ARTS STUDENTS IN FLOW:
AN INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

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Abstract

The purpose of this research project was to understand how secondary arts students make sense of their academic flow experiences. Collective demand for preserving and increasing student engagement necessitates research centered on student experiences with optimal engagement. This exploration, framed by the qualitative methodology of interpretative phenomenological analysis, examined student flow experiences in the arts and generated the following themes among data: challenge, autonomy, and control; temporal phenomena; and peer and community feedback. These themes help to elucidate how arts students make sense of their experiences with peak engagement and generated findings that may aid educators seeking to understand the means by which optimally engaging experiences across subject lines can be promoted and sustained.

*Keywords*: arts, flow, engagement.
Dedication

This thesis is dedicated to my family: my wife, Kristine, my son, Declan, and my daughter, Mackennah.
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Table of Contents

Abstract ..................................................................................................................2
Dedication .............................................................................................................3
Acknowledgements ............................................................................................4
Table of Contents ...............................................................................................5
Chapter 1: Introduction .......................................................................................9
  Statement of the Problem ...............................................................................9
  Significance of the Research Problem ..........................................................10
  Positionality Statement ...............................................................................11
  Research Questions .......................................................................................13
  Theoretical Framework ...............................................................................14
  Indicators .......................................................................................................15
    Contextual Alignment ...............................................................................16
    Axiological Interpretivism ........................................................................16
Chapter 2: Literature Review ..........................................................................18
  Theoretical Roots of Flow ............................................................................18
    Motivational and Engagement Theories .....................................................18
    Positive Psychology ...................................................................................19
  Flow Research ...............................................................................................21
  The Experience Sampling Method .................................................................23
  Challenge and Skill: A Delicate Balance .......................................................24
  Flow in Education ........................................................................................27
Conclusion ........................................................................................................33
Conclusion……………………………………………………………………..73

Chapter 5: Discussion of Findings………………………………………………..74

Recognition & Articulation: Student Consciousness…………………………..75

Learner Independence: Challenge, Autonomy, and Control Increase Ability to
Reach Flow State………………………………………………………………..78

Time Out of Mind: Management of Educational Time Affects Student
Relationships with Flow……………………………………………………….80

Group Dynamics: Peers Influence Flow……………………………………….81

The Findings as a Whole: Contextualizing the Results………………………..83

Implications of Findings…………………………………………………………..84

Implications: Student Consciousness………………………………………..85

Implications: Challenge, Autonomy, and Control Increase Ability to
Reach Flow…………………………………………………………………….87

Implications: Management of Educational Time Affects Student
Relationships with Flow……………………………………………………….87

Implications of Group Dynamics: Peers Influence Flow…………………..89

Limitations……………………………………………………………………….90

Topic for Additional Study…………………………………………………….91

Conclusion………………………………………………………………………..92

References……………………………………………………………………….94

Appendices……………………………………………………………………….107

Appendix A: Superintendent Study Approval……………………………..107

Appendix B: Opt-out Forms & Participant Questionnaire………………..108
Chapter 1: Introduction

Statement of the Problem

For educators, student engagement, or the lack of student engagement, is a concern, with studies classifying high school students, in particular, as bored and chronically disengaged from the academic process (Goodlad, 1984). The stakes of student engagement are high, affecting academic achievement (Dotterer & Lowe, 2011), dropout rates (Finn & Rock, 1997; Battin-Pearson, Newcomb, Abbott, Hill, Catalano & Hawkins, 2000), even substance use and abuse (Bond, Butler, Thomas, Carlin, Glover, Bowes, et al. 2007). Despite the challenges of today, populations of students who are intellectually curious, intrinsically motivated, and consistently engaged still thrive (Shernoff, Csikszentmihalyi, Schneider, Shernoff, 2003). Understanding the nuances of experiences of optimal academic engagement is salient, as is the collective assimilation of engagement research.

Engagement is a broad term with numerous connotations. One means of understanding human engagement is through the application of flow theory. Csikszentmihalyi (1990) initially defined psychological flow, or optimal engagement, as a state in which individuals become wholly immersed in an activity or process. His 1990 publication of Flow: The psychology of optimal experience popularized the concept through largely qualitative, interview-based accounts of the optimal experiences of artists, scientists, and other professionals. Stirred by Abraham Maslow’s (1962, 1971) research regarding peak experiences and their effect on consciousness, Csikszentmihalyi’s work focused on happiness, inspiration, and creativity. The utilization of flow theory as a means of measuring and enhancing student engagement is, at this time, atypical. Further demystification of flow theory and its applicability to educational practice is necessary to cultivate an environment of increased academic engagement.
Significance of the Research Problem

If Csikszentmihalyi’s (1990) characterization of flow is accepted in greater psychology academia as the apex of human engagement, its study in relation to secondary student engagement provides educators and their students with a lens through which peak experiences may be better understood. In turn, this understanding supplies educators with a unified context for peak experiences in education. Specific research pinpointing the relationships between secondary student engagement and flow theory exists (Shernoff et al. 2003). Present research in educational flow is largely quantitative, relying on Csikszentmihalyi’s Experience Sampling Method, or ESM, as a valid model of flow measurement (Csikszentmihalyi & Larson, 1987; Moneta & Csikszentmihalyi, 1996). Rogatko (2007) identifies three major research trends in educational flow: studies of correlations between flow characteristics and activities, studies of potential factors influencing flow, and studies of flow’s effect on performance or personal affect.

Though present in academic literature, everyday measurements of classroom engagement are largely superficial, founded on passive observation or evidence of student compliance. Kuh (2009) claims that one of the prominent storylines of the first decade of the twenty-first century education will be “the emergence of student engagement as an organizing construct for institutional assessment, accountability, and improvement efforts” (p. 5). Further punctuating the need for the continued assimilation of flow theory and education is the fact that teens who report the most flow experiences also reported increased levels of “mood, motivation, self-esteem, concentration, and future importance” (Hektner & Csikszentmihalyi, 1996, p. 15).

Providing educators with a deeper awareness of the experiences that form lasting impressions on student experience is salient. Ainley, Enger & Kennedy (2007) call for a range of flow indicators, citing the inability of any constricted set of processes to accurately identify and
evaluate flow experiences. This belief indicates the need for breadth in the realm of educational flow research. Further elucidation of flow theory and its applicability to educational practice is necessary to channel the work of educators toward intrinsically satisfying academic experiences for students by providing educators with a cohesive context for peak experiences in education.

Understanding the curricular and instructional parameters conducive to arts students’ flow experience could have profound implications for practice. The heightened level of engagement offered by flow serves as a medium through which student motivation may be better understood and amplified (Ainley, Enger & Kennedy, 2007). Education demands flexible, responsive learning environments that offer the malleability necessary for teacher customization (Doering & Veltianos, 2008), and understanding the individual essences of peak academic experiences can highlight the need for curricular individualization and increased differentiation. Instead of framing the engagement problem around the shortcomings of educational attempts at student engagement, an exploration of student flow experiences in the arts highlights the contexts that contribute to them. This exploration yielded themes that elucidate how arts students make sense of their experiences with peak engagement.

**Positionality Statement**

As an individual whose upbringing and maturation were comfortable and supported, whose life is currently centered on education in the arts and humanities, I acknowledge a favorably contextual backdrop for seeking my own optimally engaging experiences, particularly those grounded in the arts. I am a product of stable home and academic environments that nourished intellectual growth and the pursuit of optimal experiences. Though these types of environments fail to represent absolute precursors for flow, I believe that these foundational circumstances enhanced these potentials in me. Axiological interpretivism, the philosophical
stance adhered to in this study, promotes the researcher’s acknowledgement that inquiry is inherently biased and may be directed in part by the values of the researcher (Creswell, 2012). As a researcher, my focus rests on balance: I must acknowledge and counteract a number of assumptions that may skew the research process while placing objective value on both my illuminations and the interpretations of others. My belief in the influence of my background and my predilection for optimal experiences must be considered singular. Though such personal experiences seemingly enhance my understanding and appreciation of flow, I must not allow them to impede my objective interpretation of others’.

As a young art student at Massachusetts College of Art & Design, I experienced flow on a regular basis. Oftentimes, after prolonged painting sessions in my studio, I would sit in my car, idling for some time before setting off for home. These were peculiar periods of mental decompression wherein I felt the need to retreat back into the real world after having navigated an alternative spatial realm while immersed in a work of art. Eventually, I would drive myself home and adjust to the demands of reality. At the peak of these experiences with artistic engagement, I would come to contextualize these occurrences through the lens of flow theory. Via a psychology professor, I encountered the work of Csikszentmihalyi (1990) and was able to classify and define many of my own immersive experiences that developed my passions and molded my character. I consider the pairing of skill and rigor an essential habit and am awed by others’ accounts of complete immersion.

In drawing, writing, teaching, learning, sport, and even leisure, my consciousness of the flow phenomenon persists. Of potential hazard is the assumption that the same impetuses for engagement exist for others, or that others’ characterization of optimal engagement mirror my
own. Value must first be placed on how individuals make sense of their own optimal experiences as phenomena unique and separate from my own.

As a teacher, understanding and fostering the optimal engagement of students represents a valuable and sustainable endeavor. As a parent, I aim to instill this same pursuit in my children through the cultivation of appropriate challenges and experiences. Now, as a researcher, I recognize the intimate and binary relationship between my positionality and the nature of this study. As an art student, artist, professor, and arts teacher (English and visual art), my passions and interests lie, quite naturally, with the arts as a whole. Examining arts student perspectives regarding flow also unifies my work as a teacher of both English and art. I am drawn to the immersive, the creative, and the unique. Second, my personal experiences with flow, in both theory and practice, tie myself to this study in a profound way. This partiality for flow experiences, and the appreciation and quest for such occurrences, equips me with a considerably favorable bias that I must counter with severe objectivity in order to eliminate inadvertent persuasion or self-censorship from participants (Briscoe, 2005).

**Research Questions**

Objective research is first beholden to the careful construction of research questions. An investigation into the optimally engaging experiences of secondary students demands a question or questions that elicit findings of value to educators seeking to further understand the perspectives of engaged young learners. Research questions for qualitative studies driven by interpretative phenomenological analysis should explore and capture the meaning that participants assign to a particular experience (Smith, Flowers, & Larkin, 2009). To explore such meaning, Creswell (2009) posits that research questions, like the query driving this study, should use the words ‘how’ or ‘what’ as a conveyance
of an “open and emerging design that is reflective of qualitative research” (p. 130). Creswell (2009) further indicates that questions in phenomenological research “might be broadly stated without specific reference to the existing literature or a typology of questions” (p. 130). Interviewers must design research questions that explore participant experiences, understandings, perceptions, and views of a phenomenon (Creswell, 2009). As is necessitated, this study proposed research questions that are designed to reveal participants’ views regarding their flow experiences: How do secondary arts students describe and make sense of their flow experiences? What can educators learn from the school-based factors that influence arts students’ flow experiences?

These questions invite interview procedures that aim to elicit relatively open and unbridled data sets from participants while allowing the researcher to interpret and pinpoint themes amid and between the interview materials, prompting the remainder of the research design to sustain this alignment. Both questions reflect the impetuses of Interpretative Phenomenological Analysis (Smith, Flowers & Larkin, 2009). The first question provides an overarching framework for the first interview (see Appendix E), which aims to expose participants’ meaning-making of their flow experiences; the second question frames the second interview (see Appendix F), which furthers this exposition while seeking contextualization that may contain practical applicability for educators.

These research questions demand a carefully determined theoretical framework upon which the study continuum may rely.

**Theoretical Framework**

The theoretical framework must align with the aforementioned research questions, which require data from students. Creswell (2012) defines the theoretical framework as
“a guiding perspective or ideology that provides structure” for a research endeavor (p. 524). As a result of the general acceptance of, and adherence to flow theory, the theoretical underpinnings established by Csikszentmihalyi over the past three decades serve as the foundation for an array of theoretical and empirical approaches. A recent study coupled interpretative phenomenological analysis and flow in an investigation of the optimal experiences of dancers (Hefferon & Ollis, 2006), establishing a viable model for future studies using the same framework and method.

**Indicators.** It is imperative to establish a set of qualitative indicators as a foundation for this theoretical framework. In prevailing flow research, the qualitative indicators established by Csikszentmihalyi, (1975) are re-worded, recycled, or adjusted, leaving a wake of markers that are separated mainly by subtlety and nuance. Another facet of the theoretical framework that must be addressed is contextual appropriateness. Despite the breadth of educational flow research, many theoretical underpinnings support quantitative methodologies, thereby limiting the applicability of the theories therein.

Over the past few decades, researchers advanced Csikszentmihalyi’s original flow theory to define motivational phenomena and to understand the physiognomies of optimal experiences (Schweinle, Turner, & Meyer, 2008). Csikszentmihalyi and his colleagues pinpointed the phenomenological characteristics of individuals’ most meaningful and gratifying moments in life (Shernoff, Csikszentmihalyi, 2008), ultimately producing studies that reveal flow’s six core characteristics: a combination of action and awareness, a narrowed sense of focus, a diminished self-consciousness (merging of self and environment), an increase of control, a clarity in perceived expectations, and a feeling of intrinsic satisfaction (Csikszentmihalyi, 1975, pp. 38–48). Based on four
specific criteria, this study adopts a theoretical framework founded on these specific qualitative indicators (Shernoff, Csikszentmihalyi, 2008).

**Contextual alignment.** The first trait of this model that caters to the overarching framework is contextual. These indicators (Shernoff, Csikszentmihalyi, 2008) are derived from a study of adolescent flow experiences, mirroring the context of this study and offering direct applicability. The second factor lies in the inclusion of Csikszentmihalyi in the framework construction, lending a degree of credibility and oversight to these parameters. Tempering this direct tie is the inclusion of another researcher, Shernoff, as a counterbalance whose studies have helped to modernize and refine flow theory while taking into account the aforementioned educational contexts (Shernoff, Csikszentmihalyi, 2008; Shernoff et al., 2003). The third factor is the diction of the indicators themselves, which in their relative cogence offer an accessible template for teenaged participants. Finally, the built-in indicators supply the study with conceptual and linguistic backbone for interview questions, prompts, and language.

**Axiological interpretivism.** Binding the theoretical frameworks to interpretative phenomenological analysis requires the affirmation of interpretative approach. The nature of this study will be interpreted via axiological interpretivism, which may allow for the rich representation of participant experiences while bracketing the researcher (his own positionality/flow experiences/role as educator). Via axiological interpretivism, the researcher acknowledges that the research endeavor is value and bias-laden; he or she acknowledges the power of his or her own interpretation in concert with the interpretations of participants (Creswell, 2012). Students’ descriptions of their flow experiences may reveal patterns or threads that may be further contextualized via an
interpretative phenomenological analysis (Reid, et al. 2005), through which interpretations of the students’ flow experiences may be assimilated.

This theoretical framework establishes a circuital network, linking the intentions and implications of the research problem, the research questions, the study design, flow theory, interpretative phenomenological analysis, and axiological interpretivism.
Chapter 2: Literature Review

This query is purposeful in its focus on the relationship between education and flow. In the aim of capturing the diversity of its educational applications, the goal of this literature review is to explore the status of flow theory as it pertains to the peak engagement of students, and its applicability to the multitude of educational spheres, seeking answers to the question: how has flow theory been applied to the academic experiences of students?

Theoretical Roots of Flow

**Motivational and engagement theories.** Motivational and engagement theories compose the larger academic family to which flow theory belongs. Eccles & Wigfield (2002) provide a map of motivational and engagement theories comprised of four major categories and their associated subsidiaries: theories focused on expectancy (self-efficacy and control theories); theories focused on the reasons for engagement (intrinsic motivation, interest, and goal theories); theories integrating expectancy and value constructs (attribution, modern expectancy-value, and self-worth theories); and theories integrating motivation and cognition (social cognitive theories of self-regulation and theories linking motivation and cognition). Flow theory is derived from the second major theoretical offshoot and pinpoints intrinsic motivation as the precursor for peak engagement (Eccles & Wigfield, 2002).

