Enthusiastic Students:
The Motivational Consequences of Two Alternatives to Mandatory Instruction

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Donald A. Berg

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Table of Contents

Abstract

This study used Self-Determination Theory as a framework for examining the motivational consequences of non-mandatory instruction in the contexts of a home school resource center and a democratically organized school. A positive correlation between age and intrinsic motivation was hypothesized based on the finding of Apostoleris (2000) based on a sample of home schoolers using Harter's (1981) measure of intrinsic/extrinsic motivation, which was in stark contrast to the well-replicated observation of a negative correlation between age and intrinsic motivation in traditional schools. Using the Academic Self Regulation Questionnaire in order to observe intrinsic motivation and three degrees of extrinsic motivation independently, no statistically significant correlations between age and any of the four motivation subscale scores were found. Three interpretations of this result are proposed and these particular contexts for non-mandatory instruction are further illuminated by interviews with seven teachers.

This thesis is dedicated to my intellectual ancestors who gave me hope that education can be better and to my biological ancestors who gave me support to act accordingly: John Dewey, Marietta Johnson, A.S. Niell, Al Fenn, & Gertrude Fowler.

Introduction

For a hundred years or more renowned critics of the dominant academic classroom schooling system, including John Dewey (1994), A.S. Neill (1992), George Leonard (1968), John Holt (1976), Raymond and Dorothy Moore (1986), and Alfie Kohn (1999), have lamented the detrimental effects of mainstream educational institutions on children's motivation. In spite of this long standing criticism, data on the motivational consequences of long established alternatives to the traditional classroom, such as democratic schools and homeschooling, are sadly lacking. If the motivational consequences of schooling are important, as most critics of schooling and educational psychologists would agree they are, then it is critically important to evaluate the motivational consequences of both mainstream schools and substantive alternatives that promise different motivational outcomes.

> [B]ring up education in any cocktail party and within five minutes people are going to be debating, essentially, their views on human nature which are so deep and so tangled and so problematic … it's like debating free will. *A Democractic School (DS) Teacher*

As this teacher has wisely pointed out discussing education can tap into the nether regions of philosophy. I will not attempt to address the philosophical issues, but given this decision not to address them, I must make clear the conceptual foundations that I use to construct my understanding of the situation in education and that motivate my approach to that field through the lens of psychology. Once those foundations are laid then I will characterize the situation of motivation in education that inspires this study.

Organism With a Self

This author takes it as axiomatic that humans are complex adaptive systems that are structurally coupled with their environment following Capra's (1996) definition of life. Structural coupling means that humans are in an inextricable and inherently intimate communion with their environment such that they are constrained in their choices of

action by both the information from the environment and the embodied structures with which they can process that information (Lakoff & Johnson, 1999). Taking a "mind" to be simply the embodied and relational process for monitoring and modifying the flows of energy and information within an organism (Siegel, 2010), then when we consider the issues of motivation we are necessarily dealing with the interactions between the information in the environment and the information in the mind that directs expenditures of energy at the level of the whole organism.

The information processing structures that are available to humans includes basic cognitive maps of our bodies as they are situated in the world, which is a feature we have in common with most other macroscopic organisms (Damasio, 2010). As Damasio (2010) points out, humans also have an additional capability of mapping how we might be in the distant future or have been situated in the distant past. This mapping across extraordinary temporal distance appears to be a distinguishing feature for humanity; enabling us to utilize feedback information from both internal and external sources to give rise to an incredibly robust, dynamic, and complex system of representations that we know as a "self." This complex system of representations emerges as our phenomenal center of personal experience and agency which is not isomorphic to our physical being nor with who we are as a socially defined person (Ryan & Connell, 1989).

Motivation and the Self

Motivation at the most basic level involves the initiation, maintenance and intensity of action taken towards a goal (Bergin, Ford, & Hess, 1993; Deci & Ryan, 2000). Currently in the field of psychology human motivation is studied as a cognitive process: an internally mediated transformation of available information, both from the environment and an individual's own mind, into choices about how to direct attention and enact behavior. Motivational processes are not conscious, but conscious reflection on motivation is taken to be a generally reliable source of information about the primary goals and values an individual's behavior is directed towards achieving or expressing. Research has revealed that goals that are consistent with an individual's identity and values can be pursued entirely outside of consciousness (Aarts, Gollwitzer, & Hassin,

2004). The fact that the unconscious goal pursuits must operate within the limitation of consistency with an individual's values supports the notion that the most prominent motivations are likely to be accurately reflected in self-reports.

The self is crucial to understanding motivation because, unlike other animals, humans attend to and give significance to whether the causal agency that makes decisions about how energy is expended are internal to their self-concept or external to it (Deci & Ryan, 2000). Implicit in the dominant theory of motivation, Deci and Ryan's Self-Determination Theory (SDT), is the notion that humans must automatically construe the information they use to make behavioral and attentional decisions relative to the boundaries of the self-concept. When causal attributions for one's own behavior fall outside the self then the actions are construed to some degree as coerced or compelled rather than self-generated or freely chosen. This reference to the self-concept establishes the dichotomy of intrinsic versus extrinsic motivation, where motivations that are construed to be external to the self are called extrinsic and motivations that are construed to be internal to the self are called intrinsic (Ryan & Connell, 1989).

While the basic terminology of intrinsic versus extrinsic suggests a simple dichotomy recent research has found that a more nuanced conception is more accurate. In the early years of research into this construct one of the main measures of intrinsic versus extrinsic motivation was developed by Harter (1981) using the dichotomous conception. The dichotomous conception assumes that the two types of motivation would be inversely related such that an increase in one would inherently cause a decrease in the other. More nuanced conceptions within the SDT research tradition have developed, along with reliable instruments, to consider four levels of extrinsic motivation. While intrinsic motivation is agreed to be a unitary construct, extrinsic motivation consists of an internalization continuum with four distinct levels: external, introjected, identified and integrated (Chirkov et al., 2003; Ryan & Deci, 2000). These levels of internalization indicate the degree to which an individual's actions are endorsed by the self. Over the course of development children, in particular, go through a process of learning about, often later endorsing, and self-regulating in accordance with various cultural restrictions on their behavior. These endorsements of cultural restrictions and self-regulatory accomplishments suggest that the individual has successfully adjusted to their social

situation. For example, consider a mother crossing a busy street with a toddler. The mother has integrated the necessity of looking both ways before crossing into her self-image whereas her offspring must be externally regulated in order to achieve the goal of crossing the street safely. Yet, over the course of some years the child will also integrate the socially constructed situation of safely crossing a busy street into his or her self-image, thus achieving successful adjustment. Initially, the cultural information is clearly external to their self-concept, yet by the time they have become adults they have somehow incorporated those concepts into their assumptions about the world and themselves. There are clearly different levels of integration that occur and have different behavioral and experiential consequences. The levels from least to most integrated are: external, where compliance is driven by rewards and punishments; introjected, where compliance is driven by interior pressures such as guilt or anxiety; identified, in which compliance is driven by acknowledgment that the action is consistent with the individual's values; and integrated, in which compliance is driven by acceptance of the activity as consistent with self-expression (Chirkov et al., 2003; Ryan & Deci, 2000). The increasing levels of individual self-regulation of action are also associated with increasing levels of autonomy, competence in the situation, and relatedness with other individuals encountered there (Ryan & Deci, 2000).

Self-Determination Theory (SDT) posits inherent psychological needs that must be met in order for intrinsic motivation to emerge with a substantial body of empirical evidence to support this claim (Baard, Deci, & Ryan, 2006; Deci & Ryan, 2000; Ryan & Deci, 2000; Ryan & Deci, 2006). Those three qualities, autonomy, competence, and relatedness, are posited within SDT to be fundamental human needs where need goals are distinct from merely desirable goals. That is to say, needs constitute a form of goal that is universally present in humans and directly tied to human well-being such that thwarting a need leads to ill-being while meeting a need leads to well-being. Primary evidence for the claim that the constructs of autonomy, competence, and relatedness represent universal needs is based on two lines of inquiry (Deci & Moller, 2007). For example, two studies have supported the conception of the needs as psychological nutriments through daily diary studies that examined relations between measures of well-being and need satisfaction both within and between adult persons (Reis, Sheldon, Gable, Roscoe, &

Ryan, 2000; Sheldon, Ryan, & Reis, 1996). In Sheldon et al. (1996) the measures of well-being included daily physical symptoms, vitality, positive affect and negative affect. The results from the well-being measures, both individually and in aggregate, were correlated with trait autonomy and trait competence as well as activities participants spent the most time on and their motivations for participating in those activities. The measures of well-being correlated significantly with most of the measures of need satisfaction as both traits and in the course of daily activities. The Reis et al. (2000) study focused on seven specific types of activities drawn from the literature as being associated with relatedness using some of the same measures as used in Sheldon et al. (1996) plus a symptom checklist. Analysis provided strong support for the hypothesis that psychological need satisfaction is positively related to standard measures of well-being and negatively related to standard measures of ill-being. Véronneau, Koestner, and Abela (2005) established the connection between need satisfaction and both well-being and ill-being in samples of 3rd and 7th graders across six weeks using standard self-report questionnaires. They found that affect and the symptoms of depression were associated with need satisfaction. These studies provide direct evidence supporting the assertion that autonomy, competence, and relatedness represent human needs in that they are directly associated with well-being across most of the human age span.

The second line of evidence that the SDT framework refers to human needs establishes universality through cross-cultural studies showing that the effects of these needs exist independent of culture. For example, in comparisons across the U.S.A. and Bulgaria (Deci, Ryan, Gagne, Leone, Usunov, & Kornazheva, 2001) and the U.S.A, South Korea, Turkey, and Russia **(**Chirkov, Ryan, Kim, & Kaplan, 2003) the researchers used common measures of need satisfaction: well-being as self-esteem, life satisfaction, work engagement, etc.; and ill-being as either anxiety or depression. In both studies the authors were able to point out significant cultural variations in the conceptions and expressions of how needs can be understood and satisfied, but the satisfaction still bore significant relations to well- and ill-being independent of those cultural variations on the theme.

According to SDT the two critical processes that drive human development are intrinsic motivation and internalization (Deci & Ryan, 2000). SDT posits that the needs

for autonomy, relatedness, and competence are fundamental psychological nutriments in a manner similar to how material nutrients are fundamental biological needs. Healthy psychological functioning requires a human organism to actively seek out experiences in the world. But the experiences sought after will not be random, they will follow from a combination of internal cognitive capacities, such as our inherent seeking out of social information, language, and other specific inputs, and environmental contingencies that would necessarily shape what counts as competence in the context of those inputs.

Autonomy is the need to be the volitional and causal source of your own activities (Reeve, Nix, & Hamm, 2003). When one has volition that means that one had the intention to act whereas being the causal source is when one identifies one's own activity as the cause of an event. For instance, when the doctor uses a small hammer to activate the patellar reflex by striking a tendon just below a person's knee cap, thus making their leg kick, the individual knows their body was the cause of the event, but they did not have volitional control in that event, the doctor did. Making choices is also associated with autonomy, but the sense of autonomy can vary across cultures in this regard. In a study of Chinese school children they were found to have a sense of autonomy when significant others, such as mothers and teachers, made choices about their activities on their behalf (Bao & Lam, 2008). The emphasis on the active organism in SDT implies that humans should only become passive or lazy through learning that their actions towards those ends will be consistently thwarted in their current environment.

Competence is the need to have a sense of being effective at achieving relevant goals in a situation (MacIver, Stipek, & Daniels, 1991). In a sense this need might seem obvious since the inability to achieve need goals such as attaining food and water would lead to death. But in the human psychological sense it is important that people perceive that they are competent which is independent of their objective level of competence. In MacIver et al. (1991) they tracked changes in perceived competence in a variety of academic courses in junior high and high school along with changes in intrinsic motivation demonstrated by effort and interest at the beginning and the end of a semester. Their results showed that the change in perceived competence were matched to changes in the same direction for intrinsic motivation and their analysis suggested that competence plays a causal role in the observed changes in intrinsic motivation.

Relatedness is the need to feel connected to and recognized by other people (Ryan & Deci, 2006). In the study of Chinese children's autonomy (Bao & Lam, 2008) in the situation of a significant other making a choice on their behalf the autonomy scores were mediated by the quality of the relationship with the significant other. Bao and Lam (2008) found that the better a Chinese child's relationship is with her mother, the more autonomous she feels when her mother makes a choice for her. This was also true of the child's teacher; better relationships are associated with more of a sense of autonomy when the teacher makes choices on the child's behalf, at least in China. The need for relatedness is commonly taken advantage of by parents who use a socialization technique called contingent regard in which they withhold expression of relatedness to their child until the child performs particular behaviors. Assor, Roth, and Deci (2004) found that the parents who used this technique invoked costs in terms of a child's affect and well-being. Another common way to take advantage of the need for relatedness is to tune into the child's experience through a parenting technique known as mutually responsive orientation (Kochanska, 2002). This technique involves a combination of responsiveness and shared positive emotions that are associated with a relationship that is positive, close, mutually binding, and cooperative.

It is important to remember that the three psychological needs are interrelated and self-perceptions are central to meeting all of them. In order for these needs to be met the person has to perceive their situation and how they, as a self, are positioned in that situation in social and psychological terms, not just physical terms. Self plays a crucial role in the function of the human mind as a mechanism for selecting and coordinating organismic goals informed by personally relevant values and incorporating a wide variety of environmental (including social/cultural) information in determining courses of action. Therefore the study of motivation must be centrally concerned with the self since it is a fundamental reference point for determining what values and goals are relevant, and also its boundary serves as a key component in determining how much energy and what quality of attention to invest in particular courses of action.

Motivation in Education

Education is the broad field with which this study is concerned, but more specifically the type of education that occurs in schools for children and youth. The primary concern is the motivation of students across the age span from 7 to 17 years old to accomplish the tasks explicitly expected within the context of classes taught by an instructor, usually an adult, and also in the more general school context. This age span covers most of the years of compulsory schooling in the United States and typically school attendance occurs throughout this period. Developmentally it covers a period of dramatic expansion of the child's participation in the community beyond their immediate family, with school presumably playing a significant role in the nature of that expansion given that a significant portion of their waking hours are spent in school during this time. Children in this age span have been studied extensively in traditional school environments and much of what we know about this developmental epoch is informed by the behavior of children who have lived a major portion of their lives within the context of mandatory instruction. The mainstream classroom experience assumes in both practice and policy and across organizational variations such as private, public, charter, etc., that children must be subjected to mandatory instruction by a teacher, who is typically an adult chosen by the school to fulfill that role for students assigned to him or her. Motivation within the context of classrooms is taken to be about how children understand their own participation in typical classroom activities and one of the key questions that has been addressed by the extensive psychological literature on classroom schooling is what kind of motivation is preferable in the instructional context.

Studies examining motivation in classroom settings have found that students who score higher on intrinsic motivation measures also have greater preference for challenge, conceptual understanding, creativity, engagement in classroom activities, and out of school engagement in activities learned in the classroom (Stipek, 2002). Greater intrinsic motivation is also associated with greater achievement, more favorable perception of academic competence, and less anxiety, at least in students aged 9-17 years old (Gottfried et. al., 2001). Given 1) these varied benefits and 2) the broad empirical support for the SDT account which shows that extrinsic motivations are associated with the

diminishment of well-being and the various learning benefits while intrinsic motivation is associated with their increase (Baard, Deci, & Ryan, 2004; Deci & Ryan, 2000; Ryan & Deci, 2000, 2006) then intrinsic motivation can be considered the most desirable form of motivation for learning in general, and for enabling children to engage with instructional activities more specifically.

