I really enjoy and appreciate the list in high choice; it was really cool to look through them and pick which ones I wanted to read. Although, it was a little less overwhelming to search through the low choice options than being able to search through lots of potential stories to read.” These types of responses were to be expected based on the findings of Ackerman et al. (2014), Mozgalina (2015), and Reed et al. (2011), all of whom recommended a low number of choices. However, compared to the findings from the literature, high choice was well-received and valued by most students in this study. This is likely due to differences in design. For example, Mozgalina’s “free choice” treatment expected students to create presentations but offered no scaffolding, while the “high choice” options in *this* study all came with scaffolding (among other competence supports), especially when involving writing assignments.

The writing samples analyzed show a pattern of writing in their favorite genre (in the case of narratives) or writing about personal interests; this was to be expected based

on existing studies of writing preferences among high school students (Beaton, 2010; Falkner, 2011; Jeffery & Wilcox, 2013). The narratives (a “high choice” assignment) showed the greatest effort overall, with four of the five students writing over 1000 words beyond the required length; effort has been used as an indicator of motivation in online courses (Henrie et al., 2015).

“Low Choice” and Motivation

A minority of respondents (in the end-of-course survey) in each class claimed that a low level of choice was the most motivating: 20% of total respondents were most motivated by the “low choice” level for reading assignments and 22.5% of total respondents were most motivated by the “low choice” level for writing assignments. When these students were asked why “low choice” was the most motivating level of choice, a majority of the responses fell under the theme of “simplicity” (in fact, this was the case for *all* of the explanations having to do with reading assignments). Students noted that the lower level of choice allowed them to save time, save effort, or engage in simpler procedures.

In these cases, some of the codes under the “simplicity” theme *could* be considered extrinsic motivation, as the assignments were done for the sake of outcomes unrelated to enjoyment, including getting the assignment done with a minimal investment of time and/or effort (Ryan & Deci, 2001). However, the codes categorized under the “simplicity” theme more often related to a desire for less pressure, especially in the choice of topics for writing assignments, and some of these still specifically noted that they liked having some level of choice in what they wrote about (preferring the “low choice” level for writing assignments). Sometimes this low level of choice still led to

intrinsic motivation: “I can choose which choice looks best to me without having to go find them myself, letting me save time while still being interested in what I'm writing about.” The possibility that “low choice” can relieve some of the pressure of choosing was suggested by Ackerman et al. (2014), Mozgalina (2015), and Reed et al. (2011).

Low choice writing assignments in these courses mostly focused on either literary analysis essays or timed-writing tests that allowed for students to choose a topic from two or three prompts. For all five students whose work I was able to analyze, the literary analysis essays showed moderate effort—four of the five samples stayed within the suggested length, with one student falling slightly short; none of the samples exceeded the suggested length.

In timed writing tests with a low level of choice, seven of the eight writing samples (two each from students 1-4) saw students writing about something related to intrinsic motivation, whether it was a personal story (including those about personal passions), a favorite book, or a favorite TV show. Beaton (2010), Falkner (2011), and Jeffery and Wilcox (2013) all documented the tendency of adolescent students to gravitate toward topics they find personally relatable, including those relating to personal passions and pop culture. Most of these samples were longer than the low-choice literary analysis essays, despite the fact that these had a time limit of 60 minutes each (there was no time limit for the literary analysis essays, other than the suggested pacing guide allotting several weeks for the development of the essays).

While the completion of these essays may have been based on extrinsic motivation (having to complete a test for a grade), the ability to choose topics generally resulted in students writing about something they enjoyed. In only one example did a

student choose a topic that related to extrinsic motivation: student #1 explained the steps they took to bring a grade up in another course; the content of the essay showed that the student valued the grade in that course—but not necessarily the content of the course, suggesting introjected or identified motivation (Ryan & Deci, 2000a).

“No Choice” and Motivation

A minority of respondents in each class claimed that “no choice” was most motivating: 10% were most motivated by the “no choice” level for reading assignments and 15% were most motivated by the “no choice” level for writing assignments; this represents a smaller minority than the “low choice” level. Student thoughts on this were scarce: four students selected “no choice” as the most motivating level for reading assignments but only one gave any explanation, while six students selected “no choice” as the most motivating level for writing assignments and four gave explanations. For comparison, of the students selecting “low choice” as the most motivating level, there were two responses that did not elaborate (one for reading, one for writing). Of the students selecting “high choice” as the most motivating level, one response (in the “writing” section) did not elaborate on why they found that level of choice most motivating. Those citing “no choice” as the most motivating level of choice were the smallest group, and they were least likely to explain their choice, making analysis more difficult than at other levels.

Of the available explanations as to why a student found “no choice” to be most motivating, the dominant theme was simplicity (similar to “low choice”). The response regarding no-choice reading assignments cited the ability to save time by not having to preview or investigate potential readings. The responses regarding writing assignments

mentioned that “no choice” made it easier to focus on the topic, to get started without procrastinating, or to not have to worry about choosing a topic they would later regret. In Mozgalina (2015), it is noted that students in the “no choice” treatment spent their whole class time on completing the task and had a higher word count in their assignments; she says, “engaging in choice can result in a state of fatigue, in which individuals experience a decrease in the capacity to initiate activity, make choices, or further self-regulate” (p. 128). Her assessment coincides with the student explanations as to why they found “no choice” to be the most motivating level.

In the case of “no choice” writing prompts, they were sometimes ignored (student 5 ignored one of the no-choice poetry prompts), or students specifically asked to be able to write about something else. In the January 28th, 2021 entry in my researcher journal, I mused: “I wonder if my being more flexible earlier in the year has ‘spoiled’ them in a sense, where they expect that they can write about whatever topic they want.” One of these five wanted to write about a topic they were passionate about for their argument essay (instead of an assigned argument topic about a piece of literature); this student joined two other students in the same class that also requested different topics—one about a different contemporary topic, the other about a different (favorite) piece of literature. It was previously noted that autonomy-supportive teachers predict later intrinsic motivation for student work (Hafen et al., 2012; Patall et al., 2010; Wallace & Sung, 2017); each of these three students pursuing alternative topics were all willing to take on extra literary analysis assignments in order to pursue a topic they found intrinsically motivating.

Other Factors Relating to Motivation

The Role of Existing Interest and Elective Courses

Students that participated in the non-anonymous surveys made it possible to look more deeply at the factor of existing interest in subject matter (Ackerman et al., 2014) by comparing those survey results with their background information. Three of these five students noted having positive feelings toward ELA courses in general, one had neutral feelings, and one had negative feelings; each of the five noted a fondness for reading, writing, or both. Under ideal conditions, it would have been possible to recruit more students with negative feelings toward ELA courses, reading, or writing; this would have made it easier to tell if those existing feelings had an effect on how choice related to motivation. The one student that felt negatively toward ELA courses simultaneously loved reading and writing, explaining that they enjoyed reading and writing, but their previous English courses had taken a boring approach which removed joy and creativity from the subject matter. Due to the small sample size, it was not possible to tell if existing interest interacted with the relationship between choice and motivation, as each of these students was interested in the subject matter in one way or another, even though one of the five students did express pre-existing negative feelings toward ELA courses. Students taking the anonymous end-of-course survey were not asked about their previous ELA courses, but one ELA 9 student made a comparison anyway: “I loved getting the chance to write a lot, I never got that chance in any other LA classes before.” While encouraging, it comes from one among 40 respondents.

One of the five students participating in a non-anonymous way was in the elective course (creative writing), theoretically making it possible to investigate their data for

evidence as to whether or not being in an elective course has an effect on the relationship between choice and motivation. Keller (1999) noted it was easier to motivate students in an elective course, as their presence in an elective usually indicates a value for the subject, which could be an internalized form of extrinsic motivation (such as identified or integrated motivation) or intrinsic motivation. This student showed exceptional motivation to write; they wrote extra writing samples (re-writing a flash fiction piece as a short fiction piece, then publishing both) and met requirements in all samples, far exceeding those requirements in their short story sample. The samples themselves also showed effort and a willingness to revise.