Engagement, which is often considered a meta paradigm, has substantial potential as a multidimensional construct that both bonds and distinguishes engagement in three ways: behavioral engagement, which includes the idea of participation; emotional engagement, which incorporates positive and negative responses to teachers, classmates, academics, and school; and cognitive engagement, which incorporates the idea of investment; it incorporates thoughtfulness
and willingness to exert the effort necessary to comprehend complex ideas and master difficult skills (Fredricks, Blumenfeld, & Paris, 2004).

Engagement is further divided into partitions of value placed, by the individual, upon a given task (Eccles et al. 1983). Eccles et al. (1983) designate four constituents of such value: interest, or the enjoyment of the activity; attainment value, or the importance of doing well on the task for corroborating aspects of one’s self-schema; utility value/importance, or the importance of the task for future goals; and cost, or the negative aspects of engaging in the task. Emotional engagement refers to students’ affective responses in the classroom, including interest, boredom, happiness, sadness, and anxiety (Connell & Wellborn, 1991; Fredricks et al., 2004; Skinner & Belmont, 1993). Prevailing definitions of emotional engagement fail to make qualitative distinctions between positive emotions and high involvement or investment (Fredricks et al., 2004). A notable exception to this generalization is flow theory, which provides a conceptualization that denotes high emotional involvement or investment (Fredricks et al., 2004).

Flow theory is indebted to the breadth of research in human motivation and engagement. As a unique construct that couples the engagement concepts of intrinsic, emotional, and value investments, flow represents a subset of these theoretical families and is grounded in a richly academic foundation. In the realm of psychology, flow theory is again tied to a larger academic sphere, the realm of positive psychology.

**Positive psychology.** Flow theory is also a subdivision of positive psychology, or the scientific study of optimal human functioning (Linley, Harrington, & Wood, 2006). Unlike clinical psychology, which focuses primarily on the causes of and solutions for psychological conditions, positive psychology illuminates “the conditions and processes that contribute to the
flourishing or optimal functioning of people, groups, and institutions” (Gable & Haidt, 2005, p. 103). Positive psychology is an attempt to assume a perspective of reverence regarding human potentials, purposes, and aptitudes (Sheldon & King, 2001). Among positive psychologists’ aspirations is “the hope that researchers may discover principles that unite different conceptions of the positive and good”, allowing “movement toward a taxonomic understanding of positive psychological phenomena that would provide a meta-theoretical foundation for optimal human existence” (Linley, et al., 2006, p. 14). This psychological methodology has spawned numerous subsidiaries and authorities. One such authority is Mihalyi Csikszentmihalyi, the original theorizer responsible for the identification of flow.

After observing art students in 1960’s Chicago, psychologist Csikszentmihalyi initially defined psychological flow, or optimal engagement, as a state in which individuals become entirely immersed in an activity or process (1990). Csikszentmihalyi’s publication of Flow: The psychology of optimal experience (1990), The evolving self: A psychology for the third millennium (1993) and Finding flow: The psychology of engagement with everyday life (1997) popularized the concept through largely qualitative, interview-based accounts of the optimal experiences of artists, scientists, and other professionals. Csikszentmihalyi’s work was stirred by Abraham Maslow’s (1962, 1971) research regarding peak experiences and their effects on consciousness, happiness, inspiration, and creativity. Bernard (2009) characterizes the distinction between theorists and theories:

Where Maslow sees peak experiences as the means to self-actualization and individual transcendence, Csikszentmihalyi extends these concepts to a broader arena by asserting their social and evolutionary implications. For Csikszentmihalyi, flow experiences lead to greater individual happiness and a sense of individual transcendence, which in turn can increase the
complexity of an individual’s consciousness. Bringing these ideas to a social scale, when groups of individuals increase the complexity of their consciousness, this contributes to the progress of the evolution of the human species. (p. 8)

**Flow Research**

Csikszentmihalyi (1990) describes his version of optimal experience, or flow, not as a clinical state, but as a primal, essential state of being:

It is what the sailor holding a tight course feels when the wind whips through her hair, when the boat lunges through the waves like a colt- sails, hull, wind, and sea humming a harmony that vibrates in the sailor’s veins. It is what the painter feels when the colors on the canvas begin to set up a magnetic tension with each other, and a new thing, a living form, takes shape in front of the astonished creator. Or it is the feeling a father has when his child for the first time responds to his smile…For a child, it could be placing with trembling fingers the last block on a tower she has built, higher than any she has built so far; for a swimmer, it could be trying to beat his own record; for a violinist, mastering an intricate musical passage. For each person there are thousands of opportunities, challenges to expand ourselves. (p. 3)

The phenomenology of flow has been researched comprehensively and widely (Hektner & Csikszentmihalyi, 1996), a breadth that Csikszentmihalyi (1990) acknowledges:

The concept of flow has been found useful by psychologists who study happiness, life satisfaction, and intrinsic motivation; by sociologists who see in it the opposite of anomie and alienation; by anthropologists who are interested in the phenomena of collective effervescence and rituals. Some have extended the implication of flow to attempts to understand the evolution of mankind, others to illuminate religious experience. (p. 5)
A great number of recent flow studies have centered on virtual (computer-based) engagement (Chen, 2006; Cooper, 2009; Inal & Cagiltay, 2007; Kim & Davis, 2009; Li-Chun & Ming-Puu, 2010; Li-Fen, 2006; Lu, Zhou & Wang, 2009; Shin, 2006; van Schaik, Martin & Vallance, 2012; Winberg & Hedman, 2008; Yu-Chih, Backman & Backman, 2010), though countless contexts for flow theory research exist, ranging from microbiological (Beylefeld & Struwig, 2007) to national defense (Quinn, 2005) applications. Several contemporary doctoral dissertations have examined the educational applications of flow (Cooper, 2009; Tatar, 2009).

Also of note is the bridge between flow in school and in work. Providing the educational contexts for students to discover their own forms of flow is paramount when considering that, “contrary to what one might expect, the great majority of flow-like experiences in the lives of average adults seem to come from work, not from leisure. This is true not only for people working in higher-level jobs, but also for blue-collar assembly-line workers” (Csikszentmihalyi & LeFevre, 1989, p. 820). Regardless of the nature of the task itself, individuals seek flow “because the flow state is intrinsically rewarding, individuals seek to replicate flow experiences” (Shernoff, et al., 2003, p. 161).

Boyns & Appelrouth (2011) have examined the social context of flow, while Eisenberger, Jones, Stinglhamber, Shanok & Randall (2005) found that among goal-oriented employees, the experience of high skill and challenge correlated to a positive disposition, task attentiveness, and managerial spontaneity. Gute, Gute, Nakamura & Csikszentmihalyi (2008) posited that complex, dynamic family environments provide ideal conditions for cultivating creativity and flow, claiming that such atmospheres ultimately produce mature adults who can make significant societal and cultural contributions. They characterize familial features that foster creativity and flow, promoting family structures that establish “support for individual interests,” the acceptance
of “experimentation and failure,” “a cohesive psychological and social infrastructure” that resists “the urge to wield too much instrumental control over their children’s activities, which could risk the loss of warmth and connection with children’s interests and aptitudes” (Gute, Gute, Nakamura & Csikszentmihalyi, 2008, pp. 355-356).

Many of these familial attributes parallel best practices in education, wherein experimentation and support, among other features, are permanent fixtures. The contextual flexibility of flow reflects its widespread theoretical acceptance and its potential for further exploration in all fields, including education.

The Experience Sampling Method

For the past several decades, the study of flow has been pursued chiefly through the experience sampling method, or ESM (Hektner, Schmidt, & Csikszentmihalyi, 2007; Shernoff & Csikszentmihalyi, 2008). Via the ESM, respondents carry a programmable wristwatch (or similar device) that alerts them at random moments throughout a given day (Shernoff & Csikszentmihalyi, 2008). With each signal, respondents complete questionnaires that contain open-ended, scaled questions regarding their activities, thoughts, and the cognitive, motivational, and affective facets of their experiences (Shernoff & Csikszentmihalyi, 2008). These responses are typically distilled into three variables: concentration, interest, and enjoyment (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003).

The ESM is not completely faultless. Schweinle, Turner & Meyer (2008) aimed to determine, via the ESM, whether elementary classroom experiences vary for individuals rather than remaining unwavering across different lessons, concluding that classroom experiences are “situation-specific rather than person-specific” (p. 137). These results contrast with research regarding adults and teenagers, which demonstrated affective stability (Csikszentmihalyi &
Larson, 1987). This inconsistency may imply the need for other quantitative and qualitative methods to complement the ESM in a broader range of contexts, a need that Nakamura and Csikszentmihalyi (2002) acknowledge:

A larger issue is...interrupting deep flow, in which the dynamics of experience are accessible only through retrospection...interrupting deep flow, as the ESM would do, destroys the phenomenon- but we should recognize the attendant limitations on what we can learn and generalize from ESM data. We may want to explore existing and conceivable alternatives. (p. 101)

The ESM, and variations thereof, appears to dominate the flow research continuum, a reflection of its validity and usefulness. However, this measurement of flow is paradoxical: this quantitative method has saturated the majority of flow research, and while this instrument has proven dependable and transferable, it pervades the body of empirical flow exploration, demanding a greater range of both qualitative and quantitative explorations (Ainley, Enger & Kennedy, 2007).

**Challenge and Skill: A Delicate Balance**

Essential to an understanding of flow is an appreciation of the associations between skill and challenge (see Figure 1). This skill-challenge facet of flow theory echoes the zone of proximal development posited by Vygotsky and offers a practical educational application for flow psychology (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003; Rogoff, 1990). Educators consistently seek to develop students’ skills while trafficking in the realm of understanding that is just beyond their students’ knowledge base.
The myriad relationships between an individual’s skill and a given challenge are prime determinants of flow experiences (Hektner & Csikszentmihalyi, 1996) and create a delicate dynamic that is difficult to maintain (Schweinle, Turner, & Meyer, 2008). Even teachers and students unfamiliar with flow theory are likely to traffic within this perpetual circuitry of ability and rigor, a “symbiotic” relationship that is the foundation for flow, a phenomenon occurring “when one’s skills are neither overmatched nor underutilized to meet a given challenge” (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003, p. 160). According to Shernoff & Csikszentmihalyi (2008), optimally engaging activities are “neither trivially simple nor impossibly hard; rather, the appropriate match between challenge and skill” leads to “higher quality learning experiences in terms of perceived engagement, intrinsic motivation, mood, and self-esteem” (p. 132).
The equilibrium that flow requires is not constant; for example, an individual’s skills inevitably increase with practice and thereby disrupt the stability of the skill-challenge balance (Hektner & Csikszentmihalyi, 1996). The possession of a given skill is no guarantee of its use or development (Tishman, Perkins & Jay, 1995); maintaining the gratification of flow requires perpetual engagement in new tasks to match their accumulative skills (Hektner & Csikszentmihalyi, 1996). A similar dynamic exists in cognitive psychology, where the correlation between cognitive sensitivity, confidence and uncertainty within tasks of varying difficulty has been examined (Song et al., 2007).

The high skill and challenge duality is not limited to academic tasks but has also been proven to increase employment performance in adults (Eisenberger, Jones, Stinglhamber, Shanok, & Randall, 2005). Schweinle, Turner, and Meyer (2008) write that an essential responsibility of educational settings is to match the level of student skill with academic challenge.

As a whole, the complete engagement and intrinsic motivation inherent to the flow state represent features of experience that align with the aims of education. The skill-challenge balance is unlikely to dissipate from the realm of learning. The theory linking flow to the development of understanding and skills has been buttressed by widespread empirical confirmation (Hektner & Csikszentmihalyi, 1996). Whether employing commonplace lectures or developing sophisticated software, those involved in education are constantly seeking to pinpoint the pocket of cognitive fertility that lies within the learner. The constancy of this perpetual effort is what makes flow theory so applicable to education, a relationship reflected in the scope of research surrounding it.
Flow in Education

In *Finding flow: The psychology of engagement with everyday life* (1997), Csikszentmihalyi notes that flow experience act as magnets for learning and have vital implications for teaching students in our schools:

The general attitude toward education – especially in math and science- is that learning is a hard and unpleasant task. Hard it may be, but why should it be unpleasant? Since we know that creative individuals, peak performers, and talented young people all enjoy what they are doing, and it is enjoyment that makes them want to learn more, it should be possible to translate this knowledge into the ways we deal with students. (Csikszentmihalyi, 1993, p. 194)

There is no shortage of astute research exploring the applicability of flow theory to an educational context. Shernoff & Csikszentmihalyi (2008) assert that the theory of flow is “inherently related to learning” (p. 132). Rogatko (2007) pinpoints a triad of research trends in educational flow: studies of correlations between flow characteristics and activities, studies of potential factors influencing flow, and studies of flow’s effect on performance or personal affect.

Despite the transparent correlations between flow and education, Csikszentmihalyi (1990) admit, “many people give up on learning after they leave school because thirteen or twenty years of extrinsically motivated education is still a source of unpleasant memories” (p. 141). These same individuals had their attention “manipulated long enough from the outside by textbooks and teachers” and view “graduation as the first day of freedom” (Csikszentmihalyi, 1990, p. 141). This need to supply learners with optimal experiences (flow) and intrinsically rewarding involvements continues to spur a
wealth of research intended to address the aforementioned disconnect between flow’s outstanding potential and palpable underutilization.

Because the interests of educators lie in the success of their students, most educational flow research is appropriately devoted to the study of student flow. A notable exception to this norm is the work of Basom & Frase (2004), who studied the flow experiences of teachers. The researchers found that specific factors—self-efficacy, self-efficacy of others, school efficacy, school effectiveness, teacher evaluations, professional development, and, perhaps most notably, principal classroom visits—contributed to teacher flow. Though the experiences of teachers are likely disparate from those of students, their isolation of specific, accessible variables conducive to flow serves as a model for highly applicable educational flow research. Interestingly, Csikszentmihalyi (1997) claimed that it is easier for students to be in flow when the teacher is in flow (p. 33). Basom & Frase (2004) have examined this relationship and called upon educational leaders to facilitate learning environments that are conducive to both teacher and student flow experiences.

The bulk of educational flow studies are conducted at the secondary level and are intended to address the need to understand and optimize student engagement. Shernoff & Csikszentmihalyi (2008) find that student engagement is highest when the flow variables of “concentration, enjoyment, and interest are simultaneously elevated” (p. 133). Unfortunately, this elevation is rarely achieved in school, as secondary students are habitually less absorbed while in classrooms than anywhere else (Shernoff & Csikszentmihalyi, 2008).
Despite the bleak state of student engagement, secondary students often possess the autonomy to select core and elective classes, thereby allowing for the potential for the skill-challenge symbiosis critical for flow (Schweinle, Turner, & Meyer, 2008). Research found that students were significantly more engaged in their non-academic courses than in their academic courses, a phenomenon that may be partially explained by the allotment of instructional methods in particular subject areas: “students spent more time in high engagement activities during their non-academic classes, and more time in low-engagement activities during their academic ones” (Shernoff & Csikszentmihalyi, 2008, p. 135). This distinction substantiates the inclusion of the arts, among other elective coursework, as viable realms through which student flow experiences may be explored.

Flow theory correlates to existing theories of education. The dynamic, ascending nature of the relationship between challenges and skills over the course of progressive flow experiences is likely to foster constructivist and self-directed learning (Hektner & Csikszentmihalyi, 1996; Csikszentmihalyi, Rathunde, & Whalen, 1993). Csikszentmihalyi, Rathunde, & Whalen (1993) “concluded that the development of talent in adolescence depends heavily on whether the use of the talent produces flow” (Hektner & Csikszentmihalyi, 1996).

Phenomenological instructional contexts have profound effects on student engagement (Shernoff et al. 2003). More specifically, Csikszentmihalyi, Rathunde & Whalen (1993) concluded that the development of aptitude in adolescents depends significantly on whether the use of a given talent produces flow. This research suggests that self-directed learning will be most common among adolescents who experience flow often; in other words, if adolescents could learn to find flow in coursework more
consistently, they would most likely intensify their intrinsic motivation for learning experiences as a whole (Hektner & Csikszentmihaly, 1996).