Teacher's Role in Motivation

There is a whole line of research that has looked at the motivational influences between teachers and students (e.g., Assor, Kaplan & Roth, 2002; Jang, Reeve & Deci, 2010; Radel, Sarrazin, Legrain & Wild, 2010; Reeve, Jang, Carrell, Jeon & Barch, 2004; Reeve & Jang, 2006). SDT informed research has shown that the opposite of autonomy supportive behavior by teachers or parents is controlling behavior. In a review Reeve (2009) examined influences on teachers that might contribute to more controlling behaviors and suggests that teachers in traditional classroom environments have a variety of influences that act upon them from "above" (e.g. occupying a powerful social role), "below" (i.e. student behaviors), and "within" (e.g. personality dispositions and beliefs). Teachers may tend to behave in controlling ways because of three forms of influence which are "above" the teachers and include cultural and job expectations which suggests that the supports for teachers' controlling (and, thus, need thwarting) behaviors are entrenched in subtle and pervasive systems of influence. The sources of that influence are often distant from the day-to-day interactions of students and teachers, so it is not enough to look merely at teacher/student interactions for complete understanding. However, the teacher is one of the most salient features of an instructional environment, so it is worthwhile to start there.

Jang et al. (2010) combined an observational method and self-reports of 2523 students' engagement to compare the instructional styles of their 133 teachers in nine public high schools. Jang et al. (2010) conceptualize engagement as a reflection of the behavioral intensity and emotional quality of students' active involvement in a learning activity. They found through hierarchical linear modeling that autonomy supportive teaching styles led to greater student engagement with 14% of the variance accounted for between classes, presumably because of the unique contribution of teachers (as opposed

to within class, which would be due to variations between the students). This suggests that the teacher is a significant influence on students' motivation.

Radel et al. (2010) looked directly at the contagiousness of motivation across teachers and students for a novel ball game taught in P.E. classes. In this experiment groups of French senior high school students were told that an instructor they were about to meet was either a reluctant paid professional or an enthusiastic volunteer who would teach them a special game for blind teenagers. The instructor was, in fact, always the same professional presenting the same scripted lesson each time. The adult game instructor left as soon as the lesson time was up then the initial student group was informed they each would teach the game to another pair of students. After a designated period for that lesson the entire group was informed that the lesson was done, their regular instructor had other business to attend to, and they had a free choice period in which they could play basketball, continue with the game they had just learned, or do nothing. Those who had been informed that the original adult game instructor was a reluctant well-paid professional (thus it could be inferred that he was extrinsically motivated) played less of the new game and also self-reported less intrinsic motivation for it as well. Thus the merely inferred motivation of the adult instructor affected the motivations of their students and also the student's of their students. This motivational contagion effect suggests that the influences that affect the motivation of a teacher will also affect the motivation of students. Thus it can be expected that in schools in which teachers are controlled by their supervisors they will be likely to show less positive results than in school settings in which teachers are supported to be autonomous.

Given the influence of teachers on students and the variety of influences on teachers to thwart students' needs for autonomy, then the question arises what motivational consequences have been observed in traditional classrooms. Both longitudinal and cross-sectional studies of children in traditional classrooms show a well-documented decline in intrinsic motivation in student populations from first through twelfth grades (Bouffard, Marcoux, Vezeau & Bordeleau, 2003; Corpus, McClintic-Gilbert & Hayenga, 2009; Gottfried, Fleming & Gottfried, 2001; Harter, 1981; Hunter & Csikszentmihalyi, 2003; Lepper, Corpus & Iyengar, 2005; Otis, Grouzet & Pelletier, 2005; Pintrich, 2003; Prawat, Grissom & Parish, 1979; Wigfield, Eccles & Rodriguez,

1998). Recent work that makes distinctions between different kinds of extrinsic motivation suggests that extrinsic motivation may also decline across the school years in children in traditional schools (Corpus et al., 2009; Otis et al., 2005).

The observed declines in intrinsic motivation should be alarming to educators, policy makers, and society because intrinsic motivation is also an inherent property of healthy children (Deci & Ryan, 2000; Véronneau, Koestner, & Abela, 2005). Intrinsic motivation can be enhanced or thwarted by the conditions in which the children are situated (Jang et al. 2010; Koestner, Ryan, Bernieri & Holt, 1984), as renowned critics have maintained for a long time. Thus, it is disturbing to think that the majority of schools appear to be systematically compromising the well-being of some proportion of the children they serve.

There are a few suggestions from empirical studies that the declines may not be inevitable, which is a crucial point if the critics' arguments and proposals for change are to be taken seriously and the classroom situation improved. Gottfried et al. (1998, 2001) studied 96 children attending mainstream classroom schools whose academic intrinsic motivation was measured at ages 9, 10, 13, 16, and 17 as part of a larger longitudinal study. The measures they used specified academic subject areas (math, science, social studies, etc.) as well as motivation for school in general. They found that declines in intrinsic motivation with age occurred for school in general and in all but one subject area the exception being social studies. Using structural equation modeling they also found that children's intrinsic motivation was increasingly stable over the course of the years and that each year was a direct predictor of the next year, as well as an indirect predictor of later years' motivation scores. They conclude from their observation of the subject specificity of declines and the cumulative nature of intrinsic motivation scores that the declines are not inevitable and suggest that proper intervention at an early enough age may enhance academic intrinsic motivation over the years of a child's school career.

In a person-centered study of classroom motivation across one year Haimovitz, Wormington, and Corpus (2011) reported on what they termed "decliners" versus "maintainers" regarding students' changing levels of intrinsic motivation. Though they did not report on what proportion of their maintainer category may have shown an increase, they defined the category to include the possibility of rising motivation which

suggests that at least for some students increases in intrinsic motivation occurred within the course of a year.

There is also a cross-sectional study that suggested at least one population of children may show the opposite pattern: a positive, instead of a negative, correlation between age and intrinsic motivation. Apostoleris (2000) studied intrinsic motivation in homeschooling children aged six to sixteen years from Massachusetts. He aimed to see if SDT would be a useful framework for studying homeschooling and specifically investigating the hypothesis that providing support for the three psychological needs posited by SDT (autonomy, relatedness, and competence) would positively predict children's intrinsic motivation. The study assessed the learning contexts of 60 homeschooling families through a structured interview with the primary homeschooling parents (59 mothers and 1 father). The interviews were coded using sets of ratings in three broad categories of Autonomy Supportiveness, Relatedness Supportiveness, and Competence Supportiveness based on SDT. All data were based on information gathered with respect to only one child from each family who completed a survey of standard instruments that measure motivation and need satisfaction. Apostoleris (2000) also looked at demographic, personality and relationship factors.

A major issue with Apostoleris' (2000) study is the measure of intrinsic motivation that was used. The measure of intrinsic versus extrinsic motivation developed by Harter (1981) operationalized the two types of motivation as inversely related polar opposites. This means that when a child was selecting their response they were forced to choose an answer that determined both their intrinsic and extrinsic scores at the same time, where an answer that indicated high intrinsic motivation was also inherently low on extrinsic motivation, and vice versa. Let's pretend a child is answering one of the questions on Harter's (1981) instrument and happens to be thinking about an experience in which an intrinsic motivation was the most salient motive for him or her in the moment but some extrinsic motivation was also playing a significant role, as well. In this case the answer given would likely indicate the child's noticing the prominence of the intrinsic motivation, but due to the nature of the instrument, the child's response would inadvertently under-report the child's level of extrinsic motivation. More recent work in the field of motivation has found that the two types of motivation, intrinsic and extrinsic,

are orthogonal constructs which can vary independently from each other (Lepper et al. 2005). Meaning that when a child is characterizing their motivations and they get to choose a score separately for intrinsic motivation and the various forms of extrinsic motivations then the two broad categories of motivation, intrinsic and extrinsic, do not show an inverse relationship. Given this independence of intrinsic and extrinsic motivations then the operationalization of them as inversely related raises the question of how to interpret any differences that might be observed in a cross-sectional study. Apostoleris (2000) clearly stated that he approached his study with a focus on intrinsic motivation and appears to have assumed that Harter's (1981) instrument would inherently indicate changes in intrinsic motivation. However, contrary to the author's interpretation it is possible that less extrinsic motivation in older youth drove the effect observed, rather than more intrinsic motivation. Thus, the Apostoleris (2000) study does not properly resolve the question of which kind of motivation differs across the ages in those home schooling children.

So the situation in education regarding motivation is that there is a well-documented decline in intrinsic motivation amongst students subjected to mandatory instruction. That decline is alarming because intrinsic motivation is both the gold standard for motivation to learn and can be an indirect indicator of children's well-being. There are a few hints in the existing data that the declines are not inevitable and one study suggests that a different pattern may exist in at least one alternative form of schooling. So let's take a closer look at what constitutes an alternative and then I'll explain how this study may contribute to our understanding of motivation in education.

Alternatives in Education

For the purposes of this study an "alternative" is considered to be an educational organization that provides opportunities for non-mandatory classroom instruction for children and youth. By this standard most of what is typically labeled "alternative" by school districts in the U.S.A., usually programs created to serve specific populations with "special" needs or students labeled "gifted and talented" or some charter schools that get more bureaucratic leeway to innovate, do not necessarily count. Home school resource

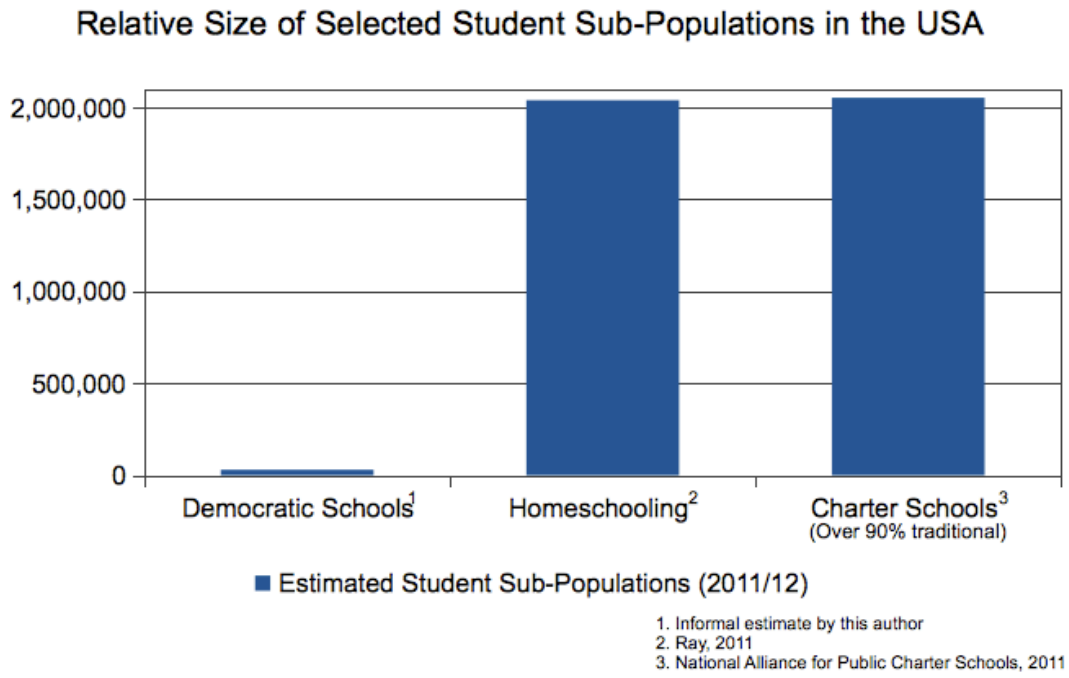
centers and democratic schools, on the other hand, are two prominent forms of alternative, in the precise sense used herein.

Home Schooling

Home schooling encompasses a variety of educational approaches that take as their common denominator the central assumption that parents are naturally endowed with the primary responsibility to educate their children independent of what educational options are made available (by the government or otherwise). This very limited commonality places no restriction on the variety of approaches to educating children that parents choose: from re-creating a school-like environment in the home, in which parents act out the role of a formal instructor; to engaging the children in the family business, in which children are given meaningful responsibilities that necessarily elicit their engagement with basic skills; to unschooling, in which the child's own interests are the primary determinant of what activities will be pursued; to as many different variations as parents could possibly dream up. This also encompasses the use of both public and private community resources and specially designated resource centers that offer a variety of instructional courses and many other types of resources for children and parents who consider themselves to be home schooling.

There were an estimated 1.5 million children aged 5-17 who were home schooled in 2007, which was 2.9% of the population of school age children in the United States of America, up from an estimated 1.7% in 1999 according to the Department of Education (Bielick, 2008). A separate independent estimate by the National Home Education Research Institute claims the number is over 2 million in 2011 (Ray, 2011, January 11). This level of participation is comparable to the charter school movement, at least 91% of which offered traditional classroom based instruction in 2001-2 (Finnigan, Adelman, Anderson, Cotton, Donnelly & Price, 2004), and may have also exceeded 2 million students in 2011 according to the National Alliance for Public Charter Schools (2011). Figure 1 shows the relative sizes of the Charter, Home, and Democratic School populations.

Figure 1. Relative Size of Selected Student Sub-Populations in the USA



Home schooling has been the subject of many non-motivational studies (e.g., Cai, Reeve & Robinson, 2002; McDowell, 2000; Medlin, 2000; Ray, 2000). Ray (2000) conducted a national survey of 1657 home schooling families with 5200 children that looked at 12 independent variables against a variety of standardized test scores. In his literature review Ray (2000) states,

> Dozens of studies have been completed regarding the academic achievement of home-educated students. In general, children who are taught by their parents score above national averages on standardized achievement tests. (p.74)… Overall, the research base to date indicates that home school students perform at least as well as public school students in the subject areas considered to be the "basics" of American education. (p.75)

The average test scores Ray (2000) found were in the 80th -87th percentiles with a high degree of variability and the five independent variables that correlated with achievement test scores were the mother's education, the father's education, years taught at home, the gender of the student, and the number of visits to the public library. However, those correlations accounted for only minimal amounts of the variance. Ray (2000) concluded that "a variety of families who represent varied philosophies and religious worldviews,

socioeconomic statuses, and races and ethnicities are clearly successful at teaching their children via home education" (p. 99). Ray (2000) made no claims regarding causes but added that, "This work … might suggest that there is something inherent to the modern practice of home education that could (or does) ameliorate the effect of background factors that are associated with lower academic achievement when students are placed in conventional public schools" (p. 99).

Given the definition of "alternative" used herein a knowledgeable reader might argue that it may inherently exclude some homeschooling families who may not be providing instruction nor have any interest in seeking it. The "unschooling" portion of homeschooling families strongly emphasize the importance of enabling children to exercise their autonomy by deciding what to study and often how (Apostoleris, 2000; Llewellyn, 1998). An extreme interpretation of this philosophy could conceivably lead to a situation in which instruction is actively avoided. However, in this author's experience and knowledge of the home schooling community (accumulated across more than a decade) this situation, if and when it arises, is most likely to be temporary. Children may need time to recover from stressful formal schooling experiences before they recover their intrinsic motivation for the particular types of learning that most adults assume are necessary (Llewellyn, 1998). Also, most families seem to discover, sooner or later, that their children's learning processes eventually outstrip both the informal learning opportunities available and the instructional capabilities of their parents. Some formal instruction is usually necessary to provide the degree of autonomy support required by the unschooling educational philosophy. Also, in the sample of home schoooling families enrolled in the Home Education Resource Center (RC) that responded to the present study several self-identified in open-ended responses as unschoolers and /or "radical unschoolers" so at least some portion of the unschooling community considers instruction in that context to be consistent with their educational philosophy.