Ackerman et al. (2014) found that students with existing interest in a subject can value less choice as much as a high level of choice; in the case of this student, their survey responses (previously quoted in Chapter 4) support that assertion: “On the one hand, if you are given a very strict prompt, it can restrict your writing to something you probably wouldn't otherwise want to write. On the other hand, if you have a very broad prompt it can be hard to decide what exactly to write about, which could lead to writer's block...I was motivated to complete the assignment because of my passion for writing, and showing others my writing. I really enjoyed the assignment because it allowed me to create some fairly good poems that I otherwise may not have made.” This student was still motivated to create despite the lack of choice in the module in question. Since the student only answered one of the three surveys, it is not possible to compare this response to a response from the same student about a higher level of choice. While their high choice writing sample (short story) suggests a high level of intrinsic motivation in that module, there is not enough data overall for valid conclusions based on work from this

student. End-of-course survey data suggests that respondents in the creative writing course had a very similar distribution of most motivating levels of choice (compared to the other two courses) in terms of reading, and slightly higher percentages of respondents finding “high choice” more motivating in writing (with zero creative writing students choosing “no choice” as most motivating for writing assignments). Again, because the sample is so small (eight creative writing students completed the end-of-course survey out of 40 respondents total), it is difficult to draw reliable conclusions about whether choice is valued more or less in an elective course.

Factors Limiting Motivation

Questions as to which specific reading and writing assignments were most and least motivating made it possible to look more deeply into whether level of choice was the most influential factor in whether an assignment was most motivating to a student (as previously discussed in this section). The questions about specific assignments can also illuminate which factors contributed to a lack of motivation, as well as some motivational differences between reading and writing assignments. Students most often cited intrinsic motivation when asked why a particular assignment was most motivating; this was true for both reading and writing assignments, though less so for writing. When asked about what assignment they were *least* motivated to complete, answers varied—and the difference between reading and writing assignments was more pronounced.

For least motivating reading assignments, most respondents cited a lack of time (13 mentions) or interest (13 mentions) in the reading; studies have found that lack of interesting material contributes to boredom in a large majority of students (NAIS, 2015). Those reasons were followed closely by a lack of competence (10 mentions), as some

students found certain pieces to be very difficult to read. The most-cited least motivating pieces were usually the longest ones, most notably *Romeo and Juliet* in the 9th grade ELA course, though students in other courses mentioned novels, or simply that they didn't like anything long, like "The novels. Those are super long and I don't have time for that." Ivey and Broadus (2001) had similar findings, explaining that students in their study had a need to read material they found personally interesting; they also noted that students they studied did not enjoy novel studies because "class novel studies take up a lot of time, and that this time is taken away from what students say they like most—time just to read" (p 367). Pitcher et al. (2007) reiterated the importance for adolescents to connect to a reading topic, and the role of choice in making that possible.

Competence was the most oft-cited factor (19 mentions) in why a writing assignment was found least motivating. Students were not motivated to complete assignments they did not feel that they were very capable of; competence is considered a prerequisite for motivation (Niemic & Ryan, 2009; Patall et al., 2014). In the ELA 9 class, eight respondents chose poetry at their least motivating writing assignment, despite the potential short length of the work. Their explanations focused on competence, with responses such as, "I'm not very good at poetry," "Poetry just never comes easy to me," or "I can't do poetry for the life of me." Writing poetry was optional (extra credit) in the ELA 9 course, and many students opted not to write any at all (as previously noted, several explanations as to a student's *most* motivating level of choice did say that choice allowed them to select specifically for competence; in this case, students elected to avoid an optional assignment for the same reason). Lack of interest in the writing topic was cited 16 times, and students gave explanations such as, "These ones [explanatory essays]

tend to lack emotion and are boring to write.” Jeffery and Wilcox (2013) found that the adolescent students in their study also preferred writing about topics personally interesting to them, notably assignments that allowed opportunities to be creative or to express their views; Beaton (2010) reported similar findings among her students. Falkner (2011) found that many students who had not been motivated to write analytically about literature performed better when allowed to focus on topics pertinent to their interests. Compared to the least motivating reading assignments, a lack of time was not a major factor in which writing assignments were least motivating, only being cited once.

While the end-of-course survey results show a strong relationship between choice and motivation, some responses allow us to investigate the inverse: does a lack of choice relate to motivation? Answers to questions about the least motivating assignments suggest a relationship, as explanations were dominated by factors that could be changed by offering choice. If a student lacks motivation to complete an assignment due to lack of interest, choice would allow them to read or write a piece they are interested in. If a lack of time is the issue, choice would allow the student to choose something shorter. If a lack of competence is the issue, choice would allow the student to read or write a piece in their zone of proximal development (Vygotsky, 1978), and some students noted that choice did indeed allow them to select for competence: “What I found more motivating about the level of writing choice I chose is that it gives the student the ability to choose the writing style they excel at and possibly be able to write a better essay.” Sometimes competence and time are linked: if a student is not very skilled in an area, it can take a lot longer for them to complete the assignment; several student explanations linked the two, for example, “I was least motivated to read the poetry exemplars—I'm not too good at

deciphering the ‘true meaning’ behind certain words or phrases and I just feel that my time is better spent elsewhere,” or “I don't like argument essays, because I can never just sit there and write and write. It takes me hours to come up with just one sentence.” While these students didn't directly link their lack of motivation to a lack of autonomy, each of these situations could have been remedied by having choices. Studies have shown that a lack of autonomy negatively affects motivation (Grund et al., 2015; Mora, 2011; Ryan, 1995).

Sometimes the demotivating factor is one that is unavoidable; while one student cited “sharing” as the reason why a certain assignment was least motivating, seven students mentioned sharing (and other forms of interaction) as their least favorite part of the course. Because state standards require ELA students to demonstrate speaking and listening skills, it is impossible to avoid class discussions (even if they are typed) and sharing using their voice; as long as standards guide public education, it is not possible for students to have full autonomy (Easley, 2013). Student responses about their least favorite part of the course most often referred to a lack of autonomy (19 of 33 responses), while responses about their *favorite* part of the course most often referred to assignments or instructional design features that allowed them to exercise autonomy (29 of 37 responses), often resulting in intrinsic motivation. These responses lend support to other end-of-course survey responses about most and least motivating assignments and levels of choice: a majority of respondents were most motivated a high level of choice (usually leading to intrinsically motivating assignments) while a minority of respondents were most motivated by either high or low choice for reasons relating to competence or extrinsic motivation, and another minority of respondents were most motivated by low or

no choice for reasons relating to simplicity and competence (more often in writing than in reading), though some students that were most motivated by “low choice” still specified that they appreciated having choice and that the low level of choice led to intrinsic motivation.

Implications for Practice: Design Contexts that Facilitate Motivation

Data from this case study suggests that offering choice to high school online ELA students is related to changes in motivation, both in quality (intrinsic motivation vs. extrinsic motivation) and quantity (overall level of motivation, regardless of type). The instructional design context of this study must be considered in relation to the data, as courses with different design choices would have produced different results. While chapter 3 described these course designs in detail, the addition of the case study data makes it necessary to consider how other elements of these designs (not just the level of choice) relate to the data. All courses used in this study begin with an introductory module designed to give students feelings of relatedness (with introductory discussions and meetings) and feelings of competence (by being able to successfully navigate the course, turn in early assignments, and use new tools), which are both main components of Self-Determination Theory (Ryan & Deci, 2001). Early assignments introduce low levels of choice, and teacher feedback reinforces autonomy support, something that has been shown to encourage autonomous motivation later on in a course (Hafen et al., 2012; Niemic & Ryan, 2009; Patall et al., 2010; Wallace & Sung, 2017); autonomy is the third main component of SDT. The courses all begin by attempting to establish a general foundation for well-being; from that starting point, the courses continue with regular

support for relatedness (opportunities for positive interactions with peers and the teacher), competence, and autonomy.