Classroom involvement, or student-centered learning, is also innately tied to flow experiences for students. Shernoff & Csikszentmihalyi (2008) found that students in high involvement classrooms stated feeling “more intrinsically motivated, open, and relaxed than those from low involvement classrooms” and observed “differences in instructional interactions between high- and low-involvement classrooms,” determining that teachers in high-involvement classrooms cultivated intrinsic motivation and employed more malleable pedagogies to accommodate differing levels of skill (p. 137).

Shernoff & Csikszentmihalyi (2008) found that “enjoyment and interest during high school” courses were “the strongest predictors of choosing” a college major, taking precedence over grade performance. These findings imply that optimal engagement “with school learning may operate in subtle ways that have important, long-term effects on students’ intellectual and professional development” (Shernoff & Csikszentmihalyi, 2008, p. 136). The phenomenology of high-involvement classrooms that promote attention, interest, and enjoyment represents a growing awareness of flow theory in the educational context (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003; Newmann, Wehlage, & Lamborn, 1992).

Students report disengagement while enduring traditional lectures, a phenomenon that may stem from a lack of challenge or meaning (Shernoff et al., 2003). Conversely, individual and group work appears to combine both the academic intensity and positive emotional state essential to flow (Shernoff et al., 2003). Interestingly, student reports reveal that many classroom activities and subject areas are pigeonholed into inducing
academic intensity or positive emotional response, a division that essentially eliminates the symbiotic criteria vital for flow (Shernoff et al., 2003).

Shernoff & Csikszentmihalyi (2008) write that “there is not a great deal of flow or engagement in traditional U.S. public schools as a whole, but there are exceptions to this trend” (p. 138). One such exception was studied in 1991, when Whalen & Csikszentmihalyi published a detailed report on the Key School of Indianapolis, an academic institution that houses a Flow Activities Room (FAR). In observing instruction within this context, the researchers noted that students were empowered to select their own activities and construct their own learning experiences (Whalen & Csikszentmihalyi, 1991). Teachers in the FAR offered minimal but focused direction in the aim of prompting immediate engagement (Whalen & Csikszentmihalyi, 1991). Interestingly, Whalen & Csikszentmihalyi (1991) found evidence of advanced student volition: children were selecting their FAR activities well before the time of selection, “ordering circumstances to fit their interests and enhance the experience,” reflecting their understanding that the key to flow experience “lies within oneself, in the capacity to shape a fit between one’s interests and the available means to fulfill them” (p. 27). Though the Key School deviates from traditional school design, it serves as an exemplar of student autonomy and consequent flow-induction that is relatively analogous to the mainstream classroom.

As a doctoral student, Johnson (2004) collected quantitative data from students attending a nontraditional, urban, public Nova High School in Seattle, Washington, and compared these data to analogous school students in conventional public schools. The Nova school is democratically governed by students and staff, promotes egalitarian relationships and supports students’ autonomy in their decision to select and attend an unusual diversity of courses (Shernoff & Csikszentmihalyi, 2008). At Nova, students spent a “higher percentage of time in
student-centered activities, and reported greater engagement in school and during lecture and independent study specifically” (Shernoff & Csikszentmihalyi, 2008, p. 139).

Montessori philosophy and schooling is perhaps the most widespread and recognizable environment tied to flow theory. Maria Montessori emphasized intrinsic motivation and observed students’ spontaneous concentration, which was similar to the concept of flow and engagement in exploration, play and learning activities (Shernoff & Csikszentmihalyi, 2008, p. 140). Montessori students reported higher amalgamations of elevated intrinsic motivation and importance, core qualities of engagement, optimal experience and flow (Shernoff & Csikszentmihalyi, 2008; Rathunde & Csikszentmihalyi, 2005).

Mahoney, Larson, & Eccles (2005) found that beyond the traditional classroom, extracurricular activities that include academic, athletic, and art enrichment have been associated with intensified levels of “engagement, challenge, enjoyment, intrinsic motivation, and initiative among adolescents,” while Shernoff and Vandell (2007) found that students were best engaged in after-school programs that involved some form of athletic and/or arts enrichment. After school programs are “uniquely qualified as optimal learning environments by providing a diversity of enriching activities in which students interacted with peers while supervised by adults” (Shernoff & Csikszentmihalyi, 2008, p. 140).

Of course, schools that flow are not limited to the borders of America. Denmark, Finland, and Japan have hosted flow researchers over the past several decades (Shernoff & Csikszentmihalyi, 2008), and evidence abounds for the suitability of flow-inducing environments, particularly for adolescents. Hektner & Csikszentmihalyi (1996) claim that adolescents who develop an inclination for flow spend increasing amounts of time engaged in flow-inducing activities, thereby increasing the likelihood of sustained study or vocation in the
given subject area. In general, adolescents who develop a propensity for flow are more academically motivated and identify educational activities as relevant to their present and future endeavors (Hektner & Csikszentmihalyi, 1996).

Overall, research suggests that instructional techniques that are academically intense and produce positive emotional responses are most effective in producing flow and engaging students (Shernoff et al. 2003). The consensus of existing research points to both the strength of flow’s relationship to education and the need for curricular and pedagogical reform to focus on optimal and intrinsically rewarding experiences for students.

Conclusion

Hektner & Csikszentmihalyi (1996) declare, “helping teenagers to find the right balance of challenges and skills in their daily activities is necessary because the growth of optimal experiences in adolescence is by no means inevitable” (p. 19). It is the responsibility of educators to lead this intervention, to understand and promote flow in students. This will require a shift in lexicon and theory, though the opportunity to transfer the strengths of flow theory to the realities of the modern classroom is suggested by a number of credible studies. Despite the impressive breadth and depth of educational flow research, opportunities for continued study are easily identifiable.

Anyone participating in any form of flow research is rightfully indebted to Csikszentmihalyi as the forefather of the theory; however, there are limitations when considering the reality that much of educational flow research is limited to Csikszentmihalyi and his circle of co-researchers. Flow research may benefit from tertiary studies that deviate from the exclusivity of the ESM model and the dense concentration of forefathers.
There is a void in educational flow research relative to general, practical learning tasks (Mustafa, Elias, Roslan, & Noah, 2011). Despite this void,

Using the flow model, researchers have discovered that creating engaged learners and optimal learning environments requires attention to a variety of contextual, instructional, developmental, and interpersonal factors beyond the preoccupation with educational “outcomes” narrowly defined. Nevertheless, a number of examples are beginning to demonstrate that schools need only the vision, initiative, and commitment to create environments where learning is enjoyable as well as rigorous for flow in schools to become a reality. (Shernoff & Csikszentmihalyi, 2008, p. 143).

If the applicability of flow theory is to penetrate the contemporary pedagogies, a distillation of flow-conducive classroom practices must occur. This demystification must include criteria that go beyond the ESM variables and consider all factors from the student perspective. Though the specific nature and lexis of flow theory remains relatively distant, educators already value and utilize the parallels between the inherent characteristics of flow and those of more common, modern pedagogies (student-centered learning, group work, etc.). Thus, the more particular assimilation of flow and optimal engagement into the vocabularies and practices of modern educators require less overhaul and more amplification.

Bernard (2009) claims, “what our students need is teachers who can create the conditions that make transcendent experiences possible in their classrooms,” teachers who attend to their “own experiences of transcendence with the subject matter” that they teach, making “all educators more aware of and open to” their “own mindfulness, as well
as facilitating opportunities for mindfulness among” their “students in the classroom” (p. 17). This notion of regeneration holds tremendous potential in establishing optimal experiences that produce lifelong learners who live rich, fulfilling lives. Helping students find flow is not an isolated scholastic endeavor but a life-altering transformation that can shape lives while preserving the individuality essential for maturation and growth.

Csikszentmihalyi (1999) presents the core value of flow as a bridge to happiness:

> The prerequisite for happiness is the ability to get fully involved in life. If the material conditions are abundant, so much the better, but lack of wealth or health need not prevent one from finding flow in whatever circumstances one finds at hand...it would be a mistake to think that each person should be left to find enjoyment wherever he or she can find it or to give up efforts for improving collective conditions. There is so much that could be done to introduce more flow in schools, in family life, in the planning of communities, in jobs, in the way we commute to work and eat our meals -- in short, in almost every aspect of life. This is especially important with respect to young people...Creating conditions that make flow experiences possible is one aspect of that “pursuit of happiness” for which the social and political community should be responsible. (p. 1)

In the interest of students’ engagement, success, and even their happiness, educators must build upon the existing flow research and enlarge its spectrum and feasibility. As represented in prevailing literature, the secondary arts provide a generative backdrop for further qualitative investigations regarding student perspectives of their own flow experiences. Currently, little exploration exists regarding how students make sense of their own flow experiences. These close, careful investigations may issue useful cues for educators who aim to propel the
engagement of their students. The following chapter provides an overview of one such investigation.
Chapter 3: Research Design

The following chapter provides an overview of this study’s research design, which includes sections regarding methodology, the interpretative phenomenological analysis research tradition, participants, recruitment and access, data collection and storage protocols, data analysis procedures, trustworthiness, and the protection of human subjects.

**Methodology**

Qualitative research was selected as an overarching research approach for this study. The core motivation for this study is to explore the optimal experiences of arts students through the empowerment of their voices, an impetus that aligns with Creswell’s (2012) contextualization of qualitative research design. Additionally, flow experiences are subjective, experiential, and diverse, necessitating a design that captures the participants’ individual experiences. Flow is a phenomenon, and the adapted nature and consequent subjectivity of flow experiences align effectively with the nature of qualitative research. This phenomenological quality leads, naturally, to the consideration of phenomenology and its offshoots as suitable research mediums. This study employs the qualitative and phenomenological approach of interpretative phenomenological analysis, which corresponds aptly with the research questions.

**Research Tradition**

Interpretative phenomenological analysis, as a qualitative and phenomenological research derivative, involves participants orienting their focus upon a particular lived experience, from which subsequent examination and analysis of that experience can take place by the individual, all while recognizing that such a continuum inevitably becomes
an hermeneutic or interpretative endeavor for both the participant and the researcher (Creswell, 2009; Fossey, Harvey, McDermott, and Davidson, 2002; Fraenkel & Wallen, 2009; Maxwell, 2005; Seidman, 2009; Smith et al. 2009; Smith & Osborn, 2003; van Manen, 1990). According to its key theorists, interpretative phenomenological analysis is “an approach to qualitative, experiential and psychological research which has been informed by concepts and debates from three key areas of the philosophy of knowledge: phenomenology, hermeneutics and ideography” (Smith et al. 2009, p.11).

Originally developed as a methodology for health psychology, interpretative phenomenological analysis traces its theoretical origins to phenomenology and hermeneutics, and key ideas from Husserl, who first argued that human experience should be examined in the way that it occurs; Heidegger, who introduced a worldly, contextual perspective; Merleau-Ponty, who posited that lived experiences can never be entirely captured or comprehended (but must not be ignored); and Sartre, who introduced action-oriented meaning-making to the interpretative phenomenological analysis field (Smith et al. 2009). The meaning identified by phenomenology is interpreted through hermeneutics, which examines the process of interpretation and emphasizes, via the hermeneutic circle, the circularity of relationships between the parts and the whole (Smith, et al. 2009). Via interpretative phenomenological analysis, researchers seek to “know in detail what the experience for an individual is like, and what sense this particular individual is making of what is happening to them” (Smith, et al. 2009, p. 3). This study is based upon these contributions from interpretative phenomenological analysis’ key contemporary theorists, who have pioneered its methodological
implementation. The interpretative phenomenological analysis tradition provides a platform upon which the researcher’s function is situated.

**Participants**

The participants for this qualitative study were highly engaged arts students from a suburban northeastern high school. Ideally, phenomenological study participants should fulfill the experiential criterion being explored (Creswell, 2012). As suggested by Smith & Osborn (2003), the ideal sample size for fledgling interpretative phenomenological analysis researchers is low (p. 57), a sample size that accommodates the thorough engagement between researcher and participants while promoting the careful examination (similarities, differences, convergences, divergences) demanded of interpretative phenomenological analysis studies. Prevailing interpretative phenomenological analysis discourse substantiates this relatively small sample size selection (Seidman, 2006; Smith, Flowers, & Larkin, 2009; Smith & Osborn, 2003). Interpretative phenomenological analysis’s core stimulus is to obtain detailed accounts of individual experiences, favoring the quality and intricacy of these human experiences over quantity and recommending samples of between three and six participants (Maxwell, 2005; Smith et al. 2009).

After IRB and superintendent (see Appendices A and F) approval, the researcher recruited five participants based on specific criteria. The only foreseeable commonalities between the students included their enrollment in the same high school, their enrollment in an arts-based course (visual art, music, English, or drama), their decision to bypass the opt-out alternative on the survey, and their willingness to participate. No other criterion (gender, race, socioeconomic status, etc.) was considered, thereby providing a criterion sample appropriate for this interpretative phenomenological analysis study (Smith &
Osborn, 2003) and increasing the likelihood of obtaining sufficient data relevant to the research questions.

These students were treated with ethical sensitivity and provided with two incentives for participation: service hours for interviews (the site school requires fifty for graduation) and college essay development, editing and proofreading sessions with the researcher. Prior to participant recruitment, the researcher secured two essential documents. First, the researcher proffered a signed consent form, containing a detailed description of the proposed study, from the current district superintendent (see Appendix A). The researcher then confirmed that participants comprehended the nature of the research, were aware of the conceivable risks it posed, and were not forced to participate (Rubin & Rubin, 2012), providing written notification in the form of a letter (see Appendix C) that described nature of the research, the researcher’s role as a student researcher and his methods for securing data. This letter also highlighted the participant selection process, detailed the benefits of involvement, and specified the expected time parameters of the study (Rubin & Rubin, 2012). This document, signed and returned by both participants and their parents/guardians, also ensured confidentiality and anonymity of the site and the participants, confidentiality that was maintained throughout the data collection process. The researcher only included participants who assented to the study and whose parents/guardians provided written consent for their child’s participation in the study. Participants were able to withdraw from the study at any time. Whether a student participated or not had no bearing on that student’s academic status. Before the study began, participants’ parents or guardians received written study details with
directions (Appendix C) regarding withdrawal procedures and permission for their child’s participation.

**Recruitment and Access**

The researcher selected student participants via a criteria-based recruitment system, distributing questionnaires with opt-out sections (see Appendix B) to all students enrolled in the arts (including Visual Art, Music, English, Drama). All students who opted out of this research stage were eliminated from the participant recruitment pool. The Likert-style questionnaire (see Appendix B) was based carefully on the aforementioned theoretical frameworks, which, in turn, were drawn from the qualitative indicators of flow: a combination of action and awareness, a narrowed sense of focus, a diminished self-consciousness (merging of self and environment), an increase of control, a clarity in perceived expectations, and a feeling of intrinsic satisfaction (Csikszentmihalyi, 1975, pp. 38–48; Shernoff & Csikszentmihalyi, 2008). Based on the supposition that these indicators are not fully or consistently observable, the questionnaire took the form of a self-assessment completed by pool students. Based on a) the affirmation of self-reported flow experiences and b) the level of interest and willingness of each participant, the researcher requested participation from the 5 students who best represented the criteria. The divulgence of these qualitative indicators aligned recruitment with the theoretical frameworks while providing student participants with astute yet comprehensible criteria upon which selections were based. These students and their parents received written notification (see Appendix C) requesting their participation.
Data Collection

The data collection technique preferred for qualitative phenomenological research is the in-depth interview (Creswell, 2009; Fraenkel & Wallen, 2009; Seidman, 2006; Smith et al., 2009), as it allows researchers conducting phenomenological studies to acquire unique data sets centered on the participant experience (Fraenkel & Wallen, 2009). Kvale (2003) notes that key modes of qualitative research, such as the interview, work “through human interrelationships, which are the subject matter of psychology” (p. 25). In-depth interviews are characterized by calculated lines of questions that elicit opportunities for storytelling and the free expression of ideas and reflections (Smith et al., 2009). For this study, two 45-60 minute in-depth interviews were scheduled with each student over the course of a school year. This interview schedule, coupled with a semi-structured format, provided a balance of logistic predictability and inquisitive open-endedness. Classroom settings within the site were secured for the student pool meeting and self-assessment questionnaire. Interview spaces provided private, quiet environments (in the aim of confidentiality) that were also familiar and comfortable for students. Per IRB stipulation, one additional adult was present to ensure participant safety and security for each of the interview sessions.