Democratic Schooling

Democratic schooling does not have a consensus definition, but in this author's direct experience of democratic schooling and extensive conversations with democratic

school students, staff, parents, and advocates spanning more than five years, it does seem to normally include some provision for students to have a relatively high degree of autonomy in decisions regarding participation in courses of instruction, most often with the choice to opt out entirely. Democratic schooling is a far smaller movement than home schooling. As of February 19th, 2012 there were 238 schools in 33 countries that have chosen to self-identify as a democratic school on a list maintained by the Alternative Education Resource Organization (2012). With only a few hundred schools globally and a rough guess that the average number of students might fall close to 100 students then approximately twenty to thirty thousand students seems a reasonably conservative estimate of the size of the global student population in democratic schools. This small movement is notable for being long-lived and having had a degree of influence on the field of education far beyond what their numbers might suggest.

In an independent project in 2010 this author inquired informally to ascertain the founding dates of democratic schools listed on the AERO site from around the world to find out how many had been in operation for substantive amounts of time. At that time there were 62 schools for which founding dates were discovered and that had been founded in 1999 or earlier and 22 of which were founded before 1972 thus exceeding 40 years of operation. The first four schools on the list by founding date are: Marrietta Johnson's School of Organic Learning in Alabama, U.S.A., founded in 1907; Summerhill School in Suffolk, England, founded in 1921; The Margaret Lyttle Memorial School in Victoria, Australia, founded in 1931; and Play Mountain Place in Los Angeles, California founded in 1949. A.S. Neill's book *Summerhill,* which was written in 1960, was an international best-seller having sold over 4 million copies according to the edition published in 1992 and is widely acknowledged for its influence on the field of education.

The few formal studies of democratic schooling located by this author did not examine motivational constructs. Several were surveys of graduates conducted by Sudbury Valley School (SVS) in Framingham, MA, USA, (Greenberg, Sadofsky, & Lempka, 2005; Greenberg & Sadofsky, 1992), a few were independently sponsored ethnographic studies and another graduate survey conducted by a Boston University psychology professor, who is also the parent of a student/alumni at the same school, and his graduate students (Gray & Chanoff, 1986; Gray & Feldman, 1997, 2004), and one

was a case study of the patterns of touching behaviors at Summerhill School in England (Stronach & Piper, 2008) and how those patterns are in stark contrast with the patterns of extreme aversion to any touching that are coming to be expected in mainstream schools in the U.K. (which seems similar to the U.S. in this respect).

The three surveys of graduates of Sudbury found that the few distinguishing factors of that population might only include a higher than the national average rate of entrepreneurship, a slightly higher satisfaction with their lives as compared to national surveys, and a higher rate of going into careers that might be characterized as "helping" as compared with U.S. census data. The graduates of SVS did not seem to have any other outstanding features based on comparisons with national and local demographic and census data across the three studies. Gray and Chanoff (1986) conclude that given the life outcomes of SVS alumni, at minimum, there is no harm in allowing middle class kids to experience this kind of education, but further, consistent with the graduates' own evaluation of their experiences, they suggest that there may be positive attitudinal and learning benefits.

So, to return to our starting point, are the renowned critics right about the motivational consequences of schooling? The research seems to certainly support their general criticism that traditionally organized schools have a generally negative effect on student motivation. However, due to a lack of research on the alternatives those critics variously practiced and/or promoted we cannot draw any solid conclusions about whether distinctly different patterns of motivation occur there. The research also suggests that there may be students for whom the traditional classroom does not diminish motivation, thus we would be ill-advised to scrap that approach all together.

The Present Study

The literature showing declines in intrinsic motivation with age is impressively consistent but fails to encompass children who either, through home schooling, have direct influence with the primary decision makers about their education (their parents), or who are given the opportunity to be in direct control of their own learning in democratically organized alternative schools. The present study is intended to follow on

Apostoleris (2000) to more accurately document the pattern of motivation in homeschoolers in a cross section of ages and adding students from a democratic school on the speculative assumption that they are motivationally similar environments, despite some obvious organizational differences. The SDT framework provides an empirically respectable theoretical account of motivation in classroom interactions and should be applicable independent of the organizational details of schools.

The central question of this study is: Would a cross section of students aged 7-17 attending K-12 schools organized to provide instruction only following the expressed individual interests of students produce a different pattern of intrinsic motivation than the well documented decline in intrinsic motivation with age found in students who attended schools that are presumed to have provided mandatory instruction? The implementation of non-mandatory instruction is a distinct departure from the way that instruction is provided in mainstream classroom schooling where it is a pervasive imposition upon the time and attention of children and youth. Given the motivational consequences of volitional, internally located choices of action on motivation (Reeve et al., 2003) then this differentiation may contribute to any motivational differences that might be observed. The primary specific hypothesis is that these alternatives will show a positive correlation between intrinsic motivation and age. A secondary speculative hypothesis is that students having a higher proportion of their schooling history that includes conventional schooling may report less intrinsic motivation. Students who make such a substantial change in their schooling situation by leaving traditional schooling for home schooling may be exactly those students who had their basic psychological needs most neglected and may carryover some residue of that neglect into their new school setting. Finally, teachers may have insight to offer about why these organizations or the instruction provided within them differ from traditional classroom schooling, so teachers were asked to participate in interviews regarding the differences between the alternative at which they teach and traditional classrooms.

Methods

Sites

The two school sites chosen for this study share the characteristic that instruction requires an active choice on the part of a child (possibly with parental guidance) before it is provided. Both schools are also located in the Greater Portland Metropolitan area of Oregon. On the other hand, the two sites are organized and administered in very different ways.

The home school resource center (RC) has an extensive menu of 174 classes and 56 member activities that span both traditional subjects and offerings that reflect a broad array of other interests. The RC has two campuses where most of the 440 children they serve do not attend full time. Here is an arbitrary sample of class titles: Creative is a Verb: If You're Alive, You're Creative; Embroidery Workshop; Student Ambassador Program; Detective Agency: Challenge Unit; Build A Dune Buggy; On Your Mind: A User's Guide to Brain Research & Society; Traditional Skills & Outdoor Adventure; Gooey Messy Science; More Math Projects - Gift factory, Arches from around the World, and Escher and 2D Geometry; Create Your Own Island; and, Messy Garage. Most classes listed in their catalog indicate an intended age group but the expectation is that anyone can join any class as long as they are reasonably capable of doing the work required by the instructor. A few classes deal with topics that may not be appropriate for participants of other ages, or have an outside requirement from a provider organization, so those classes are labeled as “not flexible.” Students generally have the option to take as many or as few classes as they wish. The school has just started what they call a “private school” option that provides students with a customized and documented learning plan that can also lead to an accredited high school diploma. This is the first year of this program and enrollment is less than 20 children. In the past the center was a publicly funded alternative school with the local district but when the state attempted to impose standardized instructional requirements that were not consistent with the school's philosophy of family-controlled education they became a private tuition-supported

school. Some of the offerings are intended for parents and supporting them in their process of homeschooling, including consulting services for families that want to be explicit about their intentions for education and supported to implement those intentions.

The two campuses are in very different neighborhoods, the main campus is close to the downtown area of a suburb of Portland and the other is in a working class residential area in Portland. The center has a computer lab at its main campus along with a variety of traditional academic resources. Approximately one third of the center's spaces are non-instructional and devoted to providing comfortable areas for social contact which is an additional way they support families to develop more connections within the RC community.

The democratically organized school (DS) serves 49 children ages 5-18 with a full-time day school program (4 students are part-time) in which they are immersed in a self-governing community that does not require the children to take any of the courses that are offered. The democratic governance of the school is based on one-person one-vote and the three rules that have been in place since the school was constituted are; take care of yourself and other people, take care of the things the school and other people own, and remember that your freedom ends where someone else's begins. From this foundation the school has a set of rules that structures how the school community operates through a variety of meetings and a board of directors. The school is located in a former church school building on the site of the church in a low-income working class neighborhood. Children have the opportunity to make free choices about what activities to pursue nearly all the time up to the limits of their certifications to do things that the school has collectively acknowledged require some degree of publicly acknowledged responsibility. For instance, the youngest children are not allowed free access to the entire school building unless they complete a certification process that consists of a conversation between the child, the child's parents, and the child's home room staff person in which they discuss what the responsibilities of building-wide freedom entail and whether the child is ready to accept them. Thus, if a young child is not certified for it, they are not allowed to roam the building beyond their classroom unless there is either a certified or adult person taking responsibility for their whereabouts. There are certifications for a

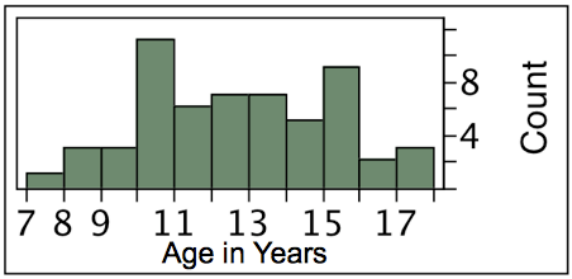
great many things that pose some level of risk or controversy, such as kitchen use and computer games.

Requiring classes is certainly possible in theory, but because it would have to go through the democratic process, just like everything else, and given that the school has an ethos of freedom then it seems an unlikely outcome. Classes are offered on a quarterly basis according to the inclinations of the students and staff. Like the resource center, they cover an eclectic variety of topics that includes traditional academic subjects. The school is not accredited; however in December, 2011, they had their first student complete a graduation process that required her to work with a committee of adults to complete four self-designed projects in preparation for a presentation to the entire community demonstrating that she is prepared to be accepted as an adult.

Participants

Participants were 57 children and youth, 49 from the resource center and 8 from the democratic school, ranging in age from 7 to 17 years old (42% female) with a mean age of 12.22, *SD* = 2.54 (see Figure 2). The distribution across the typical school levels of Elementary (39%), Middle (32%), and High School (30%) were fairly even.

Figure 2. Histogram of Age in Years



Seven teachers were interviewed (three from the DS and four from the RC though one RC teacher submitted responses by e-mail due to medical issues). Five of the seven teachers interviewed had instructional experience in traditional classrooms with the length of their traditional teaching careers ranging from one year of student teaching to

over 20 years in front of classrooms. The two teachers who had not taught in traditional classrooms both had experience in them as students. One of the teachers also mentioned that she spent three years as a student in a democratic school, as well. Only one teacher was male.

Measures

Students

Academic Self-Regulation Questionnaire. The Academic Self-Regulation Questionnaire (SRQ-A) is a widely used 32-item questionnaire designed to measure motivation in elementary age students (Ryan & Connell, 1989, see Appendix A). The scale is organized as a series of questions about why the student does certain activities such as, "Why do I try to answer hard questions in class?," where each question is presented along with a series of reasons why someone would do that activity. The student then rates how true each reason is for them on a 4-point Likert scale with the following options: Not at all true, Not very true, Sort of true, and Very true. We made some minor adaptations of language to fit the context of these schools. This measure has four subscales: external regulation, introjected regulation, identified regulation, and intrinsic motivation. For the sample question mentioned above reasons included, "Because that's what I'm supposed to do" (external regulation), "Because I feel ashamed of myself when I don't try" (introjected regulation), "Because it's important to me to try to answer hard questions in class" (identified regulation), "Because I enjoy answering hard questions" (intrinsic motivation). The order of the reasons for doing each activity was presented randomly, while the 4-point answer scale was identical for each reason. We omitted the question regarding doing homework which removed 8 reason/items, since they were likely to be irrelevant for this population. So, most students completed only 24 of the original 32 items. Three students (2 from RC, 1 from DS) did not disclose any classes, therefore they only completed a single eight item section of this measure. Excluding their data does not change any of the results obtained so it was included in the reported analyses. Each subscale showed acceptable reliability: external regulation ($\alpha = .79$),

introjected regulation (α = .83), identified regulation (α = .69, minus one item), and intrinsic motivation (α = .74).

Teacher As Social Context. The Teacher As Social Context (TASC) short form has 24 items that assess the student's perception of a teacher's motivational style across three subscales: involvement, autonomy support, and structure (Sierens et al., 2009; Taylor, Ntoumanis & Standage, 2008). Each subscale consists of 8 statements about the teacher such as, "My teacher really cares about me" (involvement), "My teacher makes sure I understand before s/he goes on" (structure), and "My teacher listens to my ideas" (autonomy support). The items that used the phrase "my teacher" had the name of the teacher of the student's self-selected hardest class substituted automatically by the online survey. (At the beginning of the survey the students were asked to name their current classes listing the hardest class first. Then they were asked the name of the teacher for their hardest class.) The three students who did not disclose any classes were automatically excluded from taking this instrument. The answers for this instrument were also indicated on a 4-point Likert scale with the following options; Not at all true, Not very true, Sort of true, and Very true. Two of the subscales for this instrument showed acceptable reliability: involvement (α = .65, minus one item) and structure (α = .68). The autonomy support subscale did not attain an acceptable level of reliability (α = .37), so is not considered further.

Parents gave consent by filling out a survey that included items for detailing each child's schooling history and for characterizing the child's schooling for each year as adult-controlled, mutually-controlled, or child-controlled for both classroom or homeschool (6 options total, where they could choose as many as they wanted). They were also asked to describe how they ensure their child is being educated. Appendix B contains the parent survey.

Teachers

Teacher Interviews. This is a qualitative feature of the study for the purpose of conveying likely areas of inquiry for future research and/or innovation based on the insights of instructors who are intimately familiar with the educational contexts under

examination and, ideally for the sake of comparison, with traditional educational contexts, as well. The interviews consisted primarily of open-ended questions about similarities and differences between providing instruction in those environments in contrast with traditional schools and their opinions about the motivational consequences that follow from those differences (see Appendix C- Teacher Interview Questions). The interviews were transcribed then the transcripts coded for common themes.

Procedure

Survey

All survey data were collected through surveygizmo.com. Parents were invited by the executive director of their respective schools to participate and provide permission for their child(ren) to participate, as well. The researcher also recruited participants on site at both campuses of the RC and at the DS campus, as well. The parents gave permission for their child's participation by completing the parent survey. The students were free to complete the survey online though many were recruited in person at the schools by the researcher entering the URL on a computer and inviting them to sit down to complete it while the researcher was available in the vicinity to answer questions. Teachers also indicated their willingness to be contacted for an interview via an online survey.

Interviews

In the RC teachers who indicated on the survey they were interested in being interviewed were chosen for having the most experience in teaching in traditional schools. All three teachers who indicated interest from the DS were included. Two participants requested, and all were given, the intended questions (see Appendix C) in advance once an interview was scheduled. Each interview was digitally recorded. Interviews took place at the DS, at the public library near the main campus of RC, and, in one case, in the Motivation Lab Waiting Room at Reed College. The interviews started

with a scripted permission procedure then proceeded to unfold conversationally, except for the interviewer occasionally making reference to interview topics or asking one of the intended questions. Interviews lasted between 38 and 59 minutes.

Coding. After the interviews were transcribed by the author, usually shortly after they took place, they were initially coded according to basic descriptive criteria regarding whether the teacher was describing traditional versus alternative environments, describing student versus teacher motivations, specifying advantages or disadvantages of alternatives or describing particular kids or situations. A thematic coding scheme was then developed that consisted of four categories: Individualized Instruction, Genuine Personal Relationships, Flexibility, and Systems Features or Design. Individualized Instruction included references to particular instructional practices and/or strategies that served to differentially respond to the learning needs of students in regards to a subject being taught. Genuine Personal Relationships included references to interactions that went beyond particular subject matter and the formal roles that people normally play out in school settings, including parents and other staff beside teachers. Flexibility included references to ways that teachers were given freedom to make independent choices or the ability to alter their plans without fear of reprisals or negative judgment by others. System Features or Design included references to aspects of the school's policies, procedures, and operations that empowered and/or restricted teachers in their teaching practices or had notable impacts on student motivation. These were themes that were judged to be consistent across all the interviews and substantially related to each other, as well.