The competence and autonomy supports developed for these courses were created using an ADDIE process (Reiser, 2001) that began by identifying student needs and educational standards, and were designed to be compatible with elements of personalized learning, such as flexible learning environments (asynchronous design with flexible pacing), student ownership (assignment choices), student interests (assignment choices), student needs and competence-based progression (multiple attempts, chunked writing process, audio/visual versions of texts, teacher feedback, assignment choices for competence or simplicity), and alignment to standards (State of Rhode Island Office of Innovation, 2016). Designing assignments and units to focus on standards (instead of on canonical texts) made it possible for students to have more choice in what they read and what they wrote about, and having students regularly read the standards (in relation to their assignments) and reflect on their performance in those standards made it possible to them to have greater autonomy later in the course—such as opting for a different essay prompt and taking on more analysis work, or designing their own novel study project. By understanding the standards they were working on, students were able to design their own work when needed, and also to increase their ownership of the process through reflection; a feeling of ownership is an essential element of autonomy (Chirkov, 2009).

The most commonly-used writing standards at the K-12 level, the Common Core, do not specify that student writing samples have to be about literature (Common Core State Standards Initiative, 2021). According to these standards, students are expected to follow the writing process, apply research skills, and create narrative, informative, and

argumentative pieces of writing across the span of a school year—all of these standards can still be met while allowing students to research and write about topics they find interesting or enjoyable or, in the case of narratives, in genres that they prefer. Still, ELA teachers largely expect their students to write about literature (Falkner, 2011); this is efficient for the teachers, and makes it possible for those teachers to assess writing standards at the same time as some “reading literature” standards that focus on literary analysis. Literary analysis can be assessed in a number of ways other than essays; in the ELA 9 course from this study, several students opted to do different assignments to meet literary analysis standards in order to make it possible for them to pursue essay topics important to them. This could be the case for every writing sample in a school year: a designer or teacher can have a “recommended” writing topic, followed by two or three alternate topics for students not interested in the recommended topic, and an “open” option that allows students to pursue a topic they are passionate about; knowledge of standards can allow those students to design alternate assignments if necessary.

Regardless of the level of choice a student uses, competence support (such as graphic organizers, lessons on writing forms, a chunked writing process, and regular feedback) provide scaffolding, so even students on a “high choice” path will have support from the course design itself (and can ask for additional support from the teacher if needed). With competence support built into the course, choice will be more meaningful for students and they will be more likely to experience intrinsic motivation (Patall et al., 2014; Ryan, 1995). Having such support in these courses might explain the difference in how “high choice” students in this study perceived choice as more motivating than the “free choice” students in Mozgalina’s (2015) study. In the ELA 9 course, these different

levels of writing choice were able to coexist in the same unit, though not originally by design—several students made a conscious decision to request more choice and were willing to do extra work to make that possible. Allowing multiple levels of writing choice in the same unit would allow those driven by intrinsic motivation to pursue their passions and interests at the same time that others can choose one of the recommended topics to save time, reduce pressure, and ease writer’s block.

While the Common Core standards sometimes suggest texts for reading in relation to certain standards, there are no specific textual requirements (though some standards lend themselves to specific pieces). Reading content for a high school ELA course is largely up to the school district and teacher, and these still largely follow canonical texts or mandated curriculums based on canonical texts (Morgan & Wagner, 2013; Pitcher et al., 2007); this is efficient, and makes it possible for teachers to reuse the same vocabulary lists, discussion topics, assessments, and text-related writing prompts from one year to the next. The prevalence of study guides and online homework help sites make it possible for many students to complete assignments, assessments, and essays based on these canonical texts without actually having read them (Broz, 2003; Falkner, 2011). It is possible to use more flexible ways of assessing reading standards; in Morgan and Wagner (2013), the teacher allowed students to choose their reading texts and assessed the students based on a combination of journal entries and one-on-one discussions about the students’ chosen text. While some of the no-choice and low-choice readings in these courses *were* canonical texts assessed with multiple-choice quizzes (including vocabulary quizzes) and essay prompts, the remainder of low-choice readings and the high choice readings were assessed with standards-based assignment templates

and writing tasks that could work with a variety of potential pieces. These templates exist as cloud-based interactive documents, and students can easily make their own copy, follow the instructions, answer questions (usually by filling in the text boxes, and the boxes expand as students add their responses), and share back to the instructor (or to classmates) for grading and/or feedback.

For example, this RL4 (a Common Core “Reading Literature” standard) template (Figure 13) allows a student to meet that standard using any piece of literature:

RL4 Worksheet		Make your own copy by clicking “File” and “Make a copy”	
<p>Instructions: Find 5 new or unfamiliar words in your short story. Put the word in the far left column, then include (in the next column) the word in its context (including the sentence it is from, plus one or two sentences on either side would be a good idea). Based on how it is used in its context, come up with a definition that makes sense (this should NOT be the dictionary definition). Finally, do a quick analysis as to how this word affects the text.</p> <p>RL.4 - Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).</p>			
New word	Word in context (paste the sentence it comes from, plus one or two sentences on either side)	What you think it means (based on how it is used)	How does the use of this word affect the text? (consider how it differs from synonyms)
Example: “Wilted”	“it was hotter <u>then</u> . . . bony mules hitched to Hoover carts flicked flies in the sweltering shade of the live oaks on the square. Men’s stiff collars <i>wilted</i> by nine in the morning.”	Loosened or sagged	I’ve heard this word before, but only referring to flowers. In this context it adds humor because the men go to all the trouble of starching their collars only to have them get all wilted or saggy from the heat
1.			
2.			
3.			
4.			
5.			

Figure 13 Assignment template allowing students to address standard RL4 with any piece of literature

Or if a teacher wants to assess whether or not a student can analyze character development, the student can use this RL3 template (Figure 14) to guide note-taking and prepare the student for an analysis essay:

Character development notes (Make your own copy by clicking "File," and "Make a copy.")

RL3: Analyze how complex characters develop over the course of the text, interact with other characters, and advance the plot or develop the theme.

Instructions: Identify and describe your character at the top. Then, as events change your character, keep track of them, describe the change, and find a quote as supporting evidence—these will come in handy on your project. Then reflect on how these changes affected the plot of the story (which is part of the standard). If you need more than 5 events, highlight the "event 5" row, then right click and select "insert row below" from the right click menu.

Name of character and piece:		
Describe the character at the start of the story (character traits, not physical traits):		
Describe event or discussion:	How did it change character?	Quote as evidence:
Event 1:		
Event 2:		
Event 3:		
Event 4:		
Event 5:		
Describe/explain how changes in this character affected the plot of the story:		

Figure 14 A scaffolded notes template based on standard RL3

Ackerman et al. (2014) recommend designing courses in a way to ensure that students who aren't interested in the subject "are given assignments in which they do not have choices to make and can focus on completing the assignment" (p. 228). For high school ELA courses, this is easily accomplished, as most common curricula already come with assignment options like these, and there are abundant materials and prompts that go with canonical texts (for teachers that don't already have these materials, they can be easily found online). But for students who *are* interested in the subject, having flexible writing prompts and assignment templates that can adapt to any text make it possible for teachers and designers to offer a much higher degree of reading choice for students who

want it. These templates can include their own scaffolding (like examples, suggestions, or the ability to get feedback on the document itself); this can help students feel more competent. Other competence supports for reading standards include audio versions of a text, visual representations of a text, and lessons/videos giving students historical and cultural context for a text—all of these supports were present in the courses in this study.