Interviews were designed with an emphasis on open-ended and follow-up questions in order to limit researcher subjectivity and provide the opportunity for the participants to reflect upon, process, and convey their experiences (Seidman, 2006). For this study, the researcher focused on how students make sense of their own flow experiences. The first interview (see Appendix D) consisted of questions derived chiefly from the first research question, which sought to investigate how students report and interpret their own flow experiences; the second interview (see Appendix E), in turn, consisted of questions pertinent to the second research
question, which seeks participants’ perceptions regarding the contextual factors conducive to flow. The research question required data from adolescent students, which necessitated a degree of accessibility in the diction and sequencing of interview questions. This study subscribed to Smith et al.’s (2009) directives regarding data collection and interview scheduling.

**Data Storage**

As indicated in the recruitment process, confidentiality and security pervaded the data collection and storage procedures. The researcher acted as the sole proprietor of all virtual and physical files. The researcher’s personal laptop was utilized while local network computers, which could potentially compromise confidentiality, were omitted. All interviews were categorized with pseudonyms, audio recorded via QuickTime, saved, backed up as MPEGS to iTunes and saved on a password protected laptop hard drive. Duplicates were housed in a password protected external hard drive. Interviews were then transcribed by the researcher and cross-referenced against audio playback for accuracy verification. Upon completion of this study, the researcher purged all copies of these audio recordings.

**Data Analysis**

Unlike other qualitative research approaches that fit findings into existing theoretical frameworks, interpretative phenomenological analysis’ data analysis conventions are “concerned with the detailed examination of human lived experience” and aim “to conduct human lived experience examination in a way that enables the experience to be expressed in its own terms, rather than according to predefined category systems” (Smith et al. 2009, p. 33). This distinction results in data analysis committed to
“an understanding of the participant’s point of view, and a psychological focus on personal meaning-making in particular contexts” (Smith et al. 2009, p. 79).

This study adopted Smith et al.’s (2009) model of interpretative phenomenological analysis data analysis, which commenced with a diligent organization and transcription of original data. The second step involves transcript annotation, which assisted the researcher in producing a comprehensive set of data-driven notes and permitted the researcher to establish an idea of how a participant talks about and understands an issue and identify any similarities, differences, and contradictions from the participant’s discourse (Maxwell, 2005; Seidman, 2006; Smith, et al. 2009). Upon completion, the notes provided the analyst with a sharp phenomenological focus on the study topic, as well as a documented account of the participant’s meaning and understanding of the topic (Smith et al. 2009).

The third phase involved the elaboration of emerging themes from the data, wherein the focus shifted from working with the written transcript or audio-tape to working primarily from initial notes in an attempt to distill the data (Smith et al. 2009). Finally, the researcher probed the data in search of connections and emergent themes. Smith et al.’s (2009) approach is substantiated by Seidman (2006), who indicates the need to “organize excerpts from the transcripts into categories” as a means of generating thematic connections.

**Trustworthiness**

The affirmation of reliability, credibility, and trustworthiness was necessary in order to substantiate this study (Creswell, 2009). Threats and concerns regarding internal validity necessitate deliberate reciprocity. For this study, potential threats to internal
validity existed in the forms of: participant characteristics and attitudes, location, and researcher bias and familiarity. Each of these threats was addressed and counteracted via the rationalization of design features through the clarification of biases, the interview framework, prolonged engagement, triangulation, and member checking.

In this study, the researcher offered clarification of his biases in order to supply the reader with an understanding of potential positional impact, divulging prejudices, acknowledging experiences, and revealing potential assumptions (Creswell, 2012; Merriam, 1988). This clarification frames and consequently reduces implicit researcher bias. Converse concerns were also inherent to the secondary student participants. Severe threats such as mortality were exceedingly rare in the study locale, though more innocuous concerns such as maturation, or the participants’ developmental and intellectual capacities, and familiarity, or the participants’ awareness of flow or the aims of formal research, had the potential to skew data. To counteract this, interview questions were specific, clear, and guided the study toward increased validity in an organized and professional context.

The structure of the interview process (Seidman, 2006) neutralized many of the potential threats to validity, credibility, and trustworthiness. The student participant questionnaire (see Appendix B), which contained a preemptive opt-out section, provided a relative concentration of advantageous participant characteristics and attitudes. Seidman (2006) asserts that the aims of interpretative phenomenological analysis offer some level of inherent authentication in valuing the participant’s understanding of his or her experiences, thereby increasing a study’s validity. Multiple interviews (2) with participants (5) afforded the researcher prolonged engagement (Creswell, 2009) to assess
individuals’ internal consistency of conversational data while measuring these consistencies against those observed from the other participants. The temporal arrangement of these interviews, spanning the course of three months, also increased validity in reducing the likelihood of singular and aberrant data sets.

Beyond the self-validating features of interpretative phenomenological analysis and data collection measures, triangulation offered additional credence to this study. Triangulation prompts the researcher to examine multiple data sources to develop a justifiable amalgam of themes (Creswell, 2009). In this study, the initial participant selection process secured preemptive triangulation in the decision to seek students from distinct disciplines. This preliminary equilibrium aimed for an inherent breadth for eventual data. Data sources- audio recordings (10), transcriptions (10)- from the five participants supplied sufficient opportunity for triangulation while adhering to interpretative phenomenological analysis’ emphasis on the essence of individual experiences. The interview questions, though stemming from the research design, offered relative distinctions in format, order, and composition, providing two distinguishing interview protocols and amplifying inbuilt triangulation (Creswell, 2009).

The direct involvement of human participants necessitated by this qualitative study demanded member checking, the process of verifying information with the targeted group. In this study, participants had the opportunity to review identified themes for accuracy and amend errors of fact or interpretation both during and after semi-structured interviews. Member checks added to the validity of the observer's interpretation of qualitative observations (Creswell, 2009).
These facets of the study design significantly reduced the potential for threats to validity, while maintaining the experiential authenticity of interpretative phenomenological analysis. By pairing each threat and concern with a curative provision, a sense of balance and dependability generated legitimate data and results.

**Protection of Human Subjects**

High school arts students represented a worthwhile population sample for an interpretative phenomenological analysis of flow experience for several reasons. Despite the appropriateness of these contexts, deep consideration was given to the ethical treatment of every human subject involved in this research study. Student participants present notable ethical and logistical concerns that must be addressed prior to study, and the researcher was obligated to eliminate participant harm and uphold all agreements with participants (Rubin & Rubin, 2012).

The district superintendent cleared the study (Appendix A), and participants and parents were supplied with informed consent prior to participation (Appendix C). The construction, schedule, and anticipated product of the study was clearly divulged, in written form, and agreed to by all participants and their parents or guardians. The researcher confirmed that participants comprehended the nature of the research, were aware of the conceivable risks it posed, and were not forced to participate (Rubin & Rubin, 2012). This letter also made clear the option for participants to refuse or discontinue their involvement in the study, for any reason and at any time, with no consequence. Participants received written notification in the form of a letter that concisely and appropriately described the nature of the research, the researcher’s role as a student researcher and his methods for securing data (Appendix C). This letter also
highlighted the participant selection process, detailed the benefits of involvement, and
specified the expected time parameters of the study (Rubin & Rubin, 2012). This
document also ensured confidentiality and anonymity of the site and the participants,
confidentiality that was maintained throughout the data collection process via
environmental privacy, password-protected document storage and student pseudonyms.
After obtaining IRB confirmation (Appendix F) and committing signatures, four of the
researcher’s adult colleagues volunteered to act as latent observers to further secure the
participants’ safety and well-being. Each interview time and space included one of these
volunteers.

The innocuous and constructive nature of the proposed study increased the
likelihood of validation and contribution; however, initial or delayed declinations
of participation remained a viable option for all participants for the study’s
duration. Participant benefits included incentives for participation: service hours
for participation and college essay development sessions (editing and
proofreading conferences with the researcher). Students may have benefited from
the opportunity to reflect upon their own optimal experiences and from the
understanding of the inherent value that this study places upon their potentially
formative flow experiences.
Chapter 4: Findings

Interviews produced findings that revealed participants’ views regarding their flow experiences, providing answers to the research questions: How do secondary arts students describe and make sense of their flow experiences and what can educators learn from the school-based factors that influence arts students’ flow experiences?

A criterion sample of highly engrossed arts students from a suburban northeastern high school served as participants for this study. The researcher selected student participants based on predetermined criteria, distributing questionnaires with opt-out sections (see Appendix B) to all students registered arts courses (including Visual Art, Music, English, Drama) via a Likert-style questionnaire (see Appendix B) founded on the aforementioned theoretical frameworks, which, represented the qualitative indicators of flow: a combination of action and awareness, a narrowed sense of focus, a diminished self-consciousness (merging of self and environment), an increase of control, a clarity in perceived expectations, and a feeling of intrinsic satisfaction (Csikszentmihalyi, 1975, pp. 38–48; Shernoff & Csikszentmihalyi, 2008). All students who opted-out of this research stage were eliminated from the participant enlistment population. Based on a) the affirmation of self-reported flow experiences and b) the level of interest and willingness of each participant, the researcher requested participation from the five students who best represented the criteria.

Fortuitously, these five students (and their parents/guardians) agreed to participation. These students and their parents received written notification (see Appendix C) requesting their participation. All consent forms were returned and the researcher scheduled and conducted the interviews over the six weeks that followed.
The five student participants—Bessie, a sophomore enrolled in a creative writing course; Henry, a sophomore band member and music student; Ruben and Rosemary, juniors enrolled in visual art; and Vivian, a senior member of the chorus—shared their perspectives regarding their arts-based flow experiences in the high school environment. The researcher conducted two semi-structured interviews with each participant during the spring of 2014. Their responses to these interview questions, though unique and subject-specific, generated common themes upon which findings are grounded.

Though emergent themes are inherent representations of commonalities among participant perspectives, each contributor offered a unique perception his or her own relationship with flow. The following participant profiles indicate the diverse backgrounds and perspectives of these arts students, whose individual involvements and histories converged in their perception of peak engagement in arts-based experiences.

**Participant Profiles**

**Bessie.** Bessie was a sophomore student enrolled in a semester-long creative writing course, a class designed to facilitate a variety of writing experiences ranging from the development of free verse poems to the creation of epistolary narratives. Bessie noted the elective designation of this course, and contextualized it as an environment within which motivated students were able to press the breadth and depth of their writing. In this course, students were encouraged to develop writing portfolios that showcased an array of approaches, literary traditions, and areas of focus. Her instructor alternated between prescribed expectations and student-designed endeavors. This backdrop suited Bessie quite well, as she identified English and creative writing as her favorite subjects and indicated a desire to publish her own
writing in the future. It was clear that Bessie had found an outlet for her imagination in an academic context that challenged and motivated her.

In regard to flow, she placed particular emphasis on the teacher as a driving force in determining his or her students’ ability to fully engage in the material. She viewed her teacher as an architect of sorts, and individual whose affect, open-mindedness, and responsiveness were foundational elements of her and her classmates’ overall course experiences. Bessie also noted that her own disposition, in her words, whether she “liked” given classes, was another prime determinant of her engagement. Her affinity appeared a byproduct of both her initial inclination to take the class and her eventual satisfaction with instructional methods, assignment types, and the allowance of freedoms.

Bessie’s smile-laden characterizations of her most “prevalent” flow experiences, which were limited to individual and prolonged writing tasks, contained a number of references to temporal phenomena. She described theses states of immersion with a sense of wonder and appeared to relish the opportunity to do so. The crux of Bessie’s perception of flow was the allocation of time for self-directed writing. Instead of perceiving the teacher and classroom as active facilitators of flow, she viewed the teacher and classroom as entities that could either disrupt or expedite prolonged passages of time during which she is able to immerse herself in a world of storytelling. For her, writing was the portal through which she achieved flow, and the academic context, when designed with an appropriate balance of directives and freedoms, was a feature that could facilitate her seemingly natural relationship with optimal engagement. By the end of the second interview, Bessie emerged as a willing and enthusiastic participant who viewed flow as an independent and focused phenomena that thrives in a “free and open” environment of like-minded learners.
Henry. At the time of the interviews, Henry was a sophomore music student and band member who enjoyed band, music, and art courses and their potential to allow for self-expression. He described his level of engagement in the arts as “pretty high” and indicated that he had “a lot of trouble staying engaged” in other subjects. He acknowledged struggling in math and noted that, if it was not a required course, he would elect to pursue an exclusively arts-centered education, and, even if he were not enrolled in school, he “would still explore those (arts) subjects.” In fact, he had difficulty imagining how flow experiences might be achieved in non-arts classes, a perspective that may be reflective of her belief that flow is generated via individual motivation. This focus on individual-to-discipline relationships surfaced as the hallmark of Henry’s perception of flow.

Henry also recognized the positive influence that his flow experiences have had on him: “It’s a good thing to have happen because you’re focused, and when I’m focused I perform better.” Though Henry reported the same sensations during painting in art, he claimed that most of his flow experiences occurred in prolonged passages of band rehearsal and performance, during which he played the French horn. Henry viewed flow experiences as “good” and “important no matter what you’re doing.”

Henry noted an inability to recognize flow experiences while immersed in them, and instead relied on reflection to distinguish their worth in hindsight. He perceived flow as a force existing in the intersections between individuals and congruent disciplines, and articulated his ideas through spare, calculated diction interspersed by reflective pauses. Henry was a pensive, forthright, albeit succinct participant who viewed the dynamic between subject (discipline) and flow as paramount in terms of his own “motivation” and “understanding of subjects.”
Ruben. In the spring of 2014, Ruben was a junior enrolled in a visual art course (Art 3), a course with two prerequisites (Art 1 and Art 2). He was an academic standout with a preference for arts-based coursework, which he completed with relish and executed at a high level. He noted that English and history “come to him” naturally, while math and science required more effort. Interestingly, Ruben reported high levels of engagement in all subjects, with art topping the ranks. Even in the courses that appeared to challenge him, he was able to reach states of engagement that he credited as helpful and productive. Though some of his peers described the transferable nature of flow, Ruben was alone in his seemingly ubiquitous recognition of peak engagement. It seemed as if Ruben felt capable of transmitting his ability to reach a flow state in art to a network of divergent subjects.

Ruben indicated that teachers and classes that allowed headphones (for listening to his own choice of music) were more conducive to his engagement. This indication seemed to suit his demeanor, which was one of amiable stoicism. He cited classroom distractions as impeding his ability to reach a flow state, which he felt was much easier to attain on his own and at home. Ruben also pinpointed the value of deadlines, which he said propelled his motivation to complete a complex task and sustain a state of flow. Overall, Ruben’s apparent self-reliance and adaptability allowed him to access the flow state in a broad spectrum of circumstances. Though Ruben was soft-spoken and concise, his incisive responses revealed an individual with a deep ability to detect and explore his relationship with peak engagement in the arts (and beyond).

Rosemary. Like Ruben, Rosemary was a junior enrolled in art (Art 3) at the time of this study. She described with tremendous fluency the richness and frequency of her art-based flow experiences, which for her were “automatic” and “easy” in arts-based classes. Rosemary drew parallels between peak engagement and her passions for an array of disciplines such as
philosophy and yoga. She presented as an enthusiastic harbinger of peak engagement, which she described with an almost spiritual intimacy. It appeared that, through Rosemary’s eyes, the world was an oyster of transformative experiences awaiting harvest.

Notably, Rosemary professed her relatively recent ability to adapt her capacity to achieve flow in courses and contexts that were previously devoid of such engagement (chemistry, for example). Like Ruben, she acknowledged the ubiquitous potential for flow; however, Rosemary’s responses suggested a remarkable cognizance. She noted that this ability to apply her predilection for flow had reinvigorated her interest in an array of subjects after a difficult academic stretch earlier in her secondary career. Rosemary suggested that her flow in art, and her ability to transfer her engagement, might have acted as a profound pivot after a trying time that removed her from school for the bulk of an academic year.

Rosemary placed great emphasis on the “vibe” and environment of classes in relation to student engagement. Overall, Rosemary served as the most outwardly enthusiastic and effusive interviewee, whose responses were characterized by vivid description and uninterrupted periods of personal and educational narrative.