Results

Descriptive Statistics

History of Educational Control

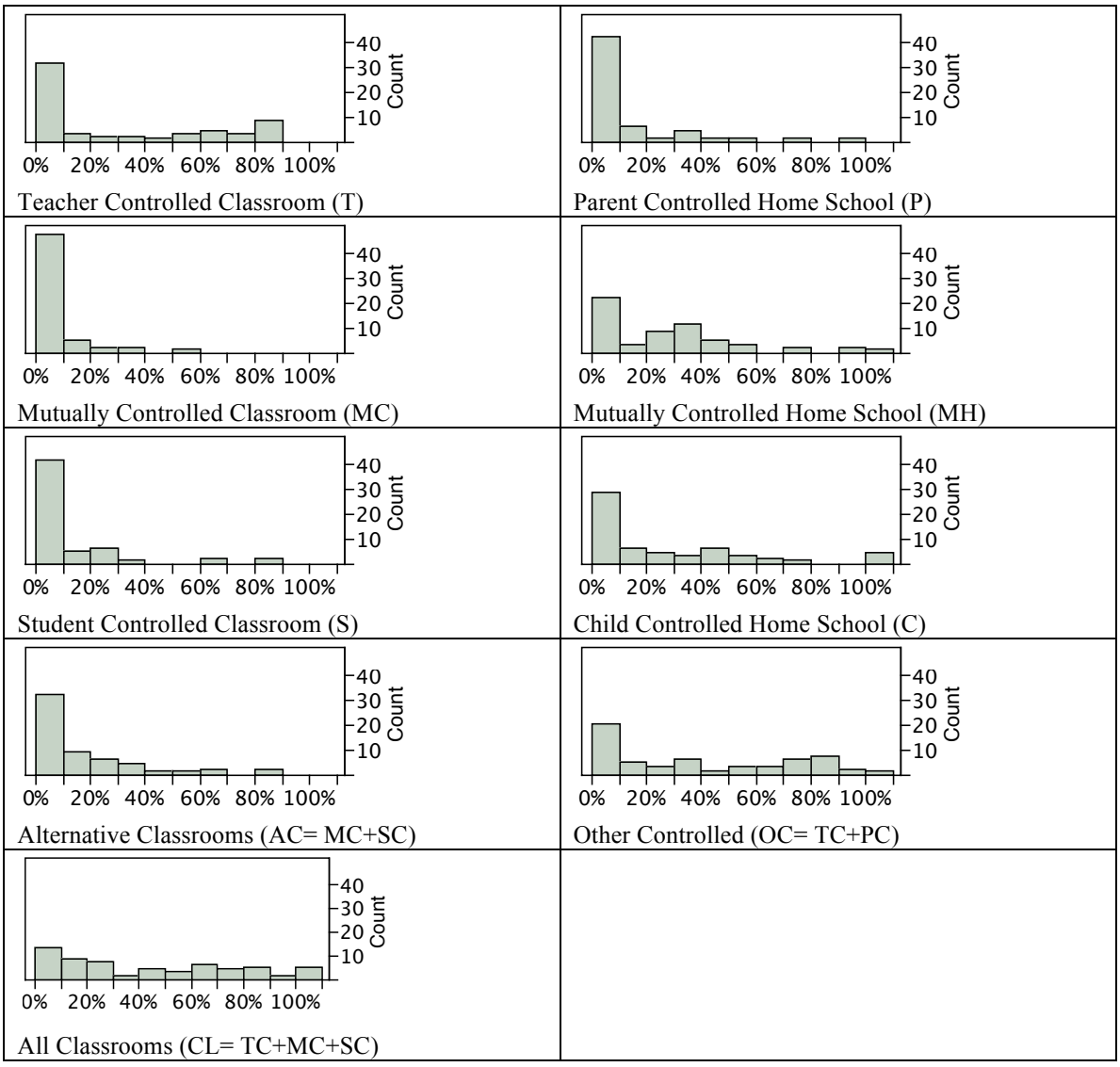
Recall that schooling history was provided by parents characterizing each year from Kindergarten to the present year as teacher/parent-controlled, mutually-controlled, or child-controlled across home- or classroom-schooling. If the parent chose more than one of the six categories then each category was assigned an equal proportion of that year. Since younger children have fewer years to count, each category was converted to a percentage of the child's schooling history. The full set of descriptive statistics for the children's school histories is presented in Table 2 and matching histograms are presented in Table 3. The two most prominent categories of schooling for this population were Mutually Controlled homeschooling ($M = .27$, $Median = .25$, $SD = .26$) and Child-Controlled homeschooling ($M = .24$, $Median = .13$, $SD = .30$). Parent-Controlled Home Schooling turned out to be uncommon ($M = .10$, $Median = 0$, $SD = .20$) for most students. Traditional classroom schooling was not a significant proportion ($M = .27$, $Median = .06$, $SD = .33$) of most of these students' schooling history. The other two forms of classroom schooling were also rare for this sample; Mutually-Controlled classroom schooling ($M = .04$, $Median = 0$, $SD = .11$) and Child-Controlled classroom schooling ($M = .09$, $Median = 0$, $SD = .19$). Particular combinations of these categories were used to get a better idea of how commonly specific aspects of the full spectrum of the education scene are in this population. Alternative classroom schools, the combination of Child and Mutually Controlled classroom schooling, do not add up to much ($M = .14$, $Median = 0$, $SD = .21$), yet combining all three categories of classroom schooling appears to represent a substantial portion of these children's schooling histories($M = .41$, $Median = .33$, $SD = .35$). Another seemingly odd result is the combination of teacher controlled and parent controlled categories, neither of which amounted to much individually, into the category of Other controlled created a substantial result ($M = .35$, $Median = .33$, $SD = .35$).

Table 2. Child's History of Educational Control Descriptive Statistics

	Category or Formula	**Descriptor or Example**	*Mean*	*Median*	*SD*
Classroom	Teacher Controlled (TC)	Traditional Schools	.27	.06	.33
	Mutually Controlled (MC)	Montessori, Waldorf, etc.	.04	0	.11
	Student Controlled (SC)	Democratic Schools	.09	0	.19
Homeschool	Parent Controlled (PC)	School-at-home	.07	0	.20
	Mutually Controlled (MH)	Home school	.27	.25	.26
	Child Controlled (CC)	Unschool	.24	.13	.30
Combinations	(MC+SC)	Alternative Classrooms	.14	0	.21
	(TC+PC)	Other Controlled	.35	.33	.35
	(TC+MC+SC)	All Classrooms	.41	.33	.35

Notes: Combined total mean percentages may not add up to 1.00 due to rounding.

Table 3. Histograms of Child's History of Educational Control



Motivation Scales

The distributions of scores on two of the SRQ-A subscales are negatively skewed: Intrinsic Motivation ($M = 3.29$, *Median* = 3.40, $SD = .58$, *Skewness* = -1.26) and Identified Regulation ($M = 3.30$, *Median* = 3.50, $SD = .58$, *Skewness* = -1.23). The External Regulation subscale ($M = 1.97$, *Median* = 1.86, $SD = .62$, *Skewness* = .60) is somewhat positively skewed. While Introjected Regulation ($M = 2.59$, *Median* = 2.57, $SD = .67$) appears to be close to a normal distribution.

Analysis

Preliminary Analysis

T-tests of the effects of gender (male $n = 33$, female $n = 24$) on SRQ-A (i.e. external, introjected, identified, intrinsic) and TASC (i.e. involvement, structure, autonomy support) subscales only showed a statistically significant result for the structure subscale of the TASC measure, $t(52) = -1.93$, $p < 0.05$ with the females higher ($M = 3.37$, $SD = .55$) than the males ($M = 3.07$, $SD = .57$). This suggests that females perceive their teachers as providing more structure than males in these environments. Given that this effect was unique to one subscale all other results are collapsed across gender.

T-tests of the effects of school site on SRQ-A and TASC subscales showed significant differences only on two subscales of the SRQ-A; for introjected regulation, $t(55) = -1.84$, $p = <.05$ with the DS higher ($M = 2.98$, $SD = .60$) than RC ($M = 2.53$, $SD = .66$), and external regulation, $t(55) = -1.77$, $p < .05$, with the DS higher ($M = 2.32$, $SD = .56$) than RC ($M = 1.91$, $SD = .61$). Overall, then, students in the DS responded higher on controlled forms of motivation than those in the RC. Results for these two subscales are each presented twice: as a whole sample and with the DS sample removed.

Ryan and Connell (1989) refer to a quasi-simplex pattern that should occur in the SRQ-A data indicating graded relations between the subscales. Given that intrinsic motivation and external regulation are opposite ends of the theoretical continuum yet are

not polar opposites, they would not be expected to vary inversely and only have a weak correlation. All categories in the continuum should be most strongly and positively related to those categories that are nearby on the posited continuum. The correlation matrix of SRQ-A, TASC, and percentages of school types in a child's schooling history is presented in Table 2. Given that distance on the continuum is equivalent to proximity to the diagonal of the table then the series of three results starting with Introjected by External and moving down and to the right shows that the categories in closer relationships on the continuum show the expected positive correlations. The three results off that diagonal show that more distal subscales are less related, also as predicted.

Table 2. Correlation Matrix of SRQ-A, TASC, and Child's History of Educational Control

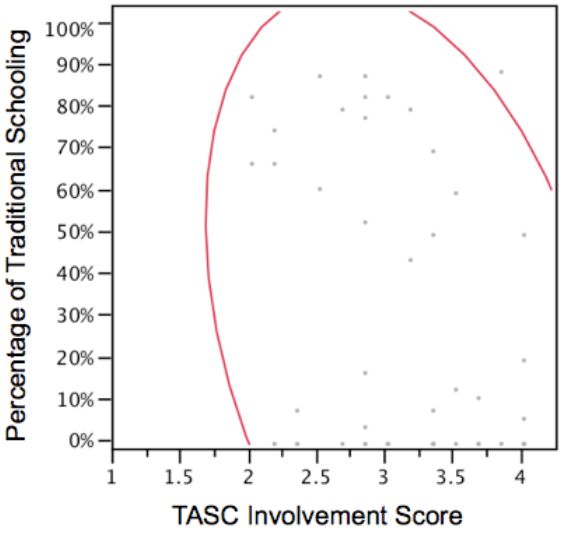
							History of Educational Control					
	SRQ-A				TASC		Classroom			Home School		
	EX	IJ	ID	IM	IV	ST	T	MC	S	P	MH	C
EX. External Regulation	-											
IJ. Introjected Regulation	.67***	-										
ID. Identified Regulation	.41**	.53***	-									
IM. Intrinsic Motivation	-.01	.01	.35**	-								
IV. Involvement	-.16	-.06	.26†	.13	-							
ST. Structure	-.17	-.18	.10	.15	.35**	-						
T. Teacher	.12	.03	.09	.09	-.34*	-.11	-					
MC. Mutual Classroom	.08	.09	-.08	-.22	.06	-.04	-.22	-				
S. Student	.22	.25†	.01	-.05	.04	-.20	-.17	-.14	-			
P. Parent	.09	.24†	.17	.14	.03	-.05	-.23†	.04	-.16	-		
MH. Mutual Home School	-.06	-.06	-.01	-.12	.32*	.25	-.30*	-.02	-.21	-.14	-	
C. Child	-.31*	-.34**	-.18	.02	.04	.09	-.50***	-.02	-.15	-.19	-.27*	-
CL. All Classrooms T+MC+S	.27*	.21	.07	-.01	-.30*	-.24†						
OC. Other Control T+P	.17	.17	.19	.16	-.31*	-.14						
AC. Alt. Classrooms MC+S	.24†	.28*	-.03	-.16	.07	-.20						

†$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

History Hypothesis

Scatterplots of percentages of traditional schooling history by each subscale of both TASC and SRQ-A only showed a statistically significant result (r = -.34, p = .01) for the correlation between traditional schooling and the TASC Involvement subscale (Figure 7). This suggests that students with a more substantial history of attending traditional classroom schools subsequently view their teachers in these alternative environments as less involved. The hypothesized influence of traditional schooling (labeled as "Teacher" in the correlation matrix, Table 2) on intrinsic motivation was not supported (r = .09, *ns*).

Figure 7. Scatterplot of Percentage of Educational Control History Spent in Traditional Schools with TASC Involvement Subscale



Age Hypothesis

To address the age hypothesis, a scatterplot and correlation coefficient was calculated for the relationship between age and each of the subscales of the SRQ-A. External regulation by age showed a non-significant small negative correlation when the whole dataset (n = 57) was considered (r = -.20, p = .13); however, when the DS data was removed (n = 8) then the small negative correlation increased enough to suggest a trend (r = -.24, p = .09). The suggestion is that there may be an age-related difference in the level of external regulation in the RC population. Introjected regulation by age showed no

correlation with either dataset ($r < .03$, *ns*). Identified regulation by age showed no correlation ($r = .04$, *ns*). Intrinsic motivation by age also showed no correlation ($r = .02$, *ns*). The scatterplots are presented in Figures 8 through 11 and the correlations are shown in Table 3. The initial hypothesis was, once again, not supported, although it is notable that the robust pattern of decreasing intrinsic motivation with age was not replicated here.

Figure 8. Scatterplot of External Regulation by Age in Years

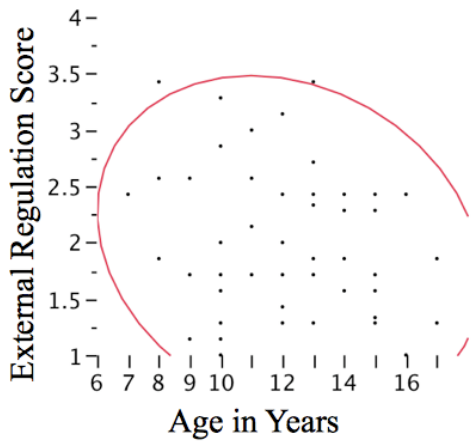


Figure 9. Scatterplot of Introjected Regulation by Age in Years

Figure 10. Scatterplot of Identified Regulation by Age in Years

Figure 11. Scatterplot of Intrinsic Motivation by Age in Years

Table 3. Correlations Between SRQ-A Subscales and Age in Years

SRQ-A Subscale		*r*	*n*	*p*
External Regulation		-.20	57	.13
	No DS	-.24	49	.09
Introjected Regulation		.02	57	.89
	No DS	.03	49	.85
Identified Regulation		.04	57	.79
Intrinsic Motivation		.02	57	.88

Teacher Interviews

The teacher interviews as a whole can be broadly interpreted as a story about how teachers seek to meet their psychological needs and simultaneously facilitate needs satisfaction in their students with the support of the school organizations to which they belong. It may be the supportiveness of the organizations that distinguish these schools from more traditional ones.

Some of the interview questions were directed towards illuminating the ways that teachers relate to the organizational levels above and below them, that is, both how they interact with students and how they are interacted with by school administrators or other school staff. All the teachers acknowledged that the collegiality of their interactions within the school organization can affect the interactions they have with students in important ways. For example, this teacher brought out both the positive and negative sides of these interactions across organizational levels by contrasting experiences in traditional schools with the RC setting:

> [T]he school plays a huge role by modeling … how teachers are treated. In public school I had to fight the constant pull towards mediocrity which caused tremendous conflict for me with the adults, parents, and admin. The students loved me and wanted more but the oversized classrooms, the over reliance on grades and a boring curriculum and lack of support drove highly gifted, sensitive teachers such as myself away. …
>
> So RC gets to have the best of all its teachers by the way it continues to treat us as intelligent, independent, creative beings. We pass that

> on to our students. The schools [role] is to model what it wants for students by how it treats it's teachers. Teachers are only too happy to be loving supportive beings. That's why they teach. Give them the respect and room to be who they are and you have the best environment for kids, for parents, for all involved. *RC Teacher*

This multi-level perspective is consistent with the organismic assumptions of SDT in that the intimate communion between any given organism and its environment occurs in the context of both smaller and larger scale systems than the organism itself, in this instance the larger system of a school organization. The teacher's quote above states the importance of understanding that teachers and students are human beings embedded in an organization that at least partly determines student outcomes by the manner in which it treats teachers.