Assuming students are competent or provided with enough support to *perceive* themselves as competent, providing choice in their assignment is likely to have a positive effect on motivation (Patall et al., 2014). Any instructional designer or ELA teacher wanting to give students more choice can use these types of assignments and writing prompts to open up options for the students that want them, while still offering “recommended” options for students who find that level of choice too much of a burden (Ackerman et al., 2014; Mozgalina, 2015; Reed et al., 2011). In the courses involved in this study, such assignments were offered in the context of a competence-supportive personalized learning framework (Adams Becker et al., 2016; Education Elements, 2019) based on Self-Determination Theory (Ryan & Deci, 2001) with an introductory module designed to develop relatedness, competence, and autonomy support, something that has been found to encourage intrinsic motivation in students (Hafen et al., 2012; Niemic & Ryan, 2009; Patall et al., 2010; Wallace & Sung, 2017). Those wishing to have a positive effect on student motivation by offering choice need to understand these design contexts, as offering choice alone is unlikely to have similar results if other student needs are not met first.

Figure 15 (below) shows how competence and autonomy support can be used to improve student motivation.

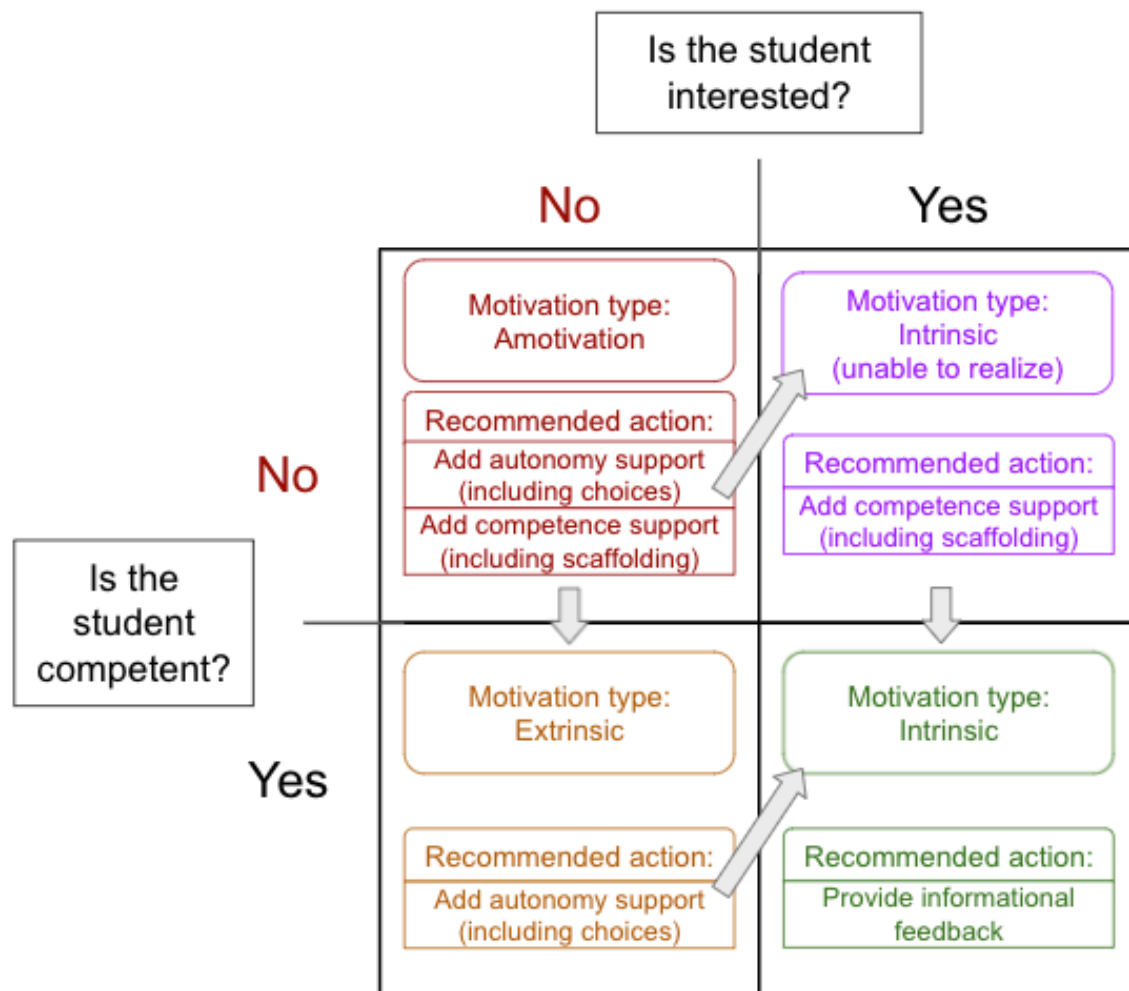


Figure 15 A diagram showing how competence support and autonomy support can be used to improve student motivation

A student lacking competence and interest is likely to experience “amotivation,” or a total lack of motivation. Adding competence support can move that student’s motivation to “extrinsic” motivation: they will be competent, but not necessarily interested. In the context of an ELA course, this might be a student that has the necessary reading and writing skills to perform on grade level, but they lack the desire due to not finding the content interesting. If that student, once achieving competence, is then given autonomy support (such as meaningful choices), they can become intrinsically motivated.

If an amotivated student is given autonomy support, they may become intrinsically motivated due to an increase in interest, but that motivation would not be able to be realized due to lack of competence. In the context of an ELA course, this might be a student that has an idea for a narrative that they think would be great (and a desire to write the narrative), but they lack the writing skills to express that narrative in the way that they want. In that case, giving the student competence support (e.g. chunked lessons, regular feedback, scaffolding) would make it possible for the student to realize their intrinsic motivation. Once someone is intrinsically motivated, it is recommended to avoid intervening or offering rewards, as these have been shown to decrease motivation in someone that is already intrinsically motivated—the best course of action is to give informational feedback only (Ryan, 1982).

Recommendations for Further Research

While survey respondents from these three courses produced potentially useful data, the sample size (40 students) and uniqueness of the situation makes it difficult to easily generalize the data to other populations. If the design features from these courses could be implemented in an area with a larger and more diverse student population (including a larger population of students in an elective ELA course), it would be possible to conduct enough surveys to apply quantitative data analysis; these surveys could include questions about demographics and student backgrounds in ELA courses and use this data to determine if there are significant relationships between those factors, choice, and motivation. These surveys could also use Likert-type questions to gauge more specific degrees of motivation in relation to levels of choice.

The surveys in this study focused on the relationship between choice and motivation. While the relationship between choice and motivation (especially intrinsic motivation) seemed clear in this study, choice is only one of potentially many motivating factors. Another study could be designed to have students rank choice among these other potential motivating factors (such as grades, parent influences, peer influences, teacher influences, and more) in order to gain more insight as to which motivators are most dominant in which students, and possibly how the different factors work together (or in opposition of one another). This study could also ask questions designed to garner more specific responses about the link between autonomy and intrinsic motivation.

Another study could also ask additional questions about how competent students feel in particular assignments with different levels of choice. While this study did gather data related to the role of competence, this was offered by students as explanation--there were no specific questions asking them to what degree they felt competent to complete any of the assignments, or to what degree competence supports helped them activate their autonomy. Including such questions could add important context and allow for deeper investigation of the interaction between competence, autonomy, and motivation/well-being, as research has shown that competence is a necessary prerequisite for intrinsic motivation (Patall et al., 2014; Ryan, 1995).