**Vivian.** At the time of the study, Vivian, a senior, was enrolled in the chorus. Like Henry, Vivian reported “impactful” and addictive sensations of flow during prolonged periods of performance and practice. She admitted that, for her, math and science seem to require “a different side of the brain” that was difficult for her to access. Vivian also described feeling deeply engaged in English class, where she identifies as a confident participant. Indicative of this confidence were her responses to interview questions, which she fielded with composure and self-assuredness. Vivian also directly emphasized the link between flow and confidence, reporting higher degrees of engagement in activities in which she was aware of her competence.
More than any other participant, Vivian emphasized the value of community in fostering environments fertile for flow. In fact, a sizeable portion of her transcript contained references to teachers, classrooms, and peers as actors in a broad linkage that supported shared flow experiences. Ultimately, Vivian offered enthusiastic and detailed accounts of her relationship with flow, which was founded on a balance of internal (confidence) and external (community) factors.

**Participant Articulation of Flow Experiences**

Shernoff et al. (2003) claim that “few studies have examined the experience of flow in the classroom setting” (p. 162). This study, in its direct extraction of student impressions conducted in a school, adds credibility to the practice of potentials for research founded on student voices and perspectives. Though participants entered the study with little to no knowledge of flow theory, these students were fully capable of describing the conceptual and practical nature of flow. Participants’ mutual ability to identify and express their impressions of flow experiences also provided a foundation for particular themes. Participants referenced, in varying ways, experiential phenomena synonymous with flow. They also utilized language that is characteristic of the phenomenon. Instead of treating flow as an esoteric abstraction, participants described the phenomenon as something familiar and special.

Rosemary, a visual art student, was particularly descriptive of her perception of the phenomenon. She portrayed her flow experiences as “intense” moments of concentration. When asked about the value of her flow experiences, Rosemary responded:

I can’t imagine what it would be like to not have them…they really help me grow.
Intense engagements…I learn a lot about myself…get into it and love it. Before I found it I would have intense engagements but not know how to use them, but I taught myself how to focus in other classes, to take it all in, in a different subject. The notion that Rosemary reported the discovery of her flow experiences speaks to the palpability of these occurrences. She was able to isolate a particular point in time during which her awareness of flow rose to her consciousness. Rosemary also referenced her apparent ability to “use” her engaging moments as a springboard toward flow in subjects that did not inherently stimulate these experiences. These nuances represented her general effectiveness in not only recognizing but also articulating her personal relationship with flow. Though other participants may not have shared Rosemary’s phenomenological grasp, they paralleled her explications with narratives and implications of their own.

In her moments of peak engagement in creative writing, Bessie, a writer, described the sensation of “being one with the story,” or being “actually there” among her characters and settings. Vivian, a singer, tells of being able to “invest everything into” a “feeling like you’re by yourself.” Vivian later classified these moments as inducing “the best feeling ever.” Ruben told of his ability to “tune out everything else” and focus exclusively on a drawing task.

Collectively, these sensations of immersion, depicted by participants as clearly positive experiences, reveal their relationships with flow as intimate and important. The effectiveness of students to communicate their relationships with flow highlights the potential value in furthering the theory’s application to classroom experiences and enhancement. When processed as a whole, the results of these conversations house
notable themes that carry with them significant implications for educational theory and practice.

**Themes**

Creswell (2012) promotes the researcher analysis of the data in the aim of identifying specific themes while accumulating information into larger constellations of ideas and providing details for their support. Following participant interviews and dialogue transcription, this researcher’s annotation led to the amplification of emerging themes from the data, which were distilled (Smith et al. 2009). The researcher analyzed student responses to isolate both ubiquitous themes, or themes suggested by a majority or totality of participant conversations, and superordinate themes (Smith et al. 2009), which emerged after the abstraction of patterns between more particular or implicit themes. Ultimately, the researcher pinpointed three core themes: challenge, autonomy, and control; temporal phenomena; and peer and community feedback. The following chart outlines the themes, and their respective evidence that emerged after interviewing the participants in the study. Each theme noted in the chart below will be expounded later in the chapter.
Table 1: Emergent Themes

<table>
<thead>
<tr>
<th>Participants &amp; Subjects</th>
<th>Theme 1: Challenge, Autonomy, and Control</th>
<th>Theme 2: Temporal Phenomena</th>
<th>Theme 3: Peer &amp; Community Feedback</th>
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<tr>
<td>Bessie (Creative Writing)</td>
<td>Bessie noted that whether or not she “liked” given courses was prime factor of her engagement. She characterized her creative writing class as “based on yourself and what you want to do with the assignments…more open” proposed a more student-directed approach to flow-prompting curricula, imagining a class wherein the teacher might take “a vote at the beginning of class about how the teacher should teach” and “incorporate a bit of every response they got” into the curricular offerings.</td>
<td>Bessie’s depiction of her most “prevalent” flow experiences contained a number of references to temporal phenomena. She viewed the teacher and classroom as influences that could either unsettle or advance prolonged passages flow. Bessie described the time-distorting sensation offered by flow as it applied to her creative writing experiences.</td>
<td>Bessie viewed flow as an independent and focused a phenomenon that flourishes in a “free and open” atmosphere of like-minded learners. She regarded flow as a singularity contingent on a shared setting and described her flow-inducing environment as inhabited by peers “immersed” and “involved” in analogous efforts, peers she “could relate to.” She claimed that this collective framework allowed her to attain flow states that were difficult to occupy in other courses and environments.</td>
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| Henry (Band) | If given the autonomy, Henry would elect to pursue an arts-centered education. He tempered other participants’ concepts of creative freedom by suggesting that “clear goals” are imperative for optimal engagement. | Henry described the ritualism involved in initiating band practice and claimed that most of his flow experiences occur in prolonged passages of band rehearsal and performance, during which he played the French horn. | Henry characterized flow experiences as personal and provided little support for Theme 3. Despite his focus on individuation, Henry did appear to acknowledge the potential forces of group influence: “I had
<table>
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<th><strong>Henry</strong></th>
<th>Henry believed that flow was “really specific to arts-based classes” and didn’t “know if…you would be able to achieve that in any other types of classes.” Henry noted an inability to recognize flow experiences while immersed in them, and instead relied on reflection to distinguish their worth in hindsight.</th>
<th>a friend in it, but we were still kind of like kind of like, still, acquaintances at that time. We’d talk a lot while they were doing their work. We were doing paintings. Sometimes I didn’t talk to anyone not necessarily because I didn’t’ know them that well but…they played off each other- I was engaged because I wasn’t talking to anyone, but I wasn’t talking to anyone because I was engaged. I guess I was able to zoom through my work better than I would because I cared more about it.”</th>
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<tr>
<td><strong>Ruben (Visual Art)</strong></td>
<td>Ruben noted that English and history “come to him” intuitively, while math and science demanded more effort. He suggested that teachers and classes that allowed headphones (for listening to his own choice of music) were more favorable to his engagement. Ruben equated challenging or unfamiliar artistic tasks with the moments of engagement during which he is able to</td>
<td>Ruben also pinpointed the value of deadlines, which he said propelled his motivation to complete a complex task and sustain a state of flow. He described the beginning of art class as effectively routinized. He noted an unspoken and succinct sensation in which he is prompted to “get to work” or “get things done.” Ruben contextualized</td>
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“tune out everything else” and maintain his creative center.  
the temporal sensations induced when drawing in class, reporting discord in his perceptions of time. 
Rosemary (Visual Art)  
Rosemary carefully described the value and frequency of her art-based flow experiences, which for her were “automatic” and “easy.”  
She noted her capacity to control flow in courses and contexts that, for her, were previously devoid of such engagement (chemistry, for example).  
Rosemary also referenced the broader context of control and the penchant for challenge: “It’s really hard to learn in classrooms with kids who don’t want to learn…you have to want to learn.” 
Rosemary described the beginning of art class as successfully routinized.  
She also referenced an unspoken and succinct sensation in which he is prompted to “get to work” or “get things done.” 
Rosemary placed significant emphasis on the “vibe” and environment of classes in relation to student engagement. Rosemary cited a “mutual respect” that surpassed the absence of external social relationships between and among students.  
Though her art group did not socialize outside of school, Rosemary identified a communal spirit, an “open and happy environment” where one can say “anything…and no one will judge” a peer, a classroom that promotes “equality.” She declared, “the art room is like my home.” 
Vivian (Chorus)  
Vivian emphasized the link between flow and confidence, reporting greater degrees of engagement in activities in which she was aware of her proficiency.  
Vivian was emphatic regarding the value of self-direction in the arts, describing her ideal  
Vivian reported “impactful” and appealing sensations of flow during sustained periods of performance and practice, noting the meditative commencement of choral warm-ups as a core example. 
Vivian emphasized the value of community in fostering environments generative of flow.  
She referred to the communal swell of a song performance, and the post-song adjustments suggested by her group, as particularly engaging.
work environment as “open to things” and “accepting of what people have to say…lenient towards ideas and opinions.”

Vivian noted that students are not “forced” to engage in arts courses, alluding to the inherent autonomy of elective arts classes.

She cited to the value of curricular autonomy, by which students determine the framework within which their peak experiences occur.

In the interest of student control, she called for “more creativity allowed in classrooms” and “in general.”

Her sense of feedback was immediate and existed in the form of a singular voice through which her focus peaked.

Vivian believed that this interchange was founded on individuals who are “open and accepting of what people have to say…lenient towards ideas and opinions.”

She confirmed that the academic environment is a “huge factor” and is a direct byproduct of the “peers you’re surrounded with.”

**Challenge, Autonomy, and Control.** Echoing antecedents of flow established by Shernoff & Csikszentmihalyi (2008), student participants reported both general (course-specific) and singular (activity-specific) sensations of challenge, autonomy, and control in their respective subject areas. This superordinate theme was born of data referencing student emphasis on factors such as confidence (control), elective courses (autonomy, control), student-directed instructional formats (autonomy), and immersion in advanced tasks (challenge). Interview dialogue (see Table 1) generated several references to these sensations, which are grouped as a trio based on their established relationship to Shernoff & Csikszentmihalyi’s (2008) characterization of flow.
To begin, participants cited the challenging nature of flow-inducing subjects and tasks. For Vivian, challenge was imbedded in the introduction of a new song and her consequent commitment to mastering it. She valued this holistic challenge as a precursor to prolonged engagement. When Ruben, a visual artist, was asked about the types of experiences that promoted his engagement, the degree of challenge shifted from medium-to-medium:

Um, I’d probably say, we were, um, during painting or like a charcoal in art, like using those to work out something, ‘cause it’s a bit more challenging than say, like pencil, so I have to get a bit more involved with it in than, like, sketching.

Ruben seemed to equate challenging or unfamiliar artistic tasks with the moments of engagement during which he is able to “tune out everything else” and sustain his creative focus. Vivian was able to find flow in the challenge of an arts-based academic task; here, Ruben indicated that the medium itself induced his flow state and did not explicate the specifics of the task itself. Another participant, Henry, maintained that optimally engaging creative challenges relied on “clear goals.”

Inherent in both the selection of participants and consequent data sets is the thought processes involved in creative endeavors, which is widely regarded as the apex of higher order thinking (Silvia, 2008). Each of these students was immersed in a realm of academic challenge obscured by their passions for respective subjects.

Direct references to challenge were strengthened in their correspondences to autonomy and control. When asked about whether or not he values his flow experiences, Henry offered a glimpse into the transferable powers of flow experiences in subjects that he has chosen, autonomously, as paths of study:

I think my influence would be not necessarily, like, direct. I think it’s just, like, I value it because those are like, those are the things I value most because, like, having the
experience with the subject that is important to me, that in itself is kind of like, why…they allowed me to have a better understanding of what’s going on with these subjects and it’s also, like, given me the motivation to explore these subjects outside of school.

Of all the participants, Vivian and Bessie were the most emphatic regarding the value of self-direction in the arts. Vivian described her ideal arts teachers as “being more open to things” and “accepting of what people have to say…lenient towards ideas and opinions.” Bessie characterized her creative writing class as “based on yourself and what you want to do with the assignments…more open” and went as far as proposing a more student-directed approach to flow-prompting curricula, imagining a class wherein the teacher might take “a vote at the beginning of class about how the teacher should teach” and “incorporate a bit of every response they got” into the curricular offerings over the course of a semester or year. She characterized her creative writing class as a model for these approaches:

I feel like the class is kind of based on yourself and what you want to do with all the…it’s based upon yourself. You get to write a poem about whatever you want or write a story about whatever you want. It’s more open…if you like the subject, too, that helps. I feel like a lot of the time, students get immersed in what they’re doing through what they like whether they’re interested in the subject or how it’s being taught or what they’re doing that makes them so involved, so maybe if they liked how it was taught.

Henry tempered other participants’ concepts of creative freedom by suggesting that “clear goals” are imperative for optimal engagement; however, the vast majority of participant feedback pointed to the favorability of student input and control in their
creative endeavors. He suggested that teachers “have one goal” for a given group of students, thereby restricting autonomy in a sense, but further submitted that teachers “let them have their own way of getting there…they’ll be more engaged in what they’re doing,” thereby proposing a degree of autonomy within a course’s objectives and parameters.

Autonomy existed as a precursor to many of the experiences described by students. Vivian notes that students are not “forced” to engage in arts courses. This seemingly minor acknowledgement alludes to the consideration of the inherent autonomy of elective arts classes: students engaged in these courses by choice. She points to the value of curricular autonomy, by which students determine the framework within which their peak experiences flourish.

Interview questions stemming from the first research question yielded participant suggestions regarding educator options for generating classroom flow. Many of these participant recommendations centered on this theme. In the interest of student control, Vivian called for “more creativity allowed in classrooms” and “in general.” Rosemary puts it simply: “It’s really hard to learn in classrooms with kids who don’t want to learn…you have to want to learn.” Henry believed that flow was “really specific to arts-based classes” and didn’t “know if…you would be able to achieve that in any other types of classes.” Overall, students felt that, though arts-based courses were engagement-friendly, furthering the extent of challenge, autonomy, and control could ameliorate the number and degree of flow experiences.

Though variation occurred in their contextualization of challenge, autonomy, and control, participants pointed to the power of these conditions in establishing opportunities
for flow. In some cases, students called for an increase in autonomy as a means of generating and individualization of control and challenge. These results reveal the participants’ recognition of balance- the equilibrium of challenge, autonomy, and control- and its relationship to flow-inducing experiences in the classroom. Understanding how these recommendations operate within a framework of time is bolsters their potency and corresponds to another theme gleaned from the data.

**Temporal Phenomena.** In this study, the theme of temporal phenomena encompasses participant sensations and occurrences associated with time. It may be expected that this criterion sample would include students who reported sensations of temporal distortion, as individuals who experience flow often pinpoint this feature. However, with little specific prompting and a dearth of time-related language from the interview schedules (see Appendices D & E), participants described contexts within which the passage of time and its management by their teachers were key influences. This adds a degree of credibility and uniqueness to participants’ associations between flow and time. Participants recounted their awareness of two distinct temporal phenomena- factors associated with the allocation and use of time within the parameters of class, and the distortion or prolongation of time during flow experiences. This theme’s function is particularly valuable to the context of the second research question, which seeks to locate concrete factors for optimizing flow in learning environments.

Participants viewed the construct of time management as key to their abilities to achieve flow in school. Students described flow-prompting learning environments as those wherein little time was spent on instructional activation at the beginning of class. In these examples, teachers had routinized expectations for the period’s commencement.
Inside these classrooms, students engaged in learning experiences immediately and often upon entry, occasionally with no prompting or cuing from their teachers, who had predetermined expectations and objectives prior to designated work periods. From the perspectives of participants, this entry bypassed static interrupters of engagement and ushered learners toward an immersive activity.