Several teachers offered examples of how their students function in the context of the larger systems outside of the school in slightly different ways than their conventionally schooled peers:

> I think the DS produces kids who have a really good sense of themselves and what they are truly capable of. Or what they could be capable of. They aren't told. They imagine it, they feel it, they realize it, and they, I think, in general are more open to guidance from adults because of that. … People say all the time when I go out (I do a lot of field trips), "Wow, your kids are just so easy to talk to." Because they will go up to a grown up and start talking and have a conversation and there's no power difference there. A kid feels just as empowered to talk to another grownup as they would another kid. … I think that sometimes grownups, other adults outside [DS], adults might feel … like the kids in the school are a little bit precocious because you ask them a question and you get an answer you might not have expected. *DS Teacher*

Here is another quote that distinguishes how RC students differ from their conventionally schooled peers in the context of a classroom interaction:

> The first day I meet the kids I always ask … them to tell me your name and tell me one cool thing about yourself or something that makes you unique. And most kids… in other environments would be like, "I don't know" or, "I have a dog" or, "I have a sister." … And here they're, "I'm a C++ program designer" and "I just designed this entire outfit I'm wearing right now." And I was like, "Whoa, well alright. This is different." … Now it's really something to be an

> adult walking into a room of kids and realizing that they're smarter than you, [laughter] realizing like "Oh my god, you're really a lot smarter than I am, holy cow!" *RC Teacher*

These teachers are both describing how they have experienced students demonstrating sensitivity to opportunities in their environments. In the first case students are portrayed as having the apparently unusual ability to take opportunities for interaction with adults as equivalent to opportunities to interact with other children. In the second case these students take better advantage of opportunities to share their true interests with a teacher who should be expected to make good use of that greater level of intimacy to better respond to the student's future learning needs.

The teacher interviews were designed to qualitatively enrich our understanding of these particular environments. While all the teachers made numerous positive and complimentary statements about these schools and how they operate, there were also a few statements of individual frustration and explicit recognition of specific limitations on what some of the teachers could accomplish in both of these settings. For instance:

> So what I guess I'm saying is … because I'm teaching small groups of kids … and because we have a small school population, … I feel like sometimes we're not able to offer as much as I would like to see opportunities for … a really good class. I love good teachers. I love good teaching. I love classrooms that have enough kids in them where they can get critical mass and you can do great progressive education. And I feel like we can do some of that here but we are limited by our size and by our resources. *DS Teacher*

> --

> *Interviewer:* Are there any important or pressing problems that teachers have or instructors have?

> *Teacher:* Yeah, the big one for me is only seeing the students one hour a week. That's very frustrating because even in [one of my former] school[s] I met with the students at least three times a week. And there's something that I call continuity or flow with a group that is really important, I think, for them to be energized, energize each other, give me lots of feedback. … Just … once a week really makes the process awkward and I don't feel that flow, that continuity, as much. So, that's a huge frustration for me. If I could just see them twice a week even, it would help. *RC Teacher*

The following quote is notable because this teacher with extensive experience in traditional schools did not perceive any significant difference in the instruction she provides through the RC:

> I run my classroom almost exactly like I did in public school. It feels the same to me. It looks the same to me. It's just that I have a broad range of ages and … I might have fewer behavior problems … . *RC Teacher (with over 20 years traditional classroom experience)*

There were four more detailed themes that the teachers all hit upon in characterizing their particular situations within the two schools: individualized instruction, genuine personal relationships, flexibility, and system design and features. Appendix D presents example quotes of each category for both schools and in some cases includes more of the original transcription text than what is quoted. While the examples in Appendix D are grouped according to the primary themes, the stories the teachers told often hit on multiple thematic categories, so the categories are not mutually exclusive. The four detailed themes take as their focus particular relations between and amongst people, instructional content, and the organization. The four categories can be grouped into two pairs that are substantially similar but each take an aspect as a focus. The categories of Individualized Instruction and Genuine Personal Relationships share a common theme of focus on interpersonal processes while the Flexibility and System Design/ Features share a common theme of how the organization influences the individuals and their interactions.

Individualized instruction refers to how teachers adapt their instructional practices or expectations to suit the needs of individual learners as they relate to a subject of study. This category is concerned with the ways that an instructor shares the requirements of a field of study or works with a student to understand and appreciate their relationship to the instructional content. This category is closely related to the next, Genuine Personal Relationships, but in these instances the content of instruction is central whereas in the next it is the two people relating to each other that takes the focus. The following is an Individualized Instruction example:

> So, … [in] my algebra class … I contract … with those kids that, "You guys want to learn algebra and I will offer it. Here's what I need from you." … They didn't necessarily say what they needed

> from me but … I'm constantly trying to get a sense of where they're at and what they're wanting out of the class and adapting. I'm able to adapt the curriculum, I'm not tied to any set state standards where my hands are tied about what I'm doing in the classroom. So, I'm much freer about what I can offer and how I can move and I can slow down, I can speed up, I can divide people up into different groups and do a lot of that. *DS Teacher*

Genuine personal relationships refers to how relationships amongst members of the school community go beyond the specific roles that each person is expected to play, such as teacher, student, parent, etc. to create interpersonal connections that engender caring and intimacy. Teachers suggested that there are many different ways that they find to connect with students outside of their instructional duties and made it clear that the depth of personal relationships outside those duties enriched their instructional capabilities. For example:

> I think there's some real advantages to being able to teach in a place where I have the time over many years to get to know kids. To meet them at a young age and get to work with them over multiple years … I think I can be a lot more patient, instructionally, with them. I don't feel like, "Oh, I've only got them for a year and I have to get them to this point" which often results in basically not seeing them. … I think kids develop on pretty non-linear sets of trajectories and … I think … having someone who gets to be with them for a longer period of time allows you to honor their learning trajectory a lot more. Just having those longer term relationships [I] get to know their learning style, get to know their interests, build trust with them, build a relationship that has a level of humor and connectedness and playfulness to it. *DS Teacher*

Flexibility refers to how the teachers can use their own judgments about a situation to effect results by deviating from either plans or expectations without fear of being second guessed or undermined by other members of the organization. This category, once again, bears substantial resemblance to the next but takes as its focus the aspect of how particular decisions are made. For example:

> One of the things I love about RC is that I feel like almost anything goes if you are making intelligent choices and communicating your needs and your desires for the classroom as an instructor. … I wanted to bring knives in to my traditional skills class and I went and I asked RC Executive Director. I'm like, "Sooo A) can I get a

> fire pit and B) can I get some … carbon steel blade knives?" She said, "How much would they cost?" I said, "$10 a piece." She said, "OK." That was it. No like, "Oh my god, fill out a form" and "No, it's not safe" and "How on earth could you suggest this?" *RC Teacher*

System features/ design refers to how the broader organizational policies and practices impact the ability of members of the organization to relate to each other and any instructional content that is chosen. For example:

> I like that I don't have to teach a curriculum that I don't believe in … that doesn't hold them to these standards that don't make sense. I don't have to give them tests. We can talk about tests and I can help them get prepared for tests like the SATs or the ACTs if their gonna do that. You know it's silly; I like that I can curse and give them hugs, you know? *DS Teacher*

The interviews with teachers give a richer picture of what may be happening in these environments. The independent emphasis of all the teachers on the richness of their relationships to students, the general lack of emphasis on particular instructional techniques, and the implication that instruction may substantially operate in the same ways across school organizations suggests that the motivational consequences for students may be shaped more by the organizations in which instruction is embedded rather than by the particular instructional techniques that a teacher employs. The lack of an effect of schooling history on motivational constructs also suggests that the context of instruction plays a larger role than what students may bring to the situation, as well.

Discussion

Three Patterns of Data

The hypothesized positive correlation between age and intrinsic motivation was not supported; however, the observed non-correlation is still a departure from both the positive correlation documented in Apostoleris (2000) and the negative correlation that has been well-replicated in studies of traditional classroom schools where instruction is presumed to be mandatory for children and youth (Bouffard et al., 2003; Corpus et al., 2009; Gottfried et al., 2001; Harter, 1981; Hunter & Csikszentmihalyi, 2003; Lepper et al., 2005; Otis et al., 2005; Pintrich, 2003; Prawat et al., 1979; Wigfield et al., 1998). Three possible explanations for the differences will be considered.

The first is that Apostoleris' (2000) data were, in fact, driven by intrinsic motivation in accord with that author's interpretation, but the different results observed in the present study may reflect the hybrid characteristics of the two schools chosen for study. Apostoleris' (2000) participants were presumably "pure" home schooling families, in the sense that they were not reported to be associated with a resource center or any other organization associated with the provision of instruction. Both schools considered in the present study are organized to provide instruction, though only after students have expressed a desire to receive instruction. Having an organizational context for the provision of instruction may necessarily engender some compromise that affects motivation. Thus, the pure homeschool context may maximize the opportunities for intrinsic motivation to develop leading to a positive correlation with age. The home school resource center model and the democratic education model may give children and youth learning opportunities that may not be available through pure homeschooling, but, at the cost of a slight compromise of their ability to build on their intrinsic motivations. The traditional classroom, meanwhile, may generally result in a substantive compromise of motivation for some children and youth leading to the robust observation of a negative correlation between intrinsic motivation and age in the literature.

Another interpretation is that the intrinsic motivation data presented here show a ceiling effect across the whole population, therefore, the change observed by Apostoleris (2000) suggests that some of the younger children in the "pure" homeschooling families took longer than the present population to reach the high end of the intrinsic motivation scale. While the data show a degree of skew it seems possible that further progress along the scale might still be possible, so this explanation does not seem as convincing as the others.

A third interpretation is that the observed effect in Apostoleris (2000), on which the present hypothesis was based, was an artifact of the simultaneous and inversely related determination of both intrinsic and extrinsic motivation on Harter's (1981) scale. In that measure students were given descriptions of two children, one motivated extrinsically and the other motivated intrinsically, and told to choose which child they were more like. It is possible that the positive correlation observed was at least partly driven by decreases in extrinsic motivations, not just increases in intrinsic motivations as Apostoleris (2000) seemed to assume. Also, the present study found a trend in the External Regulation subscale of the SRQ-A decreasing with age when the DS data were removed, whereas the Intrinsic Motivation subscale clearly did not show any correlation with age. Therefore, the difference between the data presented here and Apostoleris (2000) data may reflect the possibility that the correlation he observed was an artifact being driven by differences in extrinsic motivation, rather than differences in intrinsic motivation when no real correlation between age and intrinsic motivation actually exists in this population. The remainder of this discussion will be based on this third explanation.

Instruction and History

The hypothesized correlation between intrinsic motivation and having a greater proportion of traditional schooling in a student's history was not supported which may reflect the context specificity of psychological need satisfaction (Milyavskaya, Gingras, Koestner, Gagnon, Mageau, Fang, & Boiche, 2009). In a series of three studies of adolescents across the U.S., Canada, France, and China and across the domains of school,

home, friends, and work they found that "need satisfaction in one context does not compensate for need satisfaction in other contexts, providing further evidence for SDT's assumption that the needs are nutrients that people need consistently throughout all aspects of their lives." (Milyavskaya et al., 2009, p. 1042). If we consider other forms of basic needs there are some, such as the need for food, that are context general and can be satisfied in one context (say, eating breakfast at home) and then the benefit carried over for some time into another context (for several hours at school). Psychological need satisfaction appears to be a context specific need, unlike food, in that provisions for psychological needs must be provided in each context independent of how well those needs were satisfied in a different context. The hypothesized effect of history on intrinsic motivation implicitly assumed the context generality of psychological need satisfaction, so, given the data, what likely matters more in a given instructional context is whether a child's needs are being currently met, not what that child's history has been.

Behavioral or Situational Need Satisfaction

The SDT literature has consistently found that human psychological need satisfaction leads to intrinsic motivation (Ryan & Deci, 2000) and the results of the present study combined with Apostoleris (2000) provide preliminary evidence that these two alternatives to traditional classrooms provide contexts for instruction that do not compromise the intrinsic motivation of their student populations. This raises the question: How do these alternatives achieve better or more consistent provision for the psychological needs of their students than traditional schools? This question cannot be answered with the data we have so far; however, the teacher interviews can provide us with plausible leads.

Behavioral

If we focus our attention on the detailed categories that arose out of the teacher interviews, particularly the categories of Individualized Instruction and Genuine Personal Relationships, then the critical differences for the kids in these environments might be

thought of as behavioral patterns under the direct volitional control of teachers. If need satisfaction were merely a function of the quality of interactions between teachers and students, then the question would be how to improve those interactions and the most salient leverage point for changing that would be the teachers' behavior. This interpretation would implicitly suggest behavioral interventions focused on getting teachers to do more to differentiate instruction and make more efforts to be personable with students. These interventions could be easily justified with reference to the mutually responsive orientation framework that has been applied to parenting (Kochanska, 2002) and a variety of other empirically-based frameworks that have been applied to school settings (Stipek, 2002). However, this interpretation is unsatisfactory in at least two important ways; first, it does not address the types of influences that exist beyond the classroom and have been shown to systematically drive teachers to behave in need thwarting (a.k.a. controlling) ways as pointed out by Reeve (2009), and it does not incorporate the broader perspective on these particular school settings that the interviewed teachers expressed.

Situational

The social roles played out in these schools (e.g. students, teachers, administrators, etc.) each operate at different levels within the organization, yet all those roles are played out by people who naturally share a common membership in the human species. Therefore, they all have the same needs for autonomy, competence, and relatedness. It may be the case that the differences in operational characteristics between these schools are trivial in comparison to the fact that they both manage to create and sustain an organization in which people seem to get their psychological needs met independently of their role in the organization.

While the teachers did not use the language of psychological needs the broader perspective that emerged from their accounts of these settings can be thought of as indirectly reflecting the ways that teachers get their psychological needs met, facilitate need satisfaction in their students, and, most importantly, how each school is organized in a manner that facilitates those need satisfaction processes. The quantitative data may have hinted at the potential role of the organization. The data indicate that a child with a

longer history of traditional schooling will perceive less involvement from their teachers. This correlation may be an indicator that while one particular channel for need satisfaction (involvement with a teacher) might be compromised by a child's history of traditional schooling there may also be a synergistic effect amongst the other organizational components in these schools that result in an overall level of need satisfaction that leads to the normal development of intrinsic motivation. In this case it may be that children with more history in classroom schools have had their general expectations of involvement with teachers compromised. Perhaps these particular alternative school environments have created a variety of other ways to meet the psychological needs of those children, besides just relying on teachers, which then may have effectively compensated for that child's unfortunate previous experiences such that the child's well-being does not suffer.

The situational interpretation suggests that an organizational approach to changes in schools that would like to address motivational declines should, perhaps, focus on removing obstacles to mutually responsive orientations between teachers and students, encouraging the development of trusting intimate relationships amongst all the members of the school community, and creating organizational barriers to keep the societal and cultural expectations of controlling behavior at bay. To put it another way, schools may need to act as if teachers already know what to do and inherently want to do what is right by their students, so the job of the school is to create classroom situations that convey trust in their teachers by presenting them with the least restrictive means for them to act effectively on behalf of their students.

Limitations and Future Directions

There are several notable limitations of this study. First, the cross-sectional design presumes that the pattern of differences across the ages of these different children will reflect the pattern of changes that might occur within a population of the same children as they grow older. A longitudinal study is needed to find out if this assumption holds true. This study was also limited by a very small sample size, especially in the DS population. The samples chosen were samples of convenience and are inevitably subject to some

degree of self-selection biases. It is possible that the school organizations are not the causal element in the motivational patterns observed, but rather there may be characteristics of the students themselves or how they ended up in these schools that drive the changes.