Literary genres proved to be a “wild card” in this study; a number of students had very strong genre-related preferences and were vocal about them; these preferences were more important than the level of choice on a number of occasions. For example, a student most motivated by high choice might still be intrinsically motivated by a no-choice assignment if it involves the preferred genre, or a student most motivated by high choice

might not be motivated to complete a high choice assignment if it involves a genre the student doesn't like. Poetry was particularly divisive in this study, with some students loving the opportunities to read and write poetry while others hated those same opportunities. Qualitative case studies involving students with such strong preferences could elicit deep responses that would be useful to ELA teachers and instructional designers concerned with motivation.

Future studies could also use similar design and data collection tools to investigate the relationships between choice in motivation in other contexts. These could be contexts unrelated to personalized learning, contexts with a different level of autonomy support, brick-and-mortar classroom contexts, and/or different content areas.

Conclusions

This study sought to explore the relationship between choice and motivation among students in three online ELA courses in the 2020-2021 school year. Through the analysis of student survey responses and student work, it was possible to gain a deeper understanding of how these students perceived that relationship and how the relationship was reflected in student work samples. While work samples showed a relationship between choice and motivation, the sample size of students whose work could be analyzed (five students) was small.

The end-of-course surveys, however, were completed by 40 students and included many written explanations that made it possible to explore how students perceived the relationship between choice and motivation. The majority of respondents said that they found a high level of choice to be most motivating for both reading and writing assignments. Responses as to which assignments were most motivating suggest that

choice most often led to intrinsic motivation, as students were able to pursue options that they found interesting or enjoyable. Responses as to which assignments were least motivating, as well as responses as to what students' least favorite part of the course was, suggest that a lack of autonomy resulted in lower levels of motivation. According to Ryan and Deci (2001), "the study of conditions that facilitate versus undermine intrinsic motivation is an important first step in understanding sources of both alienation and liberation of the positive aspects of human nature" (p. 70).

Respondents' preference for choice in these courses aligns with findings from Eccles et al. (1997), who explain the fundamental adolescent need for autonomy, as well as Jenő et al. (2019), who found that higher levels of perceived autonomy (in the form of choices in a course) predicted higher levels of intrinsic motivation; in that case, the intrinsic motivation was also found to contribute to improved well-being. While this study did not specifically ask students about their well-being, motivation itself--especially intrinsic motivation--has been repeatedly and reliably associated with improved well-being (Burton et al., 2006; Deci & Ryan, 2008; Emadpoor et al., 2016; Litalien et al., 2013; Ryan & Deci, 2000b; Sheldon & Kasser, 1995; Sheldon et al., 2004). A majority of respondents to this study's end-of-course survey expressed higher motivation associated with choice and higher motivation with assignments they found intrinsically motivating (which were usually facilitated by choice); it is reasonable to expect that the intrinsic motivation reported in these courses resulted in an improvement in well-being.

As well-being among adolescents continues to decline (Curtis & Heron, 2019; Twenge et al., 2019), school districts, governments, and non-governmental organizations

continue to look for ways in which they can support and improve the health of students (OECD 2009; WHO 1998; WHO 2016). These efforts usually focus on providing nutrition, opportunities for exercise, and mental health support; they rarely integrate with academic programs (Malti & Noam, 2008). As more and more students turn to online options for their academic coursework (Lieberman, 2020), many are not able to access school-based nutrition, physical education, and mental health supports such as school counselors (U.S. Department of Education Office for Civil Rights, 2021). Online teachers and instructional designers can make a contribution to improving adolescent well-being by leveraging designs that support and honor the autonomy of their students.

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APPENDIX

Data Collection Instruments

End-of-course Surveys

1. What was your favorite part about this course?
2. What was your least favorite part about this course?
3. Which writing sample type were you most motivated to complete? [choose one from list]
4. What was more motivating about that writing assignment?
5. Which writing sample type were you LEAST motivated to complete? [choose one from list]
6. What was less motivating about that writing assignment?
7. Of the different pieces you read for this course, which were you most motivated to read, and why?
8. Of the different pieces you read for this course, which were you LEAST motivated to read, and why?
9. How do you feel about the feedback you received on your work? [Likert scale with descriptors]
10. This course offered several levels of choice in regard to what you read: no choice [course-specific example], low choice [course-specific example], and high choice [course-specific example]. Which level of choice did you find most motivating? [choose one from list]
11. What did you find more motivating about the level of reading choice you chose?
12. This course offered several levels of choice in regard to what you wrote: no choice [course-specific example], low choice [course-specific example], and high

choice [course-specific example]. Which level of choice did you find most motivating? [choose one from list]

13. What did you find more motivating about the level of writing choice you chose?

Non-anonymous Surveys

You just completed (in Q2) a module in which you had a low level of choice as to what you wrote about and read--you could choose between one reading and another, and your essay prompt limited you to writing about certain literary devices in certain potential pieces. Please answer the following questions relating to the module.

1. On a scale of 0-4, 0 being "not at all" and 4 being "a lot," how much do you typically enjoy reading/writing in this genre?
2. Consider the level of choice you were given in this module. On a scale of 0-4, 0 being "a lot less," 1 being "a little less," 2 being "the same," 3 being "a little more, and 4 being "a lot more," how much more (or less) did you enjoy the assignment due to the level of choice?
3. On a scale of 0-4, 0 being "not at all motivated" and 4 being "very motivated," how motivated do you typically feel to complete reading/writing assignments in this genre?
4. Consider the level of choice you were given in this module. On a scale of 0-4, 0 being "a lot less," 1 being "a little less," 2 being "the same," 3 being "a little more, and 4 being "a lot more," how much more (or less) motivated were you to complete the assignment due to the level of choice?
5. How do you think the module could be improved?
6. How did this experience compare with other assignments that had either more or less choice?

7. Looking back at the module you just completed, please write a reflection (in as much detail as you can) about how you felt about the activities you completed. Please be sure to address the question, “What was your motivation to complete this assignment as you did it?” and you might also think about questions that allow you to elaborate on previous responses, like:

1. How much did you enjoy (or not enjoy) the assignment?
2. What are your thoughts about the number of choices given to you? Did you feel free? Constrained? Somewhere in-between?
3. Would you have been happier with the experience if you had more or less choice? If so, why?
4. What about your writing do you think is very good, and what do you think could be changed?

End-of-course Survey Responses

Responses to “What did you find more motivating about the level of reading choice you chose?”

Responses to “What did you find more motivating about the level of reading choice you chose?”

No choice	“I don't make decisions very well; I'm very indecisive. Sometimes, it's hard to find appropriate stories from a vast reading list that meets the requirements for quizzes etc. I enjoy having a selected set of stories for me to read just so I don't have to spend time on finding a story that will fit the assignment best.”
Low choice	“I found low choice more motivating. I really enjoy and appreciate the list in high choice; it was really cool to look through them and pick which ones I wanted to read. Although, it was a little less overwhelming to search through the low choice options than being able to search through lots of potential stories to read.”
Low choice	“I didn't have to look through all the books of choices I had to read, it was so easy to just choose between 2 books I want to read.”
Low choice	“I like having options, but I'm way too indecisive to have a high choice.”