Pinpointed consistently by Rosemary and echoed in three other student responses was the emphasis on these timesaving classroom norms. Here, several participants made particular note of the value of classroom initiation customs. Henry described the ritualism involved in initiating band practice, describing the tuning and settling process as a meditative entry into periods of anticipated engagement. While Rosemary and Ruben described the beginning of art class as effectively routinized, Vivian noted the pensive commencement of choral warm-ups, which from her account often led to flow experiences for her:

I started playing tenor saxophone last January, just because I had got thrown into the course, um, the band, so I learned pretty on the fly. So this year, it was “Joy,” we’re doing it for the concert coming up. I didn’t know anything about the fingerings, didn’t even know how to play the instrument, I was working on the piece in, like, a practice room… I was in there and then, like, the bell rang for two o’clock. So I was in there and I just kept playing and going over the piece and over and over, like so invested into fixing everything that I couldn’t do before, investing myself in that and like basically dedicating myself to that one thing. I completed it and time had literally gone by. And that was insane.
Rosemary, most effectually, made clear the implications in Vivian’s description of instrumental practice and Henry’s description of the band room’s commencements. She described a consistent expectation that she and other students were accountable for spending the entirety of a given period engaged in a project:

There’s never a time in my art class when I’m not doing my work…having pauses really takes you out of it. Warm-ups help…that just, like, immerse you in it…teachers who expect you to take your stuff out…they don’t have to tell you.

Ruben referenced a similar model, noting an unspoken and succinct sensation in which he is prompted to “get to work” or “get things done.” Without explicit prompting from the interview questions, students nonetheless isolated the positive force of minimalized interference and swaths of work time and their potential for accommodating flow in school. From multiple points of view within multiple disciplines, participants referenced the management of time as affecting their daily engagement and access to flow experiences.

According to participant accounts, these seamless transitions and prolonged periods of work promoted immediate and self-directed engagement that led to the recognition of another temporal phenomenon: an obliviousness to- or a distortion of- time, a sensation often associated with flow experiences. In one example, Ruben contextualized the temporal sensations induced when drawing in class:

I don’t really realize it until, like, the bell rings and I have to clean up immediately because I didn’t realize that time was passing…sometimes it’s…I have music playing…not really thinking about anything else, just getting the art done figuring out what I want to draw on the paper…coming out of it I guess
there’s just kind of…the sudden realization that the world’s still going on, that I’ve been working on it for a lot longer than I think I have, um, so, like when people ask me how long it takes me to draw something, which is a question I get a lot, I just don’t know…like twenty minutes to two hours, and I just don’t know.

Ruben’s is truly a transcendent characterization, one reflective of the immersive powers of peak engagement. Even when prompted toward recollection by a peer, he reports a dissonance in his perceptions of time. This degree of immersion suggests a devotion to subject matter enviable to educators aiming to foster engagement. Remarkably, Ruben was not alone in his ability to isolate what may be akin to “time out of mind” experience. Like Ruben, Bessie described the time-melding sensation offered by flow as it applied to a disparate discipline, creative writing, recalling her experiences:

I like doing it on my own. I lose track of time. I’m completely focused on what I’m doing. They might even have to say my name a few times before I respond to it, almost as if I’m one with the story or if I was actually there. I feel like a lot of time went by. It’s like going back into reality almost.

Bessie described an independent writing task during which she remained unaware of her position in a room or group. Her recounting of this sensation illustrated the power of flow to dissolve tertiary distractions and funnel one’s concentration toward a task.

Like her peer participants, when asked about a recent experience with optimal engagement, Rosemary recognized and described the effects of flow on concentration and the distortion of time:

Two days ago, when I was in art class, and I was working on an Art Nouveau poster and I noticed, so I have lotus flowers on the bottom of it and I was like
trying to make, I was like sketching them out and trying to make them proportionate on one side, because I wanted to get painting soon. Without knowing, I was focusing on this one little area so long, I was spending so much time on this one little spot. I just got lost in it until, like, I could make it the way I wanted to. I have so much other stuff to work on I lost myself in this one area, I don’t know, I get very into what I’m doing, like in art I’ll be sketching something and I’m not one of those people that goes all across the paper, I’m not someone who…I kind of like to work in one section at a time. I get really…really into that section and I don’t leave it. That was the last time I felt that.

Offering a notable context for this theme of temporal phenomena was Henry, who suggested that interruptions to these prolonged periods of engagement hold the unfortunate potential to disrupt flow. In this account, Henry implied the delicate nature of temporal immersion by default. In describing these moments of interruption by which his flow is occasionally extinguished, he considered the complex dynamic between the temporal immersion of flow and its apparent delicacy:

Afterwards is just kind of like…not like…waking up from a nap, but like kind of like…similar…kind of like…everything just resumes, where before it was, like, paused. If we’re playing…it usually happens when we’re playing entire pieces…I don’t know it when I am, but like, if he stops us, I’ll be a little bit disappointed.

These students recognize the temporal distortions that often accompany flow, and described them with a degree of familiarity and appreciation that speaks to the force of optimal engagement. Participants described frameworks within which two temporal phenomena- the management and consequent distortion of time- were key factors in spurring their engagements.
These findings generated valuable findings and implications, particularly for the second research question, which sought to locate tangible factors for optimizing flow in learning environments.

**Peer & Community Feedback.** Participants also suggested that, in concert with challenge, autonomy, and control and temporal management, learning environments accommodating a group of like-minded peers induced flow experiences. Though Henry’s conception of flow was founded upon the intimate continuum between individual and task and unique among participants, his peers described settings wherein the communal spirit of a combined effort nurtured flow-inducing experiences. Feedback, either implicit or explicit, tethered several participants to their respective classmates and generated a shared sense of objectives and engagement. In some cases, feedback came in the form of verbalization; in others it rested in the circuital nature of shared tasks and objectives. For the sake of generalizability, the researcher defines feedback loosely here, as reactions to a person’s learning or performance of a task that can be used as a basis for improvement.

Bessie viewed peer and community feedback as a latent construct, an established network of open-mindedness and respect for one another’s creative processes that permeated the classroom day after day. For example, even while operating in the relative singularity of writing, Bessie viewed flow as a fluid phenomenon dependent on a communal setting, a “free and open” environment of like-minded learners. She saw her individual efforts as valued within a system that balanced the uniqueness of individual undertakings with the collective goals of the course. Bessie described her flow-inducing environment as populated by peers “immersed” and “involved” in similar endeavors, people she “could relate to.” She claimed that this communal backdrop allowed her to reach spaces of engagement that were difficult to occupy in other courses and
environments. She stated that, if students “had friends or someone to talk to, someone they can relate to, that helps.” According to Bessie,

It makes me more open to things as a person when someone’s talking to me, and as a learner when I’m learning different subjects, but mainly just when I’m talking to someone or I’m more open to their…maybe their experiences…and it could be related to learning and school.

Other participant references to peer and community feedback were interaction-based and reliant on open dialogues between students. Vivian noted the communal swell of a song performance, and the post-song modifications suggested by her group, as supremely engaging. For Vivian, feedback was immediate and existed in the form of a singular voice through which her focus peaked:

I definitely help the music come together as a whole, like I focus on the music aspect as well, but we all have that thing in common. The people in there, I’m more comfortable with them, I’m more confident about it… I feel like I excel in and get good feedback from music classes. Like, you feel like you can be yourself, and you’re invested in it.

Vivian believed that this dialogue was founded on individuals who are “open and accepting of what people have to say…lenient towards ideas and opinions.” She confirms that the academic environment is a “huge factor” and is a direct byproduct of the “peers you’re surrounded with,” recounting an anecdote and arriving at an affirmation:

We had just got a song that, um, a lot of us had already done before. Everyone else was learning it and being able to sing it on their own…I believe that the
environment is actually, like, a huge factor in it with, that is, like, your peers and who you’re surrounded with. It makes you comfortable.

This dynamic of separation and unity echoes the context provided by Bessie. Though group engagement may appear inherent to the aims of a choral group, whose members aim to weave their voices into a collective tapestry, some participants reported a similar sensation in visual arts and creative writing classrooms, where students were typically engaged in independent endeavors. In art, Ruben cited conversations with peers over creative decision-making as conducive to his flow, whereas Rosemary cited a “mutual respect” that transcended the lack of external social relationships between and among students. She stated,

I think it’s definitely the environment. Um, because if, like, in my art room I really, like, the class, everyone in the class gets along. We’re all open with each other. No one in the class is friends with each other. Some people do, but we’re from all different groups, but we kind of have this mutual respect for each other, everyone is very accepting and look at each other’s work and are very into it. I think it creates an open environment for you to, like, get creative, when I get in the zone.

Though her art cohort did not socialize outside of school, Rosemary identified a communal spirit, which transcended prior and current relationships in an “open and happy environment” where one can say “anything…and no one will judge” a peer, a classroom that promotes “equality.” Rosemary’s salient descriptor came in the form of a telling simile: “the art room is like my home.” Even Henry, who had previously characterized flow as a phenomenon restricted to the individual, seemed to wrestle with
the paradoxical balance between the nature of his group’s effect on his engagement and
the value of a friend or acquaintance as a supportive presence:

The best example I can think of would be in art, probably, um, which, I had art at the
beginning of the year. I had a friend in it, but we were still kind of like, still,
acquaintances at that time. We’d talk a lot while they were doing their work. We were
doing paintings. Sometimes I didn’t talk to anyone, not necessarily because I didn’t’
know them that well, but…they played off each other. I was engaged because I wasn’t
talking to anyone, but I wasn’t talking to anyone because I was engaged. I guess I was
able to zoom through my work better than I would because I cared more about it.

A strong majority of participants elucidated the potential for environments founded by an
open-minded sense of community. Notably deficient from the data was participants’
acknowledgement of the teacher as a guiding force in supplying or designing the space for these
experiences. Participants described these environments as places of comfort in which feedback
from peers was consistent, timely, and of tremendous value.

**Conclusion**

The preceding themes were generated by researcher analysis of the data in the aim of
identifying specific themes represented among and between interview data sets (Creswell, 2012).
Following interviews and transcription, annotation and exploration led to the assignation of
emergent motifs from the data, which were distilled into three themes (Smith et al. 2009).
Ultimately, the researcher isolated three essential themes: challenge, autonomy, and control;
temporal phenomena; and peer and community feedback. The following chapter discusses the
findings drawn from the themes, their respective implications, and the position of these results
within the continuum of relevant research.
Chapter 5: Discussion of Findings

This study of the optimally engaging experiences of secondary students was founded on questions that obtained findings of value to educators seeking to further understand the standpoints of engaged young learners: How do secondary arts students describe and make sense of their flow experiences? What can educators learn from the school-based factors that influence arts students’ flow experiences?

These questions invited interview procedures that produced data sets from participants while allowing the researcher to interpret and pinpoint themes from interview materials. Both questions reflected the demands of interpretative phenomenological analysis (Smith, Flowers & Larkin, 2009).

As detailed in the Significance of the Problem, student engagement is of dear import and its dearth a great concern for educators, with studies from the last few decades designating high school students, specifically, as disengaged from academics (Goodlad, 1984; Finn & Rock, 1997; Battin-Pearson et al., 2000; Bond et al., 2007; Dotterer & Lowe, 2011). Notwithstanding these modern challenges, populations of students who are intellectually curious, intrinsically motivated, and consistently engaged thrive in a variety of learning environments (Shernoff, et al., 2003). Such students generated the data for this study. Utilizing data gleaned from this criterion population, the researcher uncovered some of the nuances in these students’ experiences with optimal academic engagement that add to the collective spectrum of engagement research.

In regard to the first research question, most of the emergent themes echo the findings of educational flow research. Participants were able to describe the features and sensations associated with flow with clarity and consistency. The first question provided an overarching framework for the first interview (see Appendix D), which aimed to
expose how participants derive meaning from their flow experiences. The first interview (see Appendix D) consisted of questions derived chiefly from the first research question, which sought to investigate how students report and interpret their own flow experiences.

The second question framed the second interview (see Appendix E), which furthered this elucidation while pursuing contexts that may contain practical possibilities for educators. In response the second research question, participants contributed data that resulted in themes useful for educational practice. The balance of challenge, autonomy and control, the consideration of temporal circumstances, and the significance of communal environs all suggest further educational consideration. A discussion of these findings, organized by findings, further contextualizes these results in the gamut of literature and theory.

The analysis that follows aims to identify and make sense of the findings and situates them in the greater realm of educational research. In this chapter, these results are analyzed and applied to the educational realm and contextualized against the backdrop of educational research, via its parallels to and deviations from what is known.

**Recognition & Articulation: Student Consciousness**

This study found that high school students are capable of recognizing and articulating their relationships with flow, a result that rests in contrast among a research sphere consisting of either quantitative academic studies or qualitative accounts of successful adults who are creative forces in the world (Shernoff et al., 2003). Though attitudes toward flow experiences varied, these young, student participants viewed flow as a positive and fascinating force. Participants experienced flow and were able to recognize, articulate, and make sense of these experiences as rich and meaningful, bolstering the consideration of challenge, autonomy and control, the
influence of temporal sensations, and the significance of peers and learning communities. Through interview-generated reflection, participants were able to make sense of the flow phenomenon as a valuable and consistent facet of their educational experiences. The pervasive themes (challenge, autonomy, and control; temporal phenomena; and peer and community feedback) represent the binding threads of their interview responses, which represent their capacities for recognition and contextualization. When prompted, these arts students were capable of identifying the underlying dynamics of flow experiences as a phenomenon. Though their exposure to the taxonomy of flow (and perhaps the term itself) were likely limited before their participation, participants were able to recognize and make sense of the phenomena.

Shernoff et al. (2003) claim that “few studies have examined the experience of flow in the classroom setting” (p. 162). This study, in its direct extraction of student impressions conducted in a school, adds credibility to the practice of potentials for research founded on student voices and perspectives. Though participants entered the study with little to no knowledge of flow theory, these students were fully capable of describing the conceptual and practical nature of flow. Participants’ mutual ability to identify and express their impressions of flow experiences also provided a foundation for particular themes. Participants referenced, in varying ways, experiential phenomena synonymous with flow. They also utilized language that is characteristic of the phenomenon. Instead of treating flow as an esoteric abstraction, participants described the phenomenon as something familiar and special.

Rosemary, a visual art student, was particularly descriptive of her perception of the phenomenon. She portrayed her flow experiences as “intense” moments of
concentration. When asked about the value of her flow experiences, Rosemary responded:

I can’t imagine what it would be like to not have them…they really help me grow. Intense engagements…I learn a lot about myself…get into it and love it. Before I found it I would have intense engagements but not know how to use them, but I taught myself how to focus in other classes, to take it all in, in a different subject.

The notion that Rosemary reported the discovery of her flow experiences speaks to the palpability of these occurrences. She was able to isolate a particular point in time during which her awareness of flow rose to consciousness. Rosemary also referenced her apparent ability to “use” her engaging moments as a springboard toward flow in subjects that did not inherently stimulate these experiences. These nuances represented her general effectiveness in not only recognizing but also articulating her personal relationship with flow.

In her moments of peak engagement in creative writing, Bessie, a writer, described the sensation of “being one with the story,” or being “actually there” among her characters and settings. Vivian, a singer, tells of being able to “invest everything into” a “feeling like you’re by yourself.” Vivian later classified these moments as inducing “the best feeling ever.” Ruben told of his ability to “tune out everything else” and focus exclusively on a drawing task.

Collectively, these sensations of immersion, depicted by participants as clearly positive experiences, reveal their relationships with flow as intimate and important. The effectiveness of students to communicate their relationships with flow highlights the
potential value in furthering the theory’s application to classroom experiences and enhancement.

**Learner Independence: Challenge, Autonomy, and Control Increase Ability to Reach Flow State**

This study found that students perceived the elements of reasonable challenge, curricular and operational autonomy, and allowances of control as interrelated conductors of flow experiences. Insulated forms of autonomy occurred within participant descriptions of lessons, projects, and other isolated academic tasks. The participants described experiences of self-direction and creativity that served as complements to the demands of a given task.

Participants also indicated that a degree of autonomy serves to facilitate flow experiences. In most cases, references to control appeared in the data as student-reported confidence or a form of self-control inherent to the aforementioned autonomy forms. When asked to identify and discuss their courses referenced by the student questionnaire (Appendix B), all participants referenced either a degree of confidence or self-control. Rosemary notes the link between a “motivation to learn” and the ability to enter “the zone.” Henry describes the flow state as a “mood thing” between an individual and his or her medium.