The rates of participation were low for a study that took place in a school setting. The informality of the DS and the large number of small classes at the RC that do not have the luxury of sacrificing as much as half an hour to a research project probably made recruiting participants more challenging than in regular classrooms. These alternative environments do not have an implicit, pervasive expectation of participation in activities presented by adults, whereas that may be the case in most traditional schools. Future researchers should consider using a similar online survey platform but opening up to the broader population that could be recruited via the internet. Both the home and democratic school movements have robust social networks that would likely be supportive of a research initiative that wanted to extend and elaborate on the current findings.

Future research may also benefit from focusing on the quality of relationships in the various settings that children and youth participate in. The central role that intimacy and flexibility played in the teacher's accounts of how they operate within these schools suggests that these particular schools seemed particularly supportive of the development of intimate relationships between teachers and students. Supporting intimacy maybe an important common feature independent of the very different methods of providing for psychological needs that they practice. It may be that students in traditional mandatory instructional settings who have had their needs systematically thwarted direct more of their energy towards (perhaps, uselessly) meeting those basic psychological needs and, therefore, cannot devote as much of their attention to their teacher and the subject they are sharing. Structuring the school environment beyond the classroom to meet psychological needs may mean that the teachers can subsequently pay more attention to purely instructional issues within their moment-to-moment interactions with students. The teacher therefore may have a better opportunity to focus more of their attention on the relationships between them and the student and the student and the subject.

Taking the synergistic effect view it might be fruitful to approach future research with an examination of how different degrees of intimacy in teacher/ student relationships affect the degrees of autonomy felt by the students when those teachers use various types of instructional techniques. This might be a variation on the Bao and Lam (2008) study that showed a mediating effect of relatedness on autonomy when decisions were made for children by their mothers or teachers. It would be interesting to see if children in environments such as democratic schools and home school resource centers might achieve levels of intimacy that enable the children to be more open to adult direction as suggested by this quote:

> I think the DS produces kids who have a really good sense of themselves and what they are truly capable of. Or what they could be capable of. They aren't told. They imagine it, they feel it, they realize it, and they, I think, in general are more open to guidance from adults because of that. *DS Teacher*

Conclusion

Unlocking students' ability to share their inherent enthusiasm for learning whenever they are in the classroom may not be a matter of finding the right instructional key, but rather, may be a matter of finding the right organizational key. Research data has supported the general concern of renowned critics for the negative motivational consequences of traditional classrooms. The two substantial alternatives examined in the present study, and promoted by some of those critics, now has a small amount of data that supports their contention that better motivational consequences can be created. While there is clearly not enough data to make any claims regarding the efficacy of non-mandatory instruction, per se, there is enough evidence in the literature to make the tentative claim that Self-Determination Theory is an empirically respectable framework that can and should be used to guide innovation and/or change in schools. The potential benefits of these two forms of instructional organizations, as well as the homeschooling movement more broadly, should be investigated further using the SDT framework to discover what mechanisms are at work to produce the motivational differences that seem to be found there.

Appendix A- Student Survey

[Note: bold words represent fields that the survey site will fill in automatically from previous answers.]

What is your name?

What is your birthday?

Which school do you go to?

Radio Buttons: RC/DS/ Neither

If Neither is chosen the survey site will give them a disqualification message saying children must be enrolled in one of the schools listed.

What classes are you currently taking at school? Which one is the hardest (Click on the button next to the hardest class)?

Who is the teacher in your hardest class?

SRQ-A

Radio Button Answer Options: Very true, Sort of true, Not very true, Not at all true

A. Why do I try to do well at **RC/ DS?**

Because that's what I'm supposed to do.

So my teachers will think I'm a good student.

Because I enjoy what I do there.

Because I will get in trouble if I don't do well.

Because I'll feel really bad about myself if I don't do well.

Because it's important to me to try to do well at school.

Because I will feel really proud of myself if I do well.

Because I might get a reward if I do well.

B. Why do I work on my classwork?

So that the teacher won't yell at me.

Because I want the teacher to think I'm a good student.

Because I want to learn new things.

Because I'll be ashamed of myself if it didn't get done.

Because it's fun.

Because that's the rule.

Because I enjoy doing my classwork.

Because it's important to me to work on my classwork.

C. Why do I try to answer hard questions in class?

Because I want the other students to think I'm smart.

Because I feel ashamed of myself when I don't try.

Because I enjoy answering hard questions.

Because that's what I'm supposed to do.

To find out if I'm right or wrong.

Because it's fun to answer hard questions.

Because it's important to me to try to answer hard questions in class.

Because I want the teacher to say nice things about me.

TASC Short form (24 items)

In this next section you will be answering questions about **Named Teacher.**

Radio Button Answer Options: Very true, Sort of true, Not very true,Not at all true

Named Teacher likes me.

Named Teacher really cares about me.

Named Teacher knows me well.

Named Teacher just doesn't understand me.

Named Teacher spends time with me.

Named Teacher talks with me.

I **can't** depend on **Named Teacher** for important things.

I **can't** count on **Named Teacher** when I need him/her.

Every time I do something wrong, **Named Teacher** acts differently.

Named Teacher keeps changing how he/she acts towards me.

Named Teacher doesn't make it clear what he/she expects of me in class.

Named Teacher doesn't tell me what he/she expects of me in class.

Named Teacher shows me how to solve problems for myself.

If I can't solve a problem, **Named Teacher** shows me different ways to try to.

Named Teacher makes sure I understand before he/she goes on.

Named Teacher checks to see if I'm ready before he/she starts a new topic.

Named Teacher gives me a lot of choices about how I do my work.

Named Teacher doesn't give me much choice about how I do my work.

Named Teacher is always getting on my case about schoolwork.

It seems like **Named Teacher** is always telling me what to do.

Named Teacher listens to my ideas.

Named Teacher doesn't listen to my opinion.

Named Teacher talks about how I can use the things we learn in class.

Named Teacher doesn't explain why what I do in school is important to me.

Parental Influence Question

How much do your parents control what classes you take?

Radio Buttons

- They choose all my classes for me.
- They make me take some classes, but I get to choose some of them.
- They make suggestions, but I get to decide for myself.
- They leave me alone to choose whatever classes I want.

Is there anything further you would like to share with people who will read the results of this study and will not know anything about **RC/ DS** or how it works?

Essay Text Box

Thank you!

Appendix B- Parent Survey

Child's First & Last Names

Where is this child is enrolled?

RC/ DS/ Neither

If Neither is chosen the survey site will give them a disqualification message saying children must be enrolled in one of the schools listed.

Biological Gender

Radio Buttons: Male/Female

Child's Birth Day, Month and Year

Jan/Feb/Mar/Apr/May/Jun/Jul/Aug/Sep/Oct/Nov/Dec Radio buttons

Drop-Down List: Year

Child's Schooling History

Based on your child's age what grade would s/he be in this year if s/he was attending a mainstream school?

Radio Buttons: K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

For this and each previous year indicate what form(s) of schooling this child participated in and note the name of the school or give a brief description of how you or the school implemented instruction during that year (check all that apply.)

Check Boxes in front with a Text Box Behind for each item

- Traditional Teacher-Controlled Instruction (Mainstream Schooling),
- Alternative Mutually-Controlled Instruction (e.g. Montessori),
- Alternative Child-Controlled Instruction (e.g. Democratic School),
- Home School, Parent-Controlled Instruction (School-at-Home),
- Home School, Mutually-Controlled Instruction,

- Home School, Child-Controlled Instruction (Unschooling)

How do you ensure your child is getting a good education? (Check all that apply)

Check Boxes

- I require my child to follow my educational plan for him/her.
- I require my child to take basic subjects such as reading, writing and math.
- I discuss with my child the classes s/he wants to take or that are available and make suggestions.
- I monitor my child's skills and abilities to make sure that s/he is developing normally and will take action if something is not satisfactory.
- I trust that my child will ultimately educate him-/herself just fine, whether I keep track of how it goes or not.

When asked the following question, how do you think your child will respond:

How much do your parents control what classes you take?

Radio Buttons

- They choose all my classes for me.
- They make me take some classes, but I get to choose some of them.
- They make suggestions, but I get to decide for myself.
- They leave it entirely up to me to choose whatever classes I want.

Authorizing Parent's Name /virtual signature/

Text Box

“Permission Granted (Submit)” Button

Prediction Results

Contingency Table of **Parents Prediction of Student Class Decisions Response (side)**

By Actual Student Class Decision Responses (top)

Count Total % Col % Row %	Parents decide all classes	Parents require some basic classes but I decide	Parents suggest classes but I decide	Parents leave class decisions to me	Count Total %
Parents decide all classes	**0** **0%** **0%** **0%**	*1* *1.75%* *5.56%* *100.00%*	0 0% 0% 0%	0 0% 0% 0%	1 1.75%
Parents require some basic classes but mostly I decide	1 1.75% 100.00% 3.70%	**13** **22.81%** **72.22%** **48.15%**	*12* *21.05%* *36.36%* *44.44%*	*1* *1.75%* *20.00%* *3.70%*	27 47.37%
Parents suggest classes but I decide	0 0% 0% 0%	4 7.02% 22.22% 14.29%	**21** **36.84%** **63.64%** **75.00%**	*3* *5.26%* *60.00%* 10.71%	28 49.12%
Parents leave class decisions to me	0 0% 0% 0%	0 0% 0% 0%	0 0% 0% 0%	**1** **1.75%** **20.00%** **100.00%**	1 1.75%
Count Total %	1 1.75%	18 31.58%	33 57.89%	5 8.77%	57 100%

Bold= Accurate Predictions (*n* = 35, 61.40% of total)

Italic= Positive Prediction Errors (Student perception of more autonomy than parents predicted) (*n* = 17, 29.80% of total)

Underline= Negative Prediction Errors (Student perception of less autonomy than parents predicted) (*n* = 5, 8.77% of total)

Appendix C- Teacher Interview Questions

Scripted Introduction: My name is Don Berg and I am conducting this interview as part of my thesis for Reed College under the supervision of Dr. Jennifer Corpus. This interview is being recorded and the contents of the recordings will be transcribed then the recordings destroyed. The transcripts will use pseudonyms to protect your privacy, but given the narrative nature of an interview I cannot guarantee complete confidentiality. The transcripts will not be shared with anyone outside our lab although selected quotes from the transcripts will be used in presenting the results of the study since survey data cannot fully portray how this kind of teaching environment compares to mainstream environments. You can stop at any time and there will be no negative consequences. Do you have any questions about the nature of this interview or how we will use it in our study?

Just to be clear, would you please state your name and answer the following question: Do I have your permission to continue with this recorded interview?

Thank you.

This study is concerned with instruction. What courses do you currently or regularly teach?

[End of scripted introduction.]

Briefly, how would you sum up your instructional philosophy?

How did you come to teach at DS/RC?

What do you see as the primary advantages of teaching at DS/RC instead of a traditional school?

As an instructional setting, what are the most important and/or pressing problems for a teacher in DS/RC?

Are the problems you see in this setting similar to the problems that you experienced in traditional classroom settings?

How is teaching at [current school] different from teaching in [type of school previously taught in]?

How is teaching at [current school] the same as teaching in [type of school previously taught in]?

This study is primarily about student's motivation in classes in alternative schools, what role would you say motivation plays in alternative schools like this, as compared to the role it plays in traditional classrooms?

Do you think that your teaching plays an important role in the motivation of your students (beyond any role the school might play)?

Do you think that the school plays an important role in the motivation of your students (beyond any role that your teaching might play)?

What advantages do you see in the different kinds of teaching you have done?

What are the disadvantages?

Is there anything further you would like to share with people who will read the results of this research and will not know anything about the kind of teaching environment provided by DS/RC?

Appendix D- Selected Teacher Quotes

General Need Satisfaction at RC vs. Need Thwarting Elsewhere (7)

[T]he school plays a huge role by modeling … how teachers are treated. In public school I had to fight the constant pull towards mediocrity which caused tremendous conflict for me with the adults, parents, and admin. The students loved me and wanted more but the oversized classrooms, the over reliance on grades and a boring curriculum and lack of support drove highly gifted, sensitive teachers such as myself away. …

So RC gets to have the best of all it's teachers by the way it continues to treat us as intelligent, independent, creative beings. We pass that on to our students. The schools' [role] is to model what it wants for students by how it treats it's teachers. Teachers are only too happy to be loving supportive beings. That's why they teach. Give them the respect and room to be who they are and you have the best environment for kids, for parents, for all involved.

#2 RC Teacher: By contrast in other schools, in traditional schooling environments, I feel like I have to show up as Tony Robbins. … I really do. I have to show up and … some how motivate these kids to do this thing and sometimes [I'm] really hard pressed to get the simplest thing. …Like, "You're gonna throw a ball" and "I don't wanna." …They just don't want to. They don't want to do anything you have to tell them to do. … There was one school in particular where I was really having a challenge just getting them. … We were doing Willy Wonka. I couldn't understand why they signed up if they didn't want to be there and then I realized that there are so many other factors; Mom and Dad pushed them into it, whatever, who knows why they are there. They may not know themselves … and they just kept playing basketball at the start of rehearsal and I was like, "OK, time to go. Gotta get movin'" and finally I was just like, "Screw it." And I just started playing

basketball with them. I used to play. I played for 13 years, so I would actually start a game with them and then we would bond and we would relate to each other. And …that was the moment, the aha moment, for me of meet them where they are. If they're not ready to get going on this yet, no big deal. They will be eventually. …But they have to get to know you first. But, man, I have had to give more … what I would consider to be motivational speeches at those places than I do here with these kids.

#3 RC Teacher: I run my classroom almost exactly like I did in public school. It feels the same to me. It looks the same to me. It's just that I have a broad range of ages and … I might have fewer behavior problems, sort of. I didn't feel like I had a lot of behavior problems although I was known as the teacher who could handle behavior problems. And so, … I got a lot of very very difficult kids but it didn't bother me much.

Interviewer: So you're saying that in your previous experience you got these difficult kids. Are there difficult kids in this environment?

RC Teacher: There are kids who have … one of the reasons they're at RC is because they had trouble in a public school. Maybe they had trouble because they were too advanced. Maybe they had trouble because they had behavior problems. … There's a number of reasons that they come to RC and so it's not that every kid comes in and is able to sit down and do a traditional … day's work. Let's put it that way. … I think some traditional teachers would describe some of my students as having behavior problems. I know my husband came in and subbed for me one day. He taught for 14 years and he's now in the private sector but he came in and subbed for me one day when I was sick and he identified one student… He said, … "That kid is not paying attention, he's not in this." I said, "Well, I think you'd be surprised." And, in fact, my husband wanted to give a test to the kids and they wanted a test and so I gave them the test and then he graded the test and goes, "Oh my gosh, you're right. That kid is totally knowin' what's going on." I said, "Yeah." I mean … what you see in the classroom is not necessarily, I mean he just learns in a little different way. … It [RC] allows a lot more flexibility partly because the classes are so small and partly because I'm the kind of person who can put up with a lot of this and that.

#4 RC Teacher: The RC model is magical. It really, really is. … This idea of a little … program where you have community college type classes you can sign up and take … and the kids are learning a lot. They are very well educated. I mean, they've got it all, it's great.

#5 RC Teacher: As a former public school teacher I had a really serious negative bias to home schooling. I believed, before I met this community, that it was basically impossible to successfully home school your kid. I really didn't think. I thought that was a goofy idea and I actually have family members who homeschool their kids and I thought they were goofy. I still think they are a little goofy, but, that doesn't mean that they didn't do a good job of homeschooling their kids. … I just thought, … "How can this be done?" … And I have to say that this situation has changed my mind.