- Low choice “I found it motivating to read a small lengthen story.”
- Low choice “Low choice was more motivating because I didn’t really have to do a whole project on it so I felt less pressure to choose something I could work with.”
- Low choice “Keeping it rather simple this semester was pretty good for me in the long run, while I did not finish the class in time I was able to properly do all the other classes on time.”
- High choice “I could find something to read that I enjoyed reading and was not forced to read.”
- High choice “I could pick the piece I thought I would be most interested in.”
- High choice “I chose the easiest readings which helped me a lot.”
- High choice “I just felt that when I found a reading example that was interesting it was easier to finish the assignment.”
- High choice “I wasn't stuck with two long stories written in middle English, there were tons of options to choose from.”
- High choice “I felt like it was up to me and I had many choices to choose from.”
- High choice “Because I was able to pick pieces that I enjoyed.”
- High choice “I could choose which ones and got a lot of options.”
- High choice “There was a much wider selection.”
- High choice “With high choice I can choose to read something I am interested in.”
- High choice “I got to choose what I read instead of someone choosing for me.”
- High choice “It was most likely to have things that had interesting titles.”
- High choice “I found it more motivating because I had more options to choose from rather than just a couple.”
- High “High choices make me more motivated because I can choose what to read and

- choice be more interested in it.”
- High choice “I got to choose something to read that I'd never read before.”
- High choice “I can't stomach my way through too low a level of reading, the words are just too plain. It's just very boring to read and I lose focus on the thing I'm supposed to be reading because it can't keep my attention.”
- High choice “I was able to explore the types that sounded interesting to me.”
- High choice “Well I get bored with a book easily so this way I can read a little about them and see if I think it will keep me hooked.”
- High choice “You really had a big option of stories to choose from. So then you could choose which book was most interesting to you and then you could actually enjoy reading it and doing an essay on it.”
- High choice “It allows me to choose whatever book I feel would make reading it more interesting to read.”
- High choice “I liked that you gave a lot of different choices of things to read.”
- High choice “What I found more motivating about the level of reading choice is that there is a larger variety of books or novels to read and if the book you chose is hard to understand or difficult to make an essay on, you can switch to another that may be more suitable for you.”
- High choice “I got to pick my book.”
- High choice “I feel like it is easier to read something you picked out or want to read. If you are forced to do something or feel like you are forced to do something then you won't want to do it.”
- High choice “I really like to pick the things I read, but regardless of what I pick I usually enjoy it.”
- High choice “I had a variety of interesting things to choose from.”

Responses to “Why was this level [of writing choice] more motivating?”

Responses to “Why was this level [of writing choice] more motivating?”

No choice	“If I am given a topic to write about it is easier for me to focus on the one topic.”
No choice	“When I am given a topic to write about it helps me focus better on the topic that I have to stick to.”
No choice	“No choice was most motivating because I didn't have to worry about choosing a too complicated topic or choosing the wrong one.”
No choice	“It's straight forward. Something that's harder to procrastinate on.”
Low choice	“Sometimes I have a hard time narrowing ideas down. For both short stories I looked up a random idea generator and went on from there.”
Low choice	“Because I knew exactly what I was supposed to do and what was expected of me.”
Low choice	“I already had the options and didn't have to come up with something completely on my own.”
Low choice	“I enjoy having some say in what I write, but once again, I'm too indecisive for the choice to be mine only.”
Low choice	“I can choose which choice looks best to me without having to go find them myself, letting me save time while still being interested in what I'm writing about.”
Low choice	“I enjoyed low choice because it didn't leave me to make everything myself, but it still gave me options.”
High choice	“When it comes to writing short stories, I like to be able to write about what I am passionate about, not some randomly selected topic that I have zero interest in. I'm happy that this course allows me to write what I feel like writing.”
High choice	“I enjoyed the lack of limitations, it is more fun for me when I am allowed to be more creative.”
High choice	“I love poetry, that is what helped me out.”
High choice	“I had more freedom and didn't feel like I was kept in a box.”
High	“I was allowed to be creative, even if my classmates weren't writing within the

- choice same genre we were all allowed to be creative in our own way and I believe our works came out better because of that.”
- High choice “It felt more individual in the fact that I got to choose.”
- High choice “I really loved the high choice because we could write about anything that interested us, but it had to be in the range of things we were learning about.”
- High choice “I was able to pick what I wanted to write and got more freedom with it.”
- High choice “You could write about anything.”
- High choice “Also high choice, because it is more engaging to be writing about something you care about.”
- High choice “I found it confusing because I didn't have a prompt to go off of. After I brainstormed I started to like the project and that it could be about anything.”
- High choice “It gave me the ability to find a topic I enjoy learning about.” [research project]
- High choice “I like being able to write about anything I want. It's nice.”
- High choice “I got to write about anything I wanted and it took the least amount of thought. It was the only assignment that had the potential to ease my stress.”
- High choice “I didn't realize that the poetry and narrative were the high choice. I just enjoyed writing them.”
- High choice “Because I could do any number of things like narrative or argumentative depending on what I felt was best.”
- High choice “I like the high choice because it lets me express myself however as an aspiring writer, I'd like to be good at writing anything.”
- High choice “What I found more motivating about the level of writing choice I chose is that it gives the student the ability to choose the writing style they excel at and possibly be able to write a better essay.”
- High choice “It was just nice to have the option and to not be forced to one thing.”
- High choice “Once again, you gave options and there was always an option I liked.”
- High “I found it motivating to be able to write my own story.”

choice

High choice “Again for the same reason. I liked that you gave us examples of what you would want because then you have something to go off of if you can't pick something to write about but writing about something you enjoy or want to write about will always be the easiest way to motivate people.”

High choice “I think it's easier and more motivating to write things you are interested about.”

Responses to: “Of the different pieces you read for this course, which were you most motivated to read, and why?”

Responses to: “Of the different pieces you read for this course, which were you most motivated to read, and why?”

I was most motivated to read "Girl" by Jamaica Kincaid--I really enjoyed the moral behind this story and I feel that it is quite relatable for some people.

I read a story about how a woman should act. I really liked it because it showed how/what women were supposed to do and I think that it is interesting that some cultures still have things women should and shouldn't do while others don't.

I was most motivated to read the poetry and the flash fiction. They were short so I could read more of them.

To Build a Fire, because it was interesting on how it was written.

I was most motivated to read the poetry pieces! I love some fun, quality play on words, and it was so fun to read existing poems and my classmate's pieces. They're all so creative, and it really inspired me while reading them!

If you're meaning stories, I liked "Girl," and there was one about a doctor trying to find out what was wrong with the little girl. and I really enjoyed reading them.

Probably the speeches because of their presence to history.

I was most motivated to read about the middle east because I really was interested in learning about life out there, and why war is still going on.

I was motivated to read the Asian and Latin America ones because they sounded interesting.

The poems and short stories because they're quicker to read through.

I read the book "The Sound of Waves" by Yukio Mishima. It was cool to read a book from a notable Japanese author.

I really like the Collector of Treasures because it was overall a good story and had a life lesson message in it.

things with interesting titles

Queen of Spades. it was very catching with a great plot

I was most motivated to read the poems in the lessons because it's really hard for me to sit

and read a bunch of pages especially if I am not interested in the topic.

I was more motivated to read poems because they are short and simple most times.

I really liked the poems because there always interesting to read

I disliked having to read pages of the short stories, but I was motivated to keep going by the fact that after I finished reading and writing about it, I would never have to do that specific assignment again.

Of Mice and Men because I got pulled into the story.

I actually really enjoyed reading "Of Mice and Men" by John Steinbeck. I enjoyed the plotline, the characters, and the theme.

Well, I liked Fahrenheit 451, but I think my favorite thing I read was Rikki Tikki Tavi. Fantasy and adventure because that is the type that speaks to me most.

Of Mice and Men, because it was the most interesting and I liked getting to know the characters.

I enjoyed the adventurous and intense readings, because they kept me hooked.

I enjoyed "Of Mice and Men" the most. The novel was an enjoyable read.

"Fahrenheit 451" was really interesting to read.

Fahrenheit 451 because I was already planning on reading it at some point, and also because it was a good read.

[title removed], because it's my favorite book.

Pyramus and Thisbe, because it's a play I've heard referenced a lot but I'd never actually read it.

I really liked Fahrenheit 451 because I had already read something by that author and it was a story I had heard about.

Fahrenheit 451 seemed really exciting because my brother enjoyed the book and I have heard a lot of good things about it.

Slaughterhouse Five. I like historical books

Fahrenheit 451, it was a great story to read and I was in a need to read something different.

Responses to: “Of the different pieces you read for this course, which were you LEAST motivated to read, and why?”