The substance of this finding mirrors elements of prevailing research and furthers the significance of these thematic elements through and alternative means of methodology and data extraction. Investigations have linked student engagement to the extents of control students have over their learning activities (Shernoff et al., 2003; Newmann et al., 1992; Deci, Nezlek, & Sheinman, 1981), an association that is
substantiated in this study. Research suggests that student engagement may be induced by a number of phenomenological factors, including the applicability of instruction and student perceptions of control (Shernoff et al., 2003; Newmann, Wehledge, & Lamborn, 1992). This study supports this notion. In terms of curricular relevance, research has found that students are more likely to become engaged with realistic academic work that connects real life problems that extend consequences beyond the classroom (Shernoff et al., 2003; Newmann et al., 1992). This study offers a point of contrast to these findings, in that participants did not reference the applicability of learning tasks and instead focused on their commitment to the subject matter.

Research confirms that when secondary students possess the autonomy to select core and elective classes, the potential for the skill-challenge symbiosis critical for flow is amplified (Schweinle, Turner, & Meyer, 2008). In fact, the probability of successful school completion is augmented by student influence and autonomy with the schooling process that cultivates a sense of obligation and comfort (Shernoff et al., 2003; Christenson, Sinclair, Lahr, & Godber, 2001). Research has also found that students were significantly more engaged in their non-academic courses than in their academic courses (Shernoff & Csikszentmihalyi, 2008, p. 135). Csikszentmihalyi, Rathunde & Whalen (1993) determined that the development of skill in adolescents depends significantly on whether the use of a given talent produces flow. If adolescents could learn to find flow in coursework more consistently, they would most likely intensify their intrinsic motivation for learning experiences as a whole (Hektner & Csikszentmihalyi, 1996).

Predictably, findings from this study’s art-based criterion sample reflect this spectrum of literature in terms of the link between challenge, control, autonomy and flow. Despite this
overlap, the nature of this study makes this finding unique, in that the study design yielded
synonymous results via an antonymous methodology and approach.

**Time Out of Mind: Management of Educational Time Affects Student Relationships with Flow**

This study found that students equate their potential to achieve flow with the way time is
managed by course instructors and block design, and with the availability of prolonged work
sessions. This finding is well supported with thematic data and corresponds to aspects of existing
research; however, like the aforementioned learner independence outcome, the context of this
finding offers a unique contribution to the understanding of student perceptions of temporal
influences.

Though this temporal disconnect is acknowledged by Shernoff & Csikszentmihalyi
(2008) as a byproduct of other flow parameters, no reference to such a sensation appears in the
indicators selected for this study’s theoretical framework or in the interview questions
themselves. Thus, participant references to this phenomenon were unsolicited, generating a
notable theme that emerged organically across subject areas. Csikszentmihalyi (1990) has long
indicated the commonness of the slowing of time among flow experiencers. In this study,
participant responses affirmed the already well-substantiated relationship between heightened
engagement and the distortion of time; however, a dearth in literature surrounding the
relationship between temporal facets of engagement and education points to the need for such
research.

From the standpoint of the educator, this finding is couched in the greater
consideration given to lesson planning and its inherent temporal parameters, which, based
on the results of this study, are also critical in establishing the context for the optimal
engagement of students. Research has promoted the value of classroom routines in optimizing student engagement (Diffily & Sassman, 2004; Weidman & Hammond, 1987) and criticized instructional transitions and phases that disrupt the flow of classroom activity (Arlin, 1979). Literature and research that draw an explicit connection between classroom routines or activators and flow, however, is lacking. Research has sought to locate a balance between teaching and learning to achieve equilibrium of instruction and student self-direction. Some studies have emphasized process-oriented teaching aimed at promoting congruence and constructive friction, avoiding destructive friction and reducing the gap between learning and teaching (Vermunt & Verloop, 1999).

This study found that, from vantages devoid of theoretical context, students independently feel that their abilities to achieve flow are dependent upon the management of time and the consistent access to sustained periods of productivity. In the rich, student-generated recollections of temporal distortion and through their emphasis on instructional time management, the understanding of student perceptions of temporal influences is revealed.

**Group Dynamics: Peers Influence Flow**

This study found that students attribute their relationships with flow to dynamic relationships between themselves and their peers, a finding relating a pronounced distinction among available research. This theme or feature of flow is uncommon in the realm of flow inquiry, which typically focuses on flow as an internal and self-regulated phenomenon. For participants in this study, communal sensations served as a prime determinant of an environment’s potential to generate and sustain student flow experiences. This finding contrasts with the bulk of flow-specific research, which focuses primarily on flow experiences as an
individual phenomena, and challenges any misconstruction that flow is an experience limited to the individual; instead, participants suggested that the communality found in arts courses provides an experiential cocoon within which students are able locate their own openings to optimal engagement.

This study revealed that students view their academic environment, and the peers that populate it, as essential building blocks for their own engagement. It suggests the potential for elective courses to create communal environments that foster a collective- and even collaborative style of engagement.

Participants placed more emphasis on their relationships with peers than on traditional feedback from their teachers. Research indicates that peers “are important socializers for some facets of motivation” (Ryan, 2000, p. 105). Though the distinct correlation between adolescent groups and flow is limited, current theories of engagement and motivation point to the merits of context and socialization in the development of beliefs and behaviors among students (Eccles, Wigfield, & Schiefele, 1998).

Instead, these findings align with what is known regarding the power of peer influence in learning and engagement. Organizational sciences, too, have long recognized and explored the power of groups in linking learning and work (Brown & Duguid, 1991); likewise, there is no shortage of educational research touting the transformative nature of cooperative learning (Slavin, 2011; Villa & Nevin, 2002).

Results from this study affirmed that learning environments accommodating a group of like-minded peers induced flow experiences. Participants reported sensations of flow in communal undertakings but also in visual arts and creative writing classrooms, where students were typically engaged in independent endeavors. A strong majority of participants elucidated
the potential for environments founded by an open-minded sense of community, implying the value of these environments as places of contentment in which feedback from peers is of great import.

**The Findings as a Whole: Contextualizing the Results**

Elements of this study’s findings confirm what is known regarding secondary students and flow. Though this study affirms existing knowledge about generalized flow theory, its delivery of this confirmation is unique. Shernoff et al. (2003) assert, “few studies have examined the experience of flow in the classroom setting” (p. 162). This study, in its direct extraction of student impressions conducted in a school, helps to address this gap. For example, challenge, autonomy, and control are considered features inherent to the flow experience, while temporal phenomena are widely applied to flow. Though this may appear to diminish the inimitability of these findings, further consideration must be given to the methods therein, which substantiate research gleaned from either academic theory or quantitative measures. This utilization of flow theory as a means of measuring and enhancing student engagement remains uncommon. This study answered the call of Ainley, Enger & Kennedy (2007), who, acknowledging the incompetence of any single set of processes to accurately identify and evaluate flow experiences, besought a range of flow-based inquiry. This study reveals the potentials of engaged students to speak with specificity and candor regarding what many researchers view as an esoteric concept, thereby offering divergent credence to established thought.

The fact that these results buttress existing theory and research is less than startling; however, the methodology through which they were gathered suggests that young learners have relationships with flow, are aware of the factors that influence it, and are capable of articulating its features, effects, and value. More specifically, this study succeeded in locating features of
flow, typically assigned by theory to participants, through a methodology founded on the phenomenology of the students themselves, who demonstrated a faculty for recognizing flow without knowledge of its existence in psychological theory.

Research has affirmed that flow is rarely achieved in school; moreover, it has suggested that secondary students are customarily less absorbed while in classrooms than anywhere else (Shernoff & Csikszentmihalyi, 2008). Shernoff & Csikszentmihalyi (2008) note the lack of both flow and engagement in traditional U.S. public schools as a whole, and focus on unorthodox learning environments to explore the phenomenon. This study, conducted in a suburban public school, offers a point of contrast as participants’ adeptness in making sense of their flow experiences suggests that students are capable of both achieving and reflecting upon experiences of peak engagement. Of course, criterion sampling yielded an opportune field of participants from whom data was solicited. Nevertheless, this study afforded a glimpse into a degree of student absorption considered rare among scholars and researchers, lending inherent value to student impressions of flow and the contexts that foster it.

Delineating the implications of each theme amplifies their potential application for educational theory and practice. The balance of challenge, autonomy and control, the consideration of temporal circumstances, and the significance of communal contexts all imply further educational application. A discussion of these implications, organized by theme, further contextualizes these results in the gamut of literature and theory.

**Implications of Findings**

When processed as a whole, the results of these conversations house notable themes that carry with them significant implications for educational theory and practice. Despite their inherent parallels to preponderant theory, these themes offer a unique
contribution to the continuum of educational flow research. First, these themes were generated exclusively from qualitative methodology via student interviews, contrasting with the bulk of prevailing studies regarding classroom engagement and flow, which are largely quantitative. Conscious and astute impressions of the phenomenon were the products of student reflection, whereas studies are often founded on observation, evidence of student compliance, or the assignation of flow features to the activities of learners. This study offers data gleaned from the perspectives of the students and highlights not only the uniform features of the flow experience but also the nuances that make flow unique and personal to each individual.

Understanding the curricular and instructional parameters conducive to arts students’ flow experience generated important implications for educational practice. The enhanced level of engagement offered by flow serves as a medium through which student motivation may be better understood and amplified (Ainley, Enger & Kennedy, 2007). Understanding the thematic core of peak academic experiences highlights the need for curricular advancement in the aim of facilitating student engagement. The following thematic implications are presented within this context, transforming thematic findings into contexts with practical connotations for educators.

**Implications: Student Consciousness.** The very nature of soliciting student perspectives in a direct way serves as a complement to the norm within flow research, which is characteristically theoretical and often quantitative (Csikszentmihalyi & Larson, 1987; Moneta & Csikszentmihalyi, 1996). In its design and execution, this study validates flow theory as a viable framework for considering and examining peak experiences in education. Unlike the mass of existing research, this study provided a
richer awareness of the flow experiences that form lasting impressions on students, and allowed student voices to determine its value and nuances. If, as Kuh (2009) claims, the future of education should rely upon “the emergence of student engagement as an organizing construct for institutional assessment, accountability, and improvement efforts” (p. 5), this study reveals the potential for flow theory as a feasible paradigm for practical application within the greater network of engagement theory.

Secondary arts student participants described their flow experiences as rewarding and formative. Their candor and comfort suggested a sense of familiarity that they were able to contextualize via the interview protocol. Though these students entered the participant process lacking the academic vocabulary to pinpoint the classification of these experiences, they revealed consistent abilities to articulate the sensations and qualifiers synonymous with the flow experience. Taken as a whole, these pockets of description not only reveal the competencies with which these participants characterized the phenomenon, but also reveal the enthusiasm and passion that accompanies that understanding. This able participation suggests that secondary students are capable of the metacognition necessary for recognizing, articulating, and reflecting upon experiences with peak engagement.

Implicit in this finding is the furtherance of educational engagement research through the theoretical lens of flow. Also of possibility is a deliberate focus on younger populations of study pools based on their potential capacities to contribute viable data. This finding implies that possibilities exist for educators and students to participate in fruitful dialogues regarding experiences with optimal engagement. A final implication rests in the increasing validity of qualitative methodologies for understanding flow.
Implications: Challenge, Autonomy, and Control Increase Ability to Reach Flow State. The challenge component of this finding suggests that educators should consider degrees of challenge when designing activities. The theory linking flow to the development of challenge and skills has been buttressed by widespread empirical confirmation (Hektner & Csikszentmihalyi, 1996). Implied by participant’s ability to isolate and recall particular instances of flow is the notion that individual skills inevitably increase with practice and constantly disrupt the stability of the skill-challenge balance (Hektner & Csikszentmihalyi, 1996). Though this balance has remained a fixture in educational psychology since Vygotsky (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003; Rogoff, 1990), participants’ ability to acknowledge these facets speaks to the value of calibrating, and perhaps customizing exercises based upon equilibrium of skill and challenge. Options for educational contexts may include self-regulating activities and technologies, where a desired degree of challenge is calibrated, and formative assessments that adapt assignment expectations based on performance.

This prospective alliance may be further promoted by increasing the autonomy and control of students. Examples may include increased student control in affecting course offerings, which could assist in predisposing populations to disciplines and studies favorable to their engagement; scheduling, which could provide curricular windows for alternative programs, student-directed coursework, and dual enrollment; and independent studies, which could offer an inherent platform for challenge, autonomy, and control.

Implications: Management of Educational Time Affects Student Relationships with Flow. Implicit in the data and consequent findings is the potential benefits of systematized instructional periods devoid of direct instruction. Obviously,
direct instruction is imperative in education and its worth and frequency shift from discipline to discipline; however, these findings suggest that students recognize the engaging potential of long stretches of productivity and that these rituals of minimalized instructional initiation appear to precede periods of optimal engagement for students. It may be further assumed that these periods had been prefaced by clear and detailed instruction; nonetheless, the consideration of prolonged work periods may offer an engaging counterbalance to more traditional agendas. Research substantiates this finding in its consistent call for rethinking and revitalizing school scheduling and asserting the value of long (block) periods during which students are afforded increased immersion and engagement (Canady & Rettig, 1995).

This study suggests the need for teacher focus on subtle and perhaps non-verbal activators or initiation rituals that establish a pattern of immediate engagement in the interest of reaching flow more consistently and contrasts with the traditional teacher-centered overview of the daily agenda or objectives prior to student activation. The challenge appears to be in balancing the need for objectives and expectations with the benefits of prolonged initiative tasks. Also worthy of consideration is the nature of these arts courses themselves, which may prove more likely to facilitate longer-term, ongoing projects and endeavors that span several course meetings. Though seemingly counterintuitive, student descriptions of their flow-inducing classrooms indicated very little influence (or, perhaps, interference) from a teacher. The participants’ lack of emphasis on teacher influence aligns with or surpasses the educational trend toward student-centered learning. Administrators may consider offering educators professional development opportunities focused on student directed learning approaches, alternative
project design, or lesson planning and allot time for the preparatory work necessary to launch and manage long term academic endeavors for students.

In terms of pragmatic possibilities, this theme implies the need for educators to reflect upon the relationships between scheduling and engagement. Researchers (Anderson & Walberg, 1993; Lee & Smith, 1993) have asserted the need to restructure educational schedules to allow for more student-directed and engagement promoting work time. Generating student flow requires reasonable blocks of time during which students are able to immerse themselves in an appropriate task. Short schedule blocks and pressure to display a multitude of instructional approaches in a given time frame are just some of the impediments to this consideration.

Implications of Group Dynamics: Peers Influence Flow. Emergent data and themes resulted in a finding notable for its lack of references to instruction or instructors. This suggests that either students fail to view the teacher as a pivotal mechanism for designing flow experiences for students or perhaps believe that their flow experiences rest under their own control and within the influence of their peers. Irrespective of this ambiguity, this finding implies the need to further explore the potentials of group flow in the educational context and beyond.

Implicit in these findings is the potential for the application of flow theory through a broader psychosocial lens, a view that may extend the exploration of flow from the individual to the group. In other words, the hybridization of positive psychology and psychosocial or sociological lenses may hold promise for understanding and encouraging groups of individuals, with obvious associations for education. Though, as detailed earlier in this chapter, engagement theories provide ample explorations of groups and
engagement, the explicit application of flow theory to this realm of educational research is fledgling, if not completely absent.

Limitations

There are several limitations to this study. First, the relatively small, and criterion-based sample limits the scope of applicability. Results were generated from the academic arts experiences of five students from a single region. Second, recruitment materials referenced the facets and sensations of flow verbatim, supplying participants with preemptive context for the conversations that followed. For example, references to control were present in the student questionnaire (Appendix B), which may have affected participants’ responses or diction. Participants may have relied, in varying degrees, on the explicit and implicit content of this questionnaire, which may have supplied direction for their responses to interview questions. Students entered the interview phase with a potential understanding of the study’s nature, which may have steered their reflection and recognition prior to the interview process. The third limitation lies in the relative low number of interview questions. Participant response density varied by individual and question type, resulting in incongruent length and depth of participant responses. Student participants in this criterion sample may tend to favor their electives course experiences, which produced a fourth limitation. It is possible that their enthusiasm for, and dedication to these course involvements may inflate the significance and frequency of moments of peak engagement. While these factors limit the potency of the findings, results were built with these factors in mind, thereby preserving the value of the study.
Topics for Additional Study

Embedded in and absent from this research study are several potential directions for research. Participants’ abilities to identify and discuss flow may also suggest that educators should engage in flow-centered inquiry with students. Isolating the circumstances that surround peak engagement may have several benefits: students may be prompted toward reflection and metacognition, while educators may inform practice and pedagogy aimed at enhancing student engagement. Exploring educational engagement research through the theoretical lens of flow continues to hold promise for educators and learners.