#6 RC Teacher: The first day I meet the kids I always ask … them to tell me your name and tell me one cool thing about yourself or something that makes you unique. And most kids… in other environments would be like, "I don't know" or, "I have a dog" or, "I have a sister." … And here they're, "I'm a C++ program designer" and "I just designed this entire outfit I'm wearing right now." And I was like, "Whoa, well alright. This is different." … Now it's really something to be an adult walking into a room of kids and realizing that they're smarter than you, [laughter] realizing like "Oh my god, you're really a lot smarter than I am, holy cow!"

#7 RC Teacher: I've had so many kids that I've tutored from this [local high] school and I've talked with the administration at the school. I've talked with the teachers at the school and they say, "This is our philosophy." … And … it's just horrible. I mean kids just hate math there. Good students hate math there. I mean … it's just devastating. Whereas at RC … they want people to love their education … and I don't understand why anyone would want anything different.

General Need Satisfaction at DS vs. Need Thwarting Elsewhere (5)

#1 DS Teacher: Our purpose here is to come together and be in community and learn and … enrich ourselves and nourish ourselves. … It's not enriching or nourishing to be playing video games all day. … It might be for some of the day … I like to play a video game every now and then, but … it's not enriching or nourishing to just bullshit with your friends all day on the couch. … You can do that stuff at home and we're here to do different work. … I think that there is definite … space and time for hanging out. And I know that especially with the teenagers developmentally that's really important for them right now and they need that, but they don't need to be doing that all day. And they don't have to just have that as the only thing that's going on … we can do the socializing stuff as we're doing other things.

#2 DS Teacher: I see my commitment is to create an environment … where the kids are heard. A lot of times kids don't get to have a voice. And that's what my biggest goal is to teach them to use their voice and have their voice and show them value by giving them respect.

#3 Inteviewer: What does the DS produce?

DS Teacher: I think the DS produces kids who have a really good sense of themselves and what they are truly capable of. Or what they could be capable of. They aren't told. They imagine it, they feel it, they realize it, and they, I think, in general are more open to guidance from adults because of that. … People say all the time when I go out (I do a lot of field trips), "Wow, your kids are just so easy to talk to." Because they will go up to a grown up and start talking and have a conversation and there's no power difference there. A kid feels just as empowered to talk to another grownup as they would another kid. … I think that sometimes grownups, other adults outside [DS], adults might feel … like the kids in the school are a little bit precocious because you ask them a question and you get an answer you might not have expected.

#4 DS Teacher: A clear part of our mission is preparing the students who come here for their life and also letting them have a life while they're here, but part of their life being here is growing and developing and gathering all the skills and tools … [and] abilities that they're gonna need and want to have later later in life and that they need right now, too, in some cases. Like it's helpful to be able to read and write well because you can go look stuff up and you don't have to ask other people to do it for you. … I think it would be great to have a world where people weren't judged as intensely on their … perceived academic skills. … In some sense we are preparing kids to engage in a society that's intensely competitive and very … judgmental and it has a lot of those aspects. … We do want kids to have hard skills coming out of our school, [but] we also want them to have some other skills to help transform society in some ways.

#5 DS Teacher: Someone who is really sincerely interested [in finding out more about DS], which is … pretty rare, … I would just tell them, "Think about how you felt in traditional school. Imagine, go back and feel in your body, what it felt like." And I think most people remember being scared, or nervous, or … worried. And … that's what kids are experiencing for 12 years of their life, on and off, not chronically, but now and then. Now, imagine being in a place where you actually feel like [sighs] like … things are OK. … People aren't … coming at me and I'm not competing all of the time. And just imagine how amazing that would be to grow up that way. … That's pretty conjectural. It's … pretty throwin'-it-out-there "What do you think that would be like?" But … I just think that's gonna turn out a lot better for most people to be in a place where they can breathe and feel good about themselves. …

The other thing I would always say to someone who is really interested [in this] school is … life is messy and imperfect. … The thing that most parents want is for their kids [is] to have a perfect childhood. And nobody has that for sale. Nobody's gonna get that. And so if you really want to engage in a discussion about education … the very first thing you've got to leave at the door is the notion that there is anything … out there that's perfect, or that's going to save you, or … is gonna … remove all obstacles. … You gotta

embrace the messiness of life ‘cause I think that the thing traditional education promises is that it's all sewn up. All those teachers are gonna take care of your kids and their trained and you don't have to think about education any more. ‘Cause we're gonna do it. We've got our our plan and your kid is gonna have social capital and their gonna get a good job … and it's gonna be good. And we're gonna promise that for you and everyone knows it's bullshit. … Look at any of the statistics of the outcomes of traditional education, it's not that great. … I would just start with an admission that there's gonna be stuff here that's messy and broken and hard.

Individualized Instruction @RC (4)

#1 RC Teacher: My goal is for them to understand the material. My goal isn't for them to do work my way. I'm OK with them doing work their way as long as I feel like they will be successful in the future with that. … I'm thinkin' of one kid in particular whose work is messy and all over the place … and … I've been thinkin' I'm gonna have to make him clean it up because in the future this won't be successful for him. I know he's gonna want to go into a math field and mathematicians are very organized. … So for his benefit I'm gonna have to make him straighten things up. I know he gets it. I know he understands the material. It's just that his presentation of it is a big mess. And that's not going to be to his benefit in the long run. ….

I think he trusts me enough now to know that I want what's best for him. … I think kids in particular who have gone to public school maybe think the teacher is out to trick them or, you know, the trick questions, the pop quiz, … this kind of thing. Or are afraid to give a wrong answer. … This kind of adversarial relationship with a teacher as opposed to … when they're playing soccer with their coach. … They’re not worried about making a mistake when their playing soccer with the coach because they know the coach is going to correct them to improve that. … I work really hard with them on their math to get that feeling with them that I'm trying to improve them. It's OK if they make a wrong answer ‘cause we're gonna work towards figuring out why they made that wrong answer and get it so they can do it right. … It depends on how long they've been in public school how long it takes to develop that trust if ever… but I think it's an important thing.

#2 RC Teacher: My over-all philosophy is: meet the children where they are. Which is to say, first and foremost listen to them and I think personally I learn best from people that I have strong relationships with. And so my first goal with any student that I teach, whether it's one-on-one or whether its one-on-fifteen which I have everything on that spectrum, is to meet them and get to know them and find out what they want to learn. Now, it's specific within my courses … of why we're here and what we're here to do, but I could come up with the most fabulous ten week lesson plan that has, you know, OK, we're going to get through voice and movement and we'll hit Shakespeare along the way. And it turns out … that that's not where they're at. … I do have everything lined up and everything planned because I'm a little old school in that regard. I like to have that plan for me, but, I guess that's probably it, have that plan for me, for myself as a teacher, but meet them where they are. And if I have to go back to the drawing board then [I] do.

#3 RC Teacher: Most important aspects of this kind of teaching[?] [A]bsolute creativity… the art of teaching is upfront and the challenge (no room for lazy teaching) … includes constant change, being aware of who is in your classroom and meeting the needs of each. It means you must be fully present.

#4 RC Teacher: I probably do more discussion let the students make more choices in this environment after I get to know them especially. In a traditional public school … you have a very set curriculum, you only have certain books you can use at a certain time of the year because other teachers need them. So, there's a lot of restrictions but even within that, like in composition class I would tell the students, "OK, here are the things that I am going to require you to do these four things and then we're going to do four other writing assignments that you can select and you also get to do an individual project." So … I still do … a lot of those same things and … even in the public school I was trying to build in as much choice for the students as I could within the restrictions and it was a challenge, but it was doable.

Individualized Instruction @DS (3)

#1 DS Teacher: For instance, … Josh has said he really wants to work on his handwriting. That's something that he wants to work on and so at the end of the day one day I said, “Josh, come on over to the table, we're gonna do some writing.” and Tom B. was in the room too and so I called him over… It's almost like this little drama we play out where they go, “Oh no!” and I go, “Yes, you have to” and then they come over. …The exercise I had them do was just to take turns writing a sentence of a story and … I said, “It can be as dirty and gross and, you know, foul as you want it to be.” Then they got excited about it so they wrote out this page and I'm sure they thought [they] would shock me with these things that they've written, which is silly. If they think that grosses me out they're way off. Very high threshold. But then we looked at it and we went through it and … I just commented on … the grammar and spelling. I was like, “You see what you did there?” … Pointing out the things that they did correctly, too. And then that was it and it was a totally nonpainful way to do a little writing. Not something you could put in a portfolio, it's true.

#2 DS Teacher: So, … [in] my algebra class … I contract … with those kids that, “You guys want to learn algebra and I will offer it. Here's what I need from you.” … They didn't necessarily say what they needed from me but … I'm constantly trying to get a sense of where they're at and what they're wanting out of the class and adapting. I'm able to adapt the curriculum, I'm not tied to any set state standards where my hands are tied about what I'm doing in the classroom. So, I'm much freer about what I can offer and how I can move and I can slow down, I can speed up, I can divide people up into different groups and do a lot of that.

#3 DS Teacher: Another thing that I'm pretty explicitly teaching and instructing is how to self organize, how to be self directed, how to maintain your own organization in a way that works for you, how to manage your time. I'm providing students with: … how to make a to do list, how to plan for a week if you have certain things that you want to do,

and … materials and ways of doing that. And helping them … do it for the first time. So, I would model it then I would have them try with support and then I would have them do it on their own.

Genuine Personal Relationships @RC (3)

#1 RC Teacher: [re: distinguishing features of RC] Getting to see them be who they are and be excited about learning and about being there is really remarkable and that, I think, is the notable difference. …You see happy kids on fire at RC. “Let me show you this thing that I built, it's so neat!” or, “What's that?” … So many questions, their inquiry is just … amazing. … So as an instructor … that's the notable difference, … the difference in the kids themselves.

#2 RC Teacher: My partner came to a pizza party after the musical that we did this fall and it's … crazy. It 's one of those pizza places that has the ball pit and the slide and the indoor craziness. So the decibel level there was, like “whoa,” it’s nuts and he's kinda overwhelmed and just sitting there… looking around and the kids are all coming up to me and asking me for stuff like they would their parents. They’re like, “Can I get a slice of pizza?” “Can I do this?” and I'm like, “Sure” and “Here we go” and … it's so normal for me. And … Juan [her partner] just turns and looks at me and is like, “You just talk to them.” [mutual laughter] I started laughing. “Well, that's just what you do with humans.” …It's just so funny to watch people who don't work with large groups of kids and then people who do. … You don't even think about it.

#3 RC Teacher: … RC was the first year that he actually enjoyed school which is just kind of a sad thing. … By then he was … eleven, or something, … he had been in school for five years and it was the first year he'd actually enjoyed school. … So, … it's exciting that he finally found a venue that he enjoyed school, but it's too bad that there isn't some kind of avenue in a public school that is able to meet that need.

Genuine Personal Relationships @DS (8)

#1 Interviewer: What would you say are the key advantages of the free school environment as an instructor?

DS Teacher: As an instructor, this is the way I want to be with kids. And now that I've done it, it would be really hard for me to do anything else because I am allowed to be human and they are allowed to be human and so we make mistakes and we get mad at each other, we hurt each other's feelings but … that's never … the end, you know? … I guess really just existing together in a really healthy way… that, I think, is … probably the biggest expectation of the school. … You're gonna stick it out … through conflict, through strife, through whatever awkward thing is going on. … You're gonna be there and the people that are there with you are still gonna … be there on the other side of it.

#2 DS Teacher: I think there's some real advantages to being able to teach in a place where I have the time over many years to get to know kids. To meet them at a young age and get to work with them over multiple years … I think I can be a lot more patient, instructionally, with them. I don't feel like, "Oh, I've only got them for a year and I have to get them to this point" which often results in basically not seeing them. … I think kids develop on pretty non-linear sets of trajectories and … I think … having someone who gets to be with them for a longer period of time allows you to honor their learning trajectory a lot more. Just having those longer term relationships [I] get to know their learning style, get to know their interests, build trust with them, build a relationship that has a level of humor and connectedness and playfulness to it. … Instead of I or the student feeling like we're simply living out these … teacher-student relationships that we have a connection or a bond or a relationship that's … more fully human. … They get to see me being silly or they get to just play games with me and I'm also helping them with reading and math. … I think … that just lives up to a vision of the world that I would much rather live in, where people are more connected day-to-day rather than kind of impersonally relating to each other through roles that are based on their job or their age or perceived role power … relationship.

#3 DS Teacher: [re: an ideal school] They would all go to this place and I could teach a group of twenty of them. … They would still … at certain points … show … up and … not want to be there. And …when it gets to that point I do what I'm doing with my class. I would slow the class down and be like, "OK, anyone who doesn't want to be here, you really don't have to stay, but, I really want to encourage you to stick with this. And so … if you're having difficulties with it,… are there reasons for why maybe your losin' steam with this? Let's talk about this." … We're holdin' up the class now. … I would have those conversations one-on-one with kids when I notice that's happening but I would really help them try to engage. … "How are you motivating yourself to be here? Are you motivated to be here? Are you getting what you want out of this? Are your needs being met? Even if it's hard and you feel bored sometimes, are you are you feeling satisfied that you're doing this? If you're only doing this because your parents told you had to or they were gonna send you to another school, we should at least be talking about that."

#4 DS Teacher: I said something, "Oh, ha ha and I'm your teacher." And he said, "I don't think of you as my teacher, I think of you more as my enabler." Which is a funny way to put it. So, … my official … title is advisor. … I advise them. I guide them. I try to figure out what it is they're after and facilitate that in some way. I can be a teacher, like, … I've designed curriculums before. I've taught classes … more traditionally and I think that is a skill set that I have that I would actually like to improve on because I think that too has a place in our school. But the main thing that I do is … a lot of … just relationship based stuff so I know them and then from there, because I know them so well and we have a good solid trusting relationship, I'm able to … try and steer them or have them steer themselves more effectively. …

Interviewer: So, would it be fair to say that this way of seeing the education that's happening is about … developing the relationship skills rather than focusing on the content or the role that's played or set up?

DS Teacher: Yeah, it's the relationship skills, the ability to reflect and know yourself. Which I think is a lot harder than it sounds like. Having a feeling and tracking

that feeling back to the source is something we ask of students and that's a big ask, especially when your … seven, you know, … it's a big deal. … Our curriculum is … primarily stuff that you can't see, that you can't put on paper, but I think that it sets people up to be whole people.

#5 DS Teacher: Here there's a there's a lot more emphasis placed on really noticing how the kids are feeling and what they're thinking about in regards to … the instruction that's happening. And … trying to create an environment where students have a sense of ownership of what's going on, a sense of power and say, … that they really can say no. … Our school's actually been, I think, changing. … I think, at the beginning, we had more of the … "kids can just do whatever they want" and there was not a lot of … engagement or pushing or nudging of them. They were really kind of left to their own devices and I think now we're doing more of the, … "Hey try this." And if they're like, "No, I don't want to" and like, "Well, maybe do it anyway." … Then if they go like, "No, I really don't want to." It's like, "OK." … And that maintains that real sense of … the students are really being seen and acknowledged. And they know that if they really don't want to do something it will be heard and respected.

#6 DS Teacher: I can struggle with feeling like some of the kids are getting missed or that there's some inequity in which kids, you know, with squeaky wheel … gets the grease and some kids kinda get lost in the shuffle or something like that. … I think a big challenge has been … how to identify when kids are saying no for reasons that really need to be honored and when those no's are actually signs of distress or issues that actually need engagement and attention. And that can get really tricky.

#7 DS Teacher: I do very regular work with students helping them solve problems with other students. Helping them develop those skills [to] have more … metacognitive awareness of their own ability to solve problems and how to do so. That's both in the realm of conflict with other students and also in the realm of kind of personal issues or problems.