Responses to: “Of the different pieces you read for this course, which were you LEAST motivated to read, and why?”

I was least motivated to read the poetry exemplars--I'm not too good at deciphering the "true meaning" behind certain words or phrases and I just feel that my time is better spent elsewhere.

I have enjoyed everything I have read. All of them taught me something new.

I was least motivated to read the longer examples that were given during the short story unit. Some of them weren't very interesting.

Any of the really long readings for stories. Because they take forever to read.

I was least motivated to read the fiction short story examples. This is purely because I tend to get antsy while sitting and reading longer pieces of text, although most of the time I get sucked in in the end and have less trouble than I thought I would.

I actually liked reading so I didn't have a problem.

Any piece that was longer than 5 pages couldn't grab my attention unless it was very very interesting

I didn't really enjoy a rose for Emily. It was a good story but I believe I have read it three times this school year.

Probably the novels because they took forever to complete.

I was least motivated to read about Latin America because their culture really isn't that interesting.

I was least motivated to read the Middle Eastern/African ones because they were long and not easy.

The ones that take the longest to read because I need more time for other classes.

Probably the short story, 'The answer is no' because it didn't seem to have a good flow of narrative.

The Queen of Spades was the least motivating because it was such a long story.

Everything else. I read super slow.

The argument speeches

I was least motivated to read longer stories because like I said above it's hard for me to read multiple pages if I am not interested.

I hated reading novels or longer stories because I cannot focus on the reading if I am not interested in the topic.

The novels. Those are super long and I don't have time for that.

The one about the sailors and the boat because it took the longest, as well as the other student's essays. I like to focus on my work and my grades only.

Romeo and Juliet because it was really long and hard to read

I didn't really enjoy Romeo and Juliet because it was hard to understand and incredibly

long.

I don't know. I liked everything I read, even all the articles and sources I used this year.

I would say the different poetry because the types that we had to read were not ones that I would enjoy on a day to day basis.

The book I chose was boring and Romeo and Juliet was just so difficult to read quickly, yet I knew the story basics so there was no point to get at.

Probably Romeo and Juliet, it's just so long and I've heard, seen, and read that so much that I'm just done with it.

I enjoyed "The Cask of Amontillado" the least. I also did not care for this story as it was difficult to understand.

There were no others. All the others besides Romeo & Juliet I thought were good.

Initially it was Romeo and Juliet because it's written in a way that makes it hard to follow, but that was mostly solved by following along with an audiobook, plus it has a lot of good moments.

Romeo and Juliet, because it was very confusing.

Because it was the least depressing.

Definitely Romeo and Juliet, because it was reaaally long and difficult to read because they talk so different than we do.

I don't think there were any I was unmotivated to read but my least favorite was probably Romeo and Juliet because it was in a play format and I have heard the story so many times that I didn't really want to read it again.

I was least motivated to read Romeo and Juliet because I don't like the way that it is written for a play; I found it really hard to read.

Romeo and Juliet. Not my favorite kind of reading.

I think it was the mongoose and the snake. While the story is pretty good to read, it's not really my genre to read about animals that can talk.

Responses to: “What was more motivating about that [most motivating] writing assignment?”

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It's not that it was necessarily more motivating than other assignments, I simply just enjoy it more and find it easier to write short stories.

They way I could just type whatever I was thinking as long as it had some sort of flow.

They were quick and easy which made them less stressful and more fun.

It was easier for my brain to work through creating a poem.

I absolutely loved the poetry unit! I've come to taking a liking to writing poetry in general, and I think that's why I liked it so much. It was a nice unit to have fun and relax a little bit, reading each other's poetry and writing it.

That it was shorter and that you could just make up some random story and make it come to life.

I feel I can be more creative with fiction, but I have more to say than traditional flash fiction allows.

I was passionate about it.

Learning to word my essay purposely to express the main idea without making somebody upset.

It was more motivating because it was so much easier, and I could also explain all of the steps I took into my research.

I liked what I was talking about.

We were given something to talk about and describe.

I am interested in church history.

I think trying to be eligible for sports and not having to write a full essay motivated me to do it.

I just really like research projects when I don't procrastinate.

I like to write.

I like to argue and prove my points are correct even if they aren't.

I like to argue my points to make me correct.

I don't know. I think it's just easier because of all the research presentation I had to do for my history classes.

I got to write about something that relates to my career and it took the least amount of thought.

I've been told I'm very good at debating and I'm more passionate about this category of writing than any other.

It was more free form. However I'm not happy with how it turned out. I personally disliked it greatly, mostly because I know I can do much better. Also I loved the poetry one, but I was only able to pick one so I gave it an honorable mention.

I can create a story that is a fantasy and other things that allow me to be myself.

I've always been good at arguing.

It was just easier for me.

It's just fun, like a game you sometimes have to follow the rules but you get to be creative!
And write how you feel and what you want.

The most enjoyable thing about this type of writing is that it gives the writer free will on what they would like to write.

Because it was interesting to really try to prove your point to someone instead of just describing something.

It makes it easier to just write what you're thinking and use that as a base for your essay.

I like poetry, so it was fun for me.

It's more fun and not hard.

That I could think freely

The research project was most motivating for me because it felt like the writing part wasn't entirely my own ideas and I could take more inspiration from other sources.

I find that writing a narrative is easy and fun, especially because there weren't really strict guidelines about what we could and couldn't write about. I also surprisingly enjoyed the research project.

I like that format of essay a lot.

I like saying my opinions.

I'm more comfortable in explaining a topic rather than trying to, let's say do a persuasive essay like the argument essay.

Responses to: “What was less motivating about that [least motivating] writing assignment?”

Responses to: “What was less motivating about that [least motivating] writing assignment?”

I feel like poetry requires a lot of thinking (if that makes sense.) With short stories, you can kind of just write whatever comes to mind and in the end, it turns into a decent story, but with poetry, you have to think of the correct literary devices and make everything flow properly and find a good rhythm. It's just not my style.

I love going into detail and I wasn't able to really do that with flash fictions.

I don't enjoy writing pieces using this style of writing.

It was really hard to finish because my brain felt empty.

I really liked the flash fiction unit, but I think what made it my least-motivated unit was that I usually have a hard time writing short stories without going all in and making it an entire book instead of maybe a page. I had to try and limit myself to think a little bit simpler that time around.

I just am not very good at it so it was harder for me.

I have never been good at writing poetry, no matter how hard I try.

I can't really say I was unmotivated by anything since I really enjoyed this class, so I really just picked one that was alright.

I just don't like writing that type of essay.

Just writing it was less motivating. I didn't really like the format of the explanatory essay.

It seemed hard.

I felt like it was a bit confusing at one point.

These ones tend to lack emotion and are boring to write.

I don't think I am very good at argumentative essays so I don't like to do them. I think lack of confidence was the problem.

I really did not like how I was being taught about history in my language arts class. Everything I learned in this class I had already learned in my history class.

It was confusing and I pretty much had no idea what I was doing the whole time.

I had to talk about the novel on video and send it for the whole class to see. Public speaking doesn't bother me, speaking on a video camera that I can't edit bothers me.

I'm less of a creative writer and more of a factual, evidence based, logical writer.

I don't like argument essays, because I can never just sit there and write and write. It takes me hours to come up with just one sentence.

It takes a lot of time and is not nearly as fun to me as the rest.

It just was harder.

I just like to write, and I do it for the fun of it. And an argumentative essay is just all serious. However, any writer can make anything fun!

I just did not care for this type of writing style.

It was boring, I thought.

Poetry is harder to understand.

It was not as fun, because I'm not the best at it.

It was hard.

I'm not very good at poetry

Poetry just never comes easy to me.

I'm really bad at stories, or at least I do not enjoy writing them.