Also of prospect is considered attention on younger populations of study pools based on their potential competences to produce viable data. Though this study found yielded meaningful responses from secondary school participants, researchers may eventually expand the parameters of education flow study to even younger populations of learners. Participants’ adeptness in articulating the phenomenon of flow substantiates the furtherance of research with either analogous or wider samples. Similar studies with larger samples or longitudinal scopes may be worthwhile.

In regard to understanding the effects of temporal phenomena and student autonomy and control, researchers may attend to populations and disciplines and favorable or unfavorable to student engagement or explore scheduling, alternative programs, student-directed coursework, dual enrollment, independent studies, online learning, or other avenues in which inherent platforms for flow exist.

Researchers may also choose to explore whether the notion of like-minded peers is the byproduct of an environmental or communal phenomenon, or the curricular contexts of student autonomy. Future research may include explorations into non-arts-
based subject areas, such as math and science. Also worthy of further tertiary consideration is a focus on how teachers experience the flow phenomenon in their classrooms.

**Conclusion**

This proposal has demonstrated how the research project – to conduct an interpretative phenomenological analysis of secondary arts students’ flow experiences– responds to the problem of practice and satisfies a gap in prevailing literature. Though the problem of engaging all students will not be remedied by this research project, the results of this study highlight student perspectives regarding their peak experiences in the arts, providing insight into the contexts necessary for more widespread effect. Drawing upon Shernoff & Csikszentmihalyi’s (2008) qualitative framework grounded this study in the existing field of flow research, while seeking and interpreting the perspectives of arts students offered a unique counterbalance.

This study’s findings suggest that educators hold the potential to make instructional decisions that create a learning environment conducive to student flow experiences. Many of the school-based factors pinpointed by participants or interpreted by the researcher do not require infrastructural, pedagogical, or curricular overhaul. The factors are, instead, relatively straightforward and suggest that educators aiming to promote the flow experiences of their students should: engage in flow-centered inquiry with students; consider degrees of challenge and potential for autonomy when designing activities, emphasize systematized instructional activators; recognize and appreciate temporal parameters; and harness the power of community in the classroom. Teachers
yield the power to construct spaces and circumstances within which adolescents may engage and thrive.

If the arts are to endure the onslaught of budgetary deductions and the predomination of technology, educators must understand how students experience their immersions in arts-based academics (Eisner, 2004; Beveridge, 2010). This requires deliberate approaches to understanding the lived experiences of students and their flow experiences in the arts. Making sense of these shared arts experiences aids in educators’ understanding of peak engagement and elucidates the means by which optimally engaging experiences across subject lines can be promoted and sustained.

Across the country, educators are working diligently to shrink the nation’s academic achievement gap. Movements in theory and practice have formed an amalgam of solutions to these complications. Though navigating this intellectual nebula proves challenging, most educators would likely agree that foundational to any educational system is the engagement of its students. Raider-Roth (2005) wrote that “our deepest hope for our children is that they will construct knowledge in school about themselves, their community, and the world that is robust, resilient, and creative,” helping them become contributors who can “improve our world,” “participate in our democracy,” and “take responsibility in an increasingly complex society” (p. 18). Understanding how arts students make sense of their experiences with peak engagement may help educators stimulate immersive, flow-promoting learning experiences that can help to transform such hopes into realities.
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Appendix A

March 3, 2013

Human Subject Research Protection
Northeastern University
960 Renaissance Park
360 Huntington Ave.
Boston, MA 02115-5000

Dear Human Subjects Committee:

Todd Kefor, a student at Northeastern University, has provided the Norton High School with a thorough outline of his proposed research project, tentatively titled *Arts Students in Flow: An Interpretative Phenomenological Analysis*. It is understood that this study will ask high school students, selected through a brief survey pool, to engage in interviews as part of the study. It is estimated that 5 students will meet the criteria for inclusion.

We further understand that, pending IRB approval, Todd Kefor will administer the 15-minute surveys and (approximately) 30-45 minute interviews to students at a convenient time during the current school year.

Todd Kefor has further informed us that he will only include participants who assent to the study and whose parents/guardians provide written consent for their child’s participation in the study. Before the study begins, participants’ parents will receive written study details with directions on how they may easily withdraw permission for their child’s participation. Furthermore, students may personally opt out at the time of the survey administration. Whether a student participates or not will have no bearing on that student’s grades.

In conclusion, Todd Kefor is granted permission, for up to one year, to collect the required data and conduct his study at Norton High School. Todd Kefor has agreed to inform us of significant alterations to the study, such as changes in the methodology or participant group. Please contact me at (508) 285-0101 if you have any questions.

Sincerely,

Dr. Joseph Baeta
Superintendent
Norton Public Schools

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APPROVED
NU IRB# 0814-001
VALID THROUGH 3-1-14

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Northeastern University - Human Subject Research Protection
Rev. 03/2013
Dear Arts Student,

I am currently a doctoral student at Northeastern University and an English and art teacher. I am seeking participants for a study entitled *Arts Students in Flow: An Interpretative Phenomenological Analysis*. Through this study, I aim to learn more about arts students' experiences with engagement. I am inviting you to complete the following questionnaire. This questionnaire will help me to determine which students best meet the study criteria. I will then invite these students to participate in two interviews. Please complete the questionnaire carefully and honestly.

After reviewing the following questionnaire, I will only include participants who assent to the study and whose parents/guardians provide written consent for their child’s participation in the study. Participants have no obligation to participate and are free to withdraw at any time. Before the study begins, participants’ parents will receive written study details with directions on how they may easily withdraw permission for their child’s participation. Whether a student participates or not will have no bearing on that student’s grades.

**If you choose to opt out of participation, simply check off the opt-out preference at the bottom of this form.**

I am interested in interviewing students who experience flow in the arts. The following questions will aid my ability to determine your suitability for this research. Please circle one response for each question.

1. I often experience a feeling of being “in the zone” or highly engaged in an arts based activity.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

2. I often experience a feeling of being “in the zone” or highly engaged in an arts course in school.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

During these experiences…

3. …I feel productive and aware of my actions.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. …my sense of focus is narrowed.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. …I do not feel self-conscious.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

6. …I feel in control.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

7. …I work carefully toward a goal.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree
Please make a selection:

____ I am willing to consider participation in this study (for which I would be asked to participate in 2 interviews)

____ I prefer to opt-out of this study and wish to withdraw my name from consideration

Name: _______________________________  Signature: _______________________________

APPROVED

NU IRB 1/4-14 02 14
VALID 1/4-14
THROUGH 1/4-15
Appendix B
Parent Opt-out & Participant Questionnaire/Opt-out Forms

Dear Parents:

I am a doctoral student at Northeastern University undertaking a research study entitled *Arts Students in Flow: An Interpretative Phenomenological Analysis*. In this study, I will ask high school students, selected through a brief survey pool, to engage in interviews regarding experiences with peak engagement in arts-based courses. It is estimated that five students will meet the criteria for inclusion. I will only include participants who assent to the study and whose parents/guardians provide written consent for their child’s participation in the study. Students have no obligation to participate and are free to withdraw at any time. Before the study begins, participants’ parents will receive written study details with directions on how they may easily withdraw permission for their child’s participation. Whether a student participates or not will have no bearing on that student’s grades.

To begin recruitment for this study, I will distribute a brief questionnaire. If you would prefer that your child be excluded from this questionnaire and from the process as a whole, simply check the option and sign (below). I will distribute the questionnaire no earlier than seven days from today (XX-XX-XXXX). Students whose parents return this letter with a signature within one week of this date will not receive a questionnaire or be solicited for the study. Unreturned forms will indicate a willingness to allow your child’s participation. Students may also personally opt out at the time of the survey administration.

If you have any questions about this study, please feel free to contact me at kefor.t@husky.neu.edu. You can also contact Dr. Jane Lohmann, the Principal Investigator, at j.lohmann@neu.edu.

Thank You,

Todd Kefor

_____ I prefer that my child, ___________________________, be excluded from this research study.

Signature: ___________________________ Date: ___________________

APPROVED
NU IRB
VALID 6-1-12
THROUGH 5-30-13
Appendix C

Participant and Parent/Guardian Invitation & Informed Consent Form

Dear Students and Parents:

I am a doctoral student at Northeastern University undertaking a research study entitled *Arts Students in Flow: An Interpretative Phenomenological Analysis*. In this study, I will ask high school students, selected through a brief survey pool, to engage in interviews regarding experiences with peak engagement in arts-based courses. It is estimated that 5 students will meet the criteria for inclusion.

I will only include participants who assent to the study and whose parents/guardians provide written consent for their child’s participation in the study. Students have no obligation to participate and are free to withdraw at any time. Before the study begins, participants’ parents will receive written study details (attached) with directions on how they may easily withdraw permission for their child’s participation. Furthermore, students may personally opt out at the time of the survey administration. Whether a student participates or not will have no bearing on that student’s grades.

If you have any questions about this study, please feel free to contact me at kefor.t@husky.neu.edu. You can also contact Dr. Jane Lohmann, the Principal Investigator, at j.lohmann@neu.edu.

Thank You,

Todd Kefor
Northeastern University, College of Professional Studies

Name of Investigator: Todd Kefor

Title of Project: Arts Students in Flow: An Interpretative Phenomenological Analysis

Informed Consent to Participate in a Research Study

Student Participant: We are inviting you to take part in a research study. Feel free to ask the researcher any questions that you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Parent/Guardian: We are inviting your child to take part in a research study. Feel free to ask the researcher any questions that you have. When you are ready to make a decision, you may tell the researcher if you want your child to participate or not. Your child does not have to participate if he or she does not want to. If he or she decides to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Why am I being asked to take part in this research study?

Student Participant: Your participation is being invited based upon the results of a survey regarding student engagement in the arts.

Parent/Guardian: Your son/daughter’s participation is being invited based upon the results of a survey regarding student engagement in the arts.

Why is this research study being done?

The intention of this study is to explore the peak experiences of arts students and provide means by which educators can increase and promote such experiences.

What will participants be asked to do?

The researcher will conduct two 30-45 minute interviews, scheduled for mutually convenient times and locations within the school, with each participant.

Will there be any risk or discomfort to me?

There are no foreseeable risks, harms, discomforts or inconvenience (beyond that of the 2 interviews) anticipated for participants.
Will I benefit by being in this research?
There will be no direct benefit to you for taking part in the study. However, the information learned from this study may help educators better understand and promote student engagement.

Who will see the information about me?
Your identity as a participant in this study will not be known to anyone with the exception of the researchers and, potentially, authorized personnel. In rare instances, authorized people may request to see research information about you and other people in this study. This is done only to be sure that the research is done properly. We would only permit people who are authorized by organizations such as the Northeastern University Institutional Review Board [or if applicable the sponsor or funding agency e.g. NIH, NSF, FDA, OHRP] to see this information. Also, as a teacher, your researcher is a mandated reporter and is responsible for reporting to administrators any concerns for your safety or well-being.

Pseudonyms will be used to increase anonymity. No reports or publications will use information that can identify you in any way or any individual as being of this project. Audio recordings will be destroyed at the conclusion of the study.

Can I stop my participation in this study?
Your participation in this research is completely voluntary. You do not have to participate if you do not want to and you can refuse to answer any question. Even if you begin the study, you may quit at any time. If you do not participate or if you decide to quit, you will not lose any rights, benefits, or services that you would otherwise have as a student.

Who can I contact if I have questions or problems?
If you have any questions about this study, please feel free to contact Todd Kefor, the person mainly responsible for the research, at kefor.t@husky.neu.edu. You can also contact Dr. Jane Lohmann, the Principal Investigator, at j.lohmann@neu.edu.

Who can I contact about my rights as a participant?
If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

Will I be paid for my participation?
Participants will not be paid for their participation.

Will it cost me anything to participate?
It will cost participants nothing to participate.
For parent/guardian of participant:

I agree to have my child take part in this research.

Signature of parent/guardian agreeing to take part:

____________________________________

Printed name of parent/guardian:

____________________________________

Date: ______________________

Signature of person who explained the study to the participant above and obtained consent:

____________________________________

Printed name of person above:

____________________________________

For participant:

I agree to take part in this research.

Signature of participant agreeing to take part:

____________________________________

Printed name of participant:

____________________________________

Date: ______________________

Signature of person who explained the study to the participant above and obtained consent:

____________________________________

Printed name of person above:

____________________________________
Appendix D

Interview 1 Schedule

Interview 1

Which school subjects do you most enjoy?

What is it that you like about the (these) subject(s)?

How would you describe your level of engagement in these classes?

How do these levels of engagement compare or contrast to those in other subject areas?

How does your experience in these subjects compare to the ones you’d say you like the least?

Can you describe, in detail, what it’s like when you’re deeply engaged in this course?

How do you know you are deeply engaged?

Can you describe how you feel after these immersive experiences? When you indicated that you feel immersed in this subject, what did you mean?

How would you characterize and describe the degree of value that you place on these experiences?

Describe a time during one of your favorite subjects when you felt the most into what you were doing. What were you doing? How did you know you were engaged?

What other influences, past or present, would you say have influenced the meaning you give to your experiences with these moments of peak engagement?

How have these experiences shaped you as a person? As a learner?

Is there anything else you would like to share about this (or similar) experience(s)?
Appendix E

Interview 2 Schedule

**Interview 2**

Can you describe an instance in (subject area) when, since our last conversation, you felt as though you were completely immersed in an arts activity?

What factors contribute to this, and similar experiences? –teacher –environment –time of day –peers -any other contextual factors?

Describe your favorite learning environment within the school. What makes it your favorite?

Can you describe the actions a school might take in order to promote experiences like the ones we’ve discussed?

Can you describe the actions a teacher might take in order to promote experiences like the ones we’ve discussed?

Could you describe a classroom atmosphere or layout that would promote experiences like the ones we’ve discussed?

In general, how might educators promote the immersive experiences of their students?
Appendix F

Northeastern

NOTIFICATION OF IRB ACTION

Date: March 12, 2014  IRB #: CPS14-03-01
Principal Investigator(s): Jane Lohmann
                         Todd Kefor
Department: Doctor of Education Program
            College of Professional Studies
Address: 20 Belvidere
         Northeastern University
Title of Project: Arts Students in Flow: An Interpretative
                 Phenomenological Analysis
Participating Sites: School District Superintendent's Permission Letter pending
DHHS Review Category: Expedited #6, #7
Informed Consents: One (1) signed parent/guardian consent and child assent form
                   One (1) passive consent for survey

This project is approved under 45CFR46.404 which applies to children as research subjects and involves research not
involving greater than minimal risk. Adequate provisions are made for soliciting the assent of the children and the
permission of their parents or guardians, as set forth in 45CFR46.408.

Monitoring Interval: 12 months

APPROVAL EXPIRATION DATE: MARCH 11, 2015

Investigator’s Responsibilities:
1. The informed consent form bearing the IRB approval stamp must be used when
   recruiting participants into the study.
2. The investigator must notify IRB immediately of unexpected adverse reactions, or new
   information that may alter our perception of the benefit-risk ratio.
3. Study procedures and files are subject to audit any time.
4. Any modifications of the protocol or the informed consent as the study progresses
   must be reviewed and approved by this committee prior to being instituted.
5. Continuing Review Approval for the proposal should be requested at least one month
   prior to the expiration date above.
6. This approval applies to the protection of human subjects only. It does not apply to any
   other university approvals that may be necessary.

C. Randall Colvin, Ph.D., Chair
Northeastern University Institutional Review Board

Naomi Regina, Director
Human Subject Research Protection