#8 DS Teacher: The main advantage as a teacher? … I really have to say that it's the relationships with the students and the … way that the DS operates allows for those relationships to really flourish in a natural way. The kids know they can ask me if they need something and I give them a real response. Like, “Oh, can you heat up my lunch for me? I need help with this.” … Any request they have they feel really open asking. There's not a lot of spot light or pressure, as opposed to in a traditional setting where if they were asking me a question they would probably be asking in front of a lot of people and that might feel weird to them. So … I get to connect with them on a very basic level and build from there. Build trust with them. Get to know them really well and what they like to do. Because they’re choosing what they want to do at school I actually get to see what they like to do and how they like to do it. And that helps me know more about them.

Flexibility @RC (2)

#1 RC Teacher: One of the things I love about RC is that I feel like almost anything goes if you are making intelligent choices and communicating your needs and your desires for the classroom as an instructor. … I wanted to bring knives in to my traditional skills class and I went and I asked RC Executive Director. I'm like, “Sooo A) can I get a fire pit and B) can I get some … carbon steel blade knives?” She said, “How much would they cost?” I said, “$10 a piece.” She said, “OK.” That was it. No like, “Oh my god, fill out a form” and “No, it's not safe” and “How on earth could you suggest this?”

#2 RC Teacher: This may sound really superficial, but it's really not. Dress code is not an issue there. … I don't have to wear a suit to teach. And I've worked in other environments, even as a substitute teacher where I was making absolutely nothing and taking the bus for two hours to get one way to get someplace to make my fifty dollars that day, I've been told that I … I wasn't dressed professionally enough. Even though I wasn't wearing jeans and t-shirts and things like that, I had slacks and a shirt, but I was told I wasn't dressed professionally enough. And I thought, “… I'm not dressed in a way that's revealing and I'm not dressed in a way that's distracting. What does it matter?” And if I'm

spending that time on myself in that way then I'm not spending it with my students creatively and focused on what's best for them. And so, by and large, RC is a very accepting environment and not just of the students but of the adults, as well, of the families and of the teachers and that I think creates that support that you need to be able to focus creatively. … It's … not sweating the small stuff, … not getting involved in petty things like what are you wearing today? … We have kids who show up dressed in costume just for the heck of it. I had one girl who dressed like Mary Poppins for three days straight and I was like, "You did that just because you wanted to." She's like, "Yep, my grandma made it." Perfect, great. … Why does it matter? … It doesn't distract, it doesn't matter. … Even though she's dressed like Mary Poppins it still didn't distract from her learning process. In fact, it may have enhanced it because she got to feel creative and dress like this. So, silly things like that aren't really addressed. It's come as you are, come as you're comfortable. If there's a problem, we'll address it. I really enjoy that approach. Instead of policy, policy, policy before anything's happened.

Flexibility @DS (2)

#1 DS Teacher: We are able, at the school, to constantly adjust to what the students and the families at our school need. So our school has made big changes pretty regularly to how we do business. A lot of that I think has been a function of us being a new school and having to do a lot of learning and make a lot of mistakes and then fix it. But I think … we own [the school]. No one else is giving us the money to run the school and so if there is something wrong it's within our power to change it. … No one else gets to say how we do it, we get to figure it out. …That's a strength and a challenge.

#2 DS Teacher: There are behavioral expectations and there are expectations that people are gonna have of [DS teenagers] when they leave here and so giving them the … leg up on … "this is what people want from you" and we can be really flexible in how you get those skills. You don't have to write an essay about the history of Portland if that doesn't like light you up. You can write an essay on … the history of YouTube or whatever it happens to be.

System Design/ Features @RC (5)

#1 RC Teacher: The advantage of RC is the individuality, you know, having these young kids with the older kids and they take care of 'em and the young kids love sitting with the older kids and the older kids love helping the younger kids and it's the old one room school house.

#2 RC Teacher: Obviously there are differences systematically and how we run and how … I don't have grading to do, thank god, so I get to spend my time being really creative which is what teaching and learning is. It's not grading it's … exploring new things that I want to learn and thinking, "Oh my gosh, oh, what did Loretta tell me yesterday that she likes to do? Oh, I'm going to look that up. That's really cool. I want to see if I can do that, or I want to see what that's about." And … bringing in new and innovative ideas and things into my classroom. That's what I get to spend my outside of work time doing, as opposed to spending it … judging their work.

#3 Interviewer: So, there's a role that you play and in a sense there's a role that the school plays. … There's a way that they [RC] support you. Do you see that … there's a way that … they're playing a role in [student] motivation, as well?

RC Teacher: … Yeah, absolutely. I think having … the materials there in every room … it varies a little bit room to room, but right down to having paper. … Just … paper readily available in the room, I know that sounds silly, it's just not the case everywhere. You know, paper and markers and pens. Having a lounge for the students, not the teachers; that is huge. Where they can go play fusball if they want to play fusball, or they can sit and have lunch, where they can sit and have space of their own to … pull out their laptop or their iPad and they can hang out and be with each other but also be studying. You know that there is designated space for whatever is fantastic. … I think the fact that it's

set up mainly for homeschoolers says, “This is a space where you belong.” And for a lot of these kids (you know some of them come from traditional school environments and are … still unschooling and maybe weren't fitting in maybe weren't finding their place there socially or academically or both) … so I think that just by it's … very nature, … by saying, “This is a homeschooling resource community, use it however it works for you” is really empowering for not only just the … families and the adult members of the families who are like, “Thank god we have help!” but also for the kids. Because by and large the kids get to choose what classes they take. And that's pretty empowering and … you get some of that flexibility at high school level but that doesn't really happen until college for … for most of us in the traditional schooling system. And by then you’re like, “Oh, my god, what the hell do I choose? I don't even know what to do now because I've had all of this picked for me for the last 20 years, … or however many of years, … of my education.” … So, I think the fact that they get so much agency just in choosing what they what they do and what they study (… under the guidance of Mom and Dad certainly.) But the fact that it's a space that says it's for you, this is for you. … I think that plays a part and I think RC Executive Director being who she is has a very strong commitment to these families and … always trying to provide them with whatever they need … instead of, “I'm sorry that's not what we do here.”

I've worked so many places where I've heard that phrase or something similar to it. “This is our mission and we're keeping it.” RC Executive Director's mission for RC is whatever the community ends up … deciding it is. … I can't speak for RC Executive Director but I have just seen that time and time again where people are like, “Well we'd like this to happen” and they may have a meeting about it and they get together. But, by and large, she'll try to provide it if it's really something needed. … And she trusts her families. Instead of like “ugh, I have to deal with these families.” There's such a divide … in traditional schools. … Like, “Ugh, I'm dealing with the parents again.” … You know there are interpersonal conflicts no matter what. No matter where you go. But your attitude towards … all of them individually, but … also the idea of them as a whole, is so important. … It makes for such a positive environment when you look at it as, “What can I do for you? How can I help you?” Instead of, “Don't make me do that.” So, because that's the overall tenor of feeling at RC, I think that that plays a huge part in these kid's

motivation. There isn't that bickering, there isn't that squabble, there isn't that us versus them. There's space there for just them to do whatever they want. It's not a designated science or math or … english or art space. So much of that space is set up for them and that's huge when you're a kid, when you're living in an adult world and … nothing is.

#4 RC Teacher: I always approach the parents with, "I think we can probably safely agree that we both want what's best for this kid or these kids and that we often question whether or not we're doing enough." … I don't think I've ever had a parent go, "No, that's not the case." I've always had them go, "Your right." "OK, so let's start there." But I find my self, especially in the Private School program easing a lot of fears where the parents are concerned and having all of these really interesting philosophical conversations about what it means to learn. Because as grown ups who came out of this traditional schooling environment we're still products of this world. Everything around us says this can't possibly work … so we're fighting … all of … the pervasiveness of that … message all the time. … That, I think, is the biggest challenge of my job. … I have to constantly fight that … little voice or …those messages that say, … "You're not doing enough" and, "You better do more because this isn't enough" and, "This isn't hard enough" and, "You're not testing them" and… I have to remember to shut that voice off and relax and really have fun with it. … Most of the time I'm good at that, but God, there are just those moments where you just panic, you really panic and you think, "Am I doing them justice? … Are they getting enough? Are they getting what they deserve? Are they getting what they need? ARRYAH!" … Because we don't measure it. We don't. The measuring is in daily observation. … It can be hard to measure it in every single kid every day, I mean it's impossible, right? So, it has to be in moments. It really means you have to be paying attention. You can't check out; you can't go on teacher autopilot. … The nice thing is I don't have to or want to here. … But you really have to be very present with these kids, so that in those moments, you know we talk about teaching moments, … in those moments you're … right there with them and ready to go and ready to listen to what they have to tell you. So that you can, even if … it's for my own purposes, so that I can mentally evaluate where this kid is at. But that's the hardest part. It's me getting over me.

#5 Interviewer: Are there any important or pressing problems that teachers have or instructors have?

RC Teacher: Yeah, the big one for me is only seeing the students one hour a week. That's very frustrating because even in [one of my former] school[s] I met with the students at least three times a week. And there's something that I call continuity or flow with a group that is really important, I think, for them to be energized, energize each other, give me lots of feedback. … Just … once a week really makes the process awkward and I don't feel that flow, that continuity, as much. So, that's a huge frustration for me. If I could just see them twice a week even, it would help.

System Design/ Features @DS (8)

#1 DS Teacher: I like that I don't have to teach a curriculum that I don't believe in … that doesn't hold them to these standards that don't make sense. I don't have to give them tests. We can talk about tests and I can help them get prepared for tests like the SATs or the ACTs if their gonna do that. You know it's silly; I like that I can curse and give them hugs, you know?

#2 DS Teacher: One big advantage … as a teacher is instructional freedom or curricular freedom. … I can really do in the classroom, or in whatever activity I am doing, I can do it with whatever goals and objectives I think are best based on my knowledge of who my kids are, … who their parents are, and what they want for them. And also just based on what I think is important. And so I'm not beholden to arbitrary or … one size fits all curricular objectives.

#3 DS Teacher: I think my ideal school is not even this school. So, for me, my ideal school would be a series of small schools like the DS where there are you know, um, basically what we're doing right now but that instead of me teaching Algebra here to the two or three students there would be … a satellite of free schools and all the kids who are

… actually getting to that point of … “I want to learn algebra” … “I'm ready, I want to sit in a class. I want homework. I want someone who … knows what they're talking about. I want to do that with a group of other kids.” They would all go to this place and I could teach a group of twenty of them. … They would still … at certain points … show … up and … not want to be there. And …when it gets to that point I do what I'm doing with my class. I would slow the class down and be like, “OK, anyone who doesn't want to be here, you really don't have to stay, but, I really want to encourage you to stick with this. And so … if you’re having difficulties with it,… are there reasons for why maybe your losin' steam with this? Let's talk about this.” … We're holdin' up the class now. … I would have those conversations one-on-one with kids when I notice that's happening but I would really help them try to engage. … “How are you motivating yourself to be here? Are you motivated to be here? Are you getting what you want out of this? Are your needs being met? Even if it's hard and you feel bored sometimes, are you feeling satisfied that you're doing this? If you're only doing this because your parents told you had to or they were gonna send you to another school, we should at least be talking about that.” … So what I guess I'm saying is … because I'm teaching small groups of kids … and because we have a small school population, … I feel like sometimes we're not able to offer as much as I would like to see opportunities for … a really good class. I love good teachers. I love good teaching. I love classrooms that have enough kids in them where they can get critical mass and you can do great progressive education. And I feel like we can do some of that here but we are limited by our size and by our resources.

#4 DS Teacher: We [cohort groups of teenagers] meet once a week and … this past week we did some goal setting and looking at scheduling trying out … deciding how you would spend blocks of time during the day and then talking about … how school is going for them. Are they running into like any social or otherwise stressful situations? Are they doing the things that they wanted to do? Are they doing the things they set out to do? … The purpose of those is I'm trying to actually give those skills to the students so that they can take on the bulk of support for each other.

#5 DS Teacher: The skills that I learned at the free school when I was a kid, and I was only there for three years, … have … really enabled me to be the person I am. … My ability to communicate with people, I think is a direct result of going to the free school. And having confidence in who I am I think I can also track back to and credit a lot of the free school … because the adults in that space would come up to me for no reason and say, "You're awesome. Your beautiful. Did you know that?" And when I was thirteen I was like, "You're a weird old hippy. What are you talking about?" But now I see that unconditional respect, that unconditional love that's really important in shaping somebody. … And then there's the basics we're trying to teach in conjunction with that big hard invisible relationship work. … "You want to do something. How do you do it?" … And then for the kids in my class, "You need to have some basics in reading and writing and math, how can we do that in a fun way?"

#6 DS Teacher: I tell them when I went to high school I went to a public high school and I didn't have to think about anything. They just told me what to do and I did it and I sometimes liked it and mostly did not. But … they have so much responsibility by virtue of … all the freedom that they have in this school. … And that's really hard and I want to … recognize to them how hard that is, but, also hold them to a standard that I know they can meet. Because I feel like that's doing them a service and if we were to just let them wallow in their teenage angst it would not be doing them a service. … I know they are going to be OK when they go out there and so what I try to explain to them too is … you can do this work now while you are here, while you got these resources and the support. You can learn how to write and then you can play Pokemon in the afternoon. If you don't do it now you're gonna eventually going to have to do it at some point and it's going to be a hell of a lot harder when you're trying to earn a living and doing all this backlog. And so, ultimately, it's their choice and I can only have that conversation with them so many times and I can only … do so much 'cause I won't force them. But it might mean a lot of things; it might mean that … they have regrets later, it might mean that their parents get fed up and take them out of the school, it can mean a lot of different things.

#7 DS Teacher: I think there's a really important link between … the emotional state that people are in when they're learning, … what they're learning is like, and the kind of learning outcomes that you can get. If a student feels safe, relatively powerful, able to and confident that they can get their needs met if they ask for help. Safe meaning they're gonna be respected; no one's gonna tell them they're bad or wrong or dumb or what ever. If they exist in a place of safety … learning is sooo much easier. … As opposed to if I'm in a classroom and I feel that I am competing with other people, or I'm sitting in a classroom and the … teacher and the environment, the structure, tells me I'm stupid or I'm dumb or I don't matter or shut-up … there's not time for you I just think people tend to shut down. They don't learn very well. They're either afraid or ashamed. Those kinds of emotions, when they're allowed to breed and fester and … not get dealt with, I think they … interfere incredibly … with actual learning. And they make people … say things like, "I hate school" "I don't like to learn" … "I hate history" "I hate math" "I hate all of these things" because they're having an emotional experience. It often has a lot less to do with … the content … that may be delivered or how it's being delivered. … How do you feel when you are in this place called school? What is that actually like for you? Is it scary? Does it hurt your feelings? Or is it a place that you actually feel at home and can be yourself.

#8 Interviewer: So it's … an important point to say it's structured to make motivation not a daily issue but honestly motivation's still an issue?

DS Teacher: Yeah, 'cause everyone is human and everyone likes being a motivated person and … living a life that's … based on more than just kinda makin' it through the day. That's an existential challenge that everyone faces and you can't remove that from people. And so our kids, … the students at our school, are facing that and dealing with that and wrestling with that. And … I think we're giving them a pretty good set of supports and … assistance in moving through … those challenges of … getting excited about something, getting half way in and realizing, "Oh my god, this is really hard, maybe I want to give up. … But then I'll feel really disappointed" or whatever and … just helping them have good, messy experiences … of life, of being, of running their own

lives … and … being responsible for their own lives, being responsible for their choices, being responsible for how they spend their time, what they get out of things. … I think our hope and the idea of the school is that … that's as important as what content and skills they get out of it, is that … those kind of self knowledge and metacognitive skills that people develop by having those kind of experiences … that those are really important.

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