I can't do poetry for the life of me

Mostly trying to come up with good sentences and executing them. Persuasion is not my strong suit. I only can get the information part done.

Trying to find evidence and writing supplies from that area.

Responses to: “What was your favorite part of this course?”

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My favorite part of this course was the two short stories we had to write.

My trash can poems

My favorite parts of the course were the short story sections. For me it is more fun to write about something made up.

I really liked the poetry unit and the first unit.

I absolutely love the planning out process. I feel like it's a great opportunity to think deeply into characters and the story whether some of those features will show up in the final product or not!

I liked that there was different things throughout the class and that it was easy to navigate through

There was a variety of prompts and coursework

The poetry section.

Learning about all of the different worldviews, and becoming a better writer.

My favorite part of the course was creating a TedTalk Capstone project, I've always wanted to do a TedTalk style project!

Writing the essay [capstone]

My favorite part of this course was the reading.

Writing Essays that revolve around history

My favorite part of the survey was the capstone project even though it stressed me out. I had to repeat the talk so many times before I was satisfied with it. Overall, I think I learned something and was able to teach others about it too.

I enjoyed writing essays and i thought the capstone project was really cool even though I procrastinated and ended up only finishing about half of the assignments

How you can work at your own pace.

My favorite part about this course was the freedom of what we could do.

My favorite part was the freedom we got.

My favorite part about this course was writing my argumentative essay on why [removed] is overrated because I got to write about something that has to do with music.

probably the last project because it was fun

I like how we took notes as assignments while reading something. It makes future assignments easier and having them be required is helpful.

I loved getting the chance to write a lot, I never got that chance in any other LA classes before.

Reading the different stories

I actually learned things in this class, I didn't learn from others.

The spacing on when assignments are due.

I get to write!

My favorite part of the course was the creative writing.

Being able to get feedback from other students and the teacher.

It's a mix between the fair workload, the schedule, the balance between reading comprehension and literary/writing skills, and the quick responses to emails.

reading my favorite book [title removed].

The reading

The creative writing

My favorite part was getting to read literature I wouldn't normally read, like Romeo and Juliet and Pyramus and Thisbe.

I really enjoyed that we got options in the books we were allowed to read. I knew that I was going to read a book that I'd enjoy.

I really liked the way it was constructed and how it was paced; it didn't give too much pressure but provided me with a lot of learning and I enjoyed it.

My favorite part was reading the books and PDFs.

The story reading.

Responses to: "What was your least favorite part of this course?"

Responses to: "What was your least favorite part of this course?"

My least favorite part of this course was the poetry--it's not my strong suit and I enjoy fictional writing/narratives more than writing poetry.

Starting it a week late. Other than that I enjoyed the entire course.

I don't like that we had to publish our writing. I also don't like that we were required to make a video with our faces in it, you should put another option for that assignment.

The last short story unit, that got the hardest for me to write about things.

I don't think I really have a least favorite part, I really enjoy this class!

I didn't have a least favorite, I just did myself dirty because I waited till the last minute for everything.

I personally dislike group work but I understand that it is necessary

I didnt enjoy reading all the stories but that's just personal preference.

probably when I would miss certain instructions, (my fault) and have to redo small amounts of work.

My least favorite part was mostly the Scavenger hunt or those analyzing the story projects.

The discussions

My least favorite part of this course was comparing and contrasting.

I think my least favorite part was reading. I disliked reading so much that I procrastinated on assignments that I had to read from the playlist to do.

i struggled with some of the reflections

My least favorite was the assignments because I did not like the way I was being taught.

My least favorite was that I was basically learning about history in my language arts class. I learned almost everything from this class about the regions in my history class and it made me feel like I was taking the same class twice.

the work

My least favorite part of this course was having to present my book report on "The Color Purple" on video. I hated having to do it. As well as having to do a full report on a book that was easy, yet time-consuming to read. The worksheets were fine, I just didn't like having to make a whole presentation on google slides.

poetry

My least favorite part about this course was probably having to read/watch Romeo and Juliet just because I hate reading and it took forever.

Well I don't like writing stuff that is not fantasy or related to something I like, because I feel it's boring to write things like argument essays or something based on something I find no joy in writing on that subject. That was my least favorite part, just because I struggle more with it.

The presentation with my voice

Having the whole quarter on one thing(the same book)

Probably giving critique, but I love receiving it!

My least favorite part of the course was the argument essay.

Reading about Romeo and Juliet. I thought it was boring myself.

how long some assignments take.

The essays

the Romeo and Juliet story

My least favorite part was the group discussions.

I'm not a fan of public speaking or interacting to other people when it comes to my writing, but I feel like it was also a necessary step.

My least favorite part was the timed essays. I simply do not like those.

Finding outside sources

Trying to come up with ideas on how to execute an essay.

Finding motivation to write and connect stories to the lessons we were learning.

**Complete analyses of incongruence between most motivating level of reading choice
and most motivating reading assignment**

10 students whose most motivating level of reading choice did not align with the piece they were most motivated to read

	Preferred choice level	Most motivated to read	Explanation	Coded themes
1	No choice	Short story (high choice)	"I really enjoyed the moral behind this story and I feel that it is quite relatable for some people."	Intrinsic motivation (enjoyment)
2	High choice	Speeches (no choice)	"...because of their presence to history."	Intrinsic motivation (personal interest)
3	Low choice	Unit 4 reading list (no choice)	"I really was interested in learning life out there, and why war is still going on."	Intrinsic motivation (personal interest)
4	High choice	Short story (no choice)	"...because it was overall a good story and had a life lesson message in it."	Intrinsic motivation ("good," enjoyment)
5	No choice	Short story (low choice)	"Very catching with a great plot."	Intrinsic motivation (enjoyment)
6	High choice	Short story (low choice)	[Names the story, but no explanation is given]	
7	No choice	Novel (high choice)	"...because I got pulled into the story."	Intrinsic motivation (enjoyment)
8	Low choice	Novel (high choice)	"I enjoyed the plotline, the characters, and the theme."	Intrinsic motivation (enjoyment)
9	Low choice	Myth (no choice)	"...because it's a play I've heard referenced a lot but I'd never actually read it."	Intrinsic motivation (personal interest, curiosity)
10	Low choice	Novel (high choice)	"...great story to read and I was in a need to read something different."	Intrinsic motivation (enjoyment)

**Complete analyses of incongruence between most motivating level of writing choice
and most motivating writing assignment**

10 students whose most motivating level of writing choice did not align with the piece they were most motivated to write

	Preferred choice level	Most motivated to write	Explanation	Coded themes
1	High choice	Poetry (no/low choice)	"It was easier for my brain to work through creating a poem."	Simplicity (easier process)
2	High choice	Poetry (no/low choice)	"I was passionate about it."	Intrinsic motivation (passion)
3	Low choice	Argument (no choice)	"Learning to word my essay purposely to express the main idea without making somebody upset."	Competence
4	High choice	Argument (no choice)	"We were given something to talk about and describe."	Simplicity
5	High choice	Argument (no choice)	"I like to write."	Intrinsic motivation (enjoyment)
6	Low choice	Argument (no choice)	"Because it was interesting to really try to prove your point to someone."	Intrinsic motivation (interest)
7	Low choice	Argument (no choice)	"I've been told I'm very good at debating and I'm more passionate about this category of writing than any other."	Competence (ability); intrinsic motivation (passion)
8	High choice	Argument (no choice)	"I got to write about something that relates to my career and it took the least amount of thought."	Intrinsic motivation (personal interest); simplicity (easier)
9	Low choice	Narrative (high choice)	"It's more fun and not hard."	Intrinsic motivation (fun); competence (level of difficulty)

10	No choice	Research (high choice)	“The research project was most motivating for me because it felt like the writing part wasn't entirely my own ideas and I could take more inspiration from other sources.”	Simplicity
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