UNDERSTANDING SEMESTER SCHOOLS AS TRANSFORMATIVE LEARNING EXPERIENCES

Final Project Report
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EXECUTIVE SUMMARY

As this study began, the primary purpose was to explore whether or not semester school students are experiencing transformative learning and to understand the underlying mechanisms that may support transformative learning outcomes. In order to begin this process, we interviewed staff, surveyed alumni, and surveyed and interviewed current students during phase one of the study in the spring of 2018. The initial data showed that semester school students were potentially having transformative learning experiences. Students reported growth and change in three primary areas: their values, the confidence they have in their life choices, and robust skill development, especially in interpersonal domains. The surveys and subsequent follow-up interviews showed the main mechanisms for transformation were their relationships with the teachers, opportunities for reflection on direct experiences, the structure of the semester, the social communities afforded by the schools, and the curriculum.

Findings from the spring of 2018 led to phase two, where we sought to understand identity formation at semester schools. Identity formation involves exploring possibilities about who one can become, committing to some possibilities, and maintaining and deepening those commitments over time. Results from phase two showed students who attend semester schools make more new commitments and deepen their existing commitments regarding who they want to be while at semester schools These new and deepening commitments appear to be the function of the social environment (teacher and student relationships) and the meaningfulness of the experiences.

We also surveyed students daily for several weeks over the fall 2018 and spring 2019 semesters. Data from these daily surveys support the premise that semester schools offer a highly engaging academic setting for students. Students report more favorable views of curricular elements such as academic discussions, lectures, studying, and labs/practice compared to their time at home. Specifically, students see their experiences at semester schools as affording greater opportunities to reflect, try out their ideas, do new things, challenge themselves, and think about their beliefs and values. They also report better rapport with teachers/adults and a greater sense-of-belonging at semester schools.

The third and final phase involved interviewing recent semester school graduates and sought to understand students' transition home as well as the impact semester schools have on students' decision-making. The results showed students shifted their focus to decisions that extend further into the future and have a greater impact on their future trajectory. For example, students are less concerned about whether they should participate in drama or soccer and are more focused on questions about the type of person they are becoming. In

connection with who students want to become, students often return home from their semester schools more aware and mindful of their friendships with people at home. Many reported ending unhealthy friendships in pursuit of friends who better reflect their new values. There is a greater concern about the quality of their relationships with friends and family. Finally, students are reporting coming home with a greater desire to learn and a new perspective on knowledge acquisition. Students see learning as a process that requires their contribution and involvement to construct understanding. These findings suggest that semester school students are maturing as students and better understand their agency and role in lifelong learning. Another way to describe this evolution is that they are becoming more self-authored, which is taking on a more active role in their own life decisions.

While this report includes a great amount of detail and many terms, some of which are only subtly different in the academic literature, we have tried to distill our central findings below. After two years of study, we conclude that semester schools are powerful learning settings that employ an engaging and effective educational model. This model is made effective by a synergistic and holistic approach that combines several key elements:
1. a focused and integrated curriculum,
2. an experiential pedagogy that includes both application and reflection,
3. numerous opportunities for personal challenge and new experiences,
4. a social system including both teachers and other students that is supportive and invites critical dialog, and
5. a structure that is both temporary and separate from home.

Through this educational model, students learn a wide range of important lessons. Six of these stand out as strengths of the semester school educational model.
1. Students come to understand better their values and how these fit within society.
2. Students become more confident in their abilities to enact change.
3. Students learn skills specific to the content areas of their schools, but many report the most valuable skills are interpersonal; they learn how to get along with others.
4. Students better understand who they want to be and how they want to live their lives.
5. Students better understand that they need to take an active role in their learning and their life paths. What they learn and what they do should not be imposed on them by others.
6. Students learn what they want and need from others in their lives or their social communities.

INTRODUCTION

The primary focus of this report is to give an accounting of the three phases of research that the University of Utah completed in response to the Request for Proposals (RFP) issued by the Semester School Network (SSN) in the fall of 2017. The RFP's purpose centered on the following statement: "What is needed is a systematic study of semester schools in order to substantiate or refute the anecdotal evidence of transformative learning experiences and, if validated, to explain the causes of these outcomes." The proposal that was subsequently funded sought to determine the transformational learning potential of SSN schools and to describe the educational mechanisms most frequently reported by students as responsible for their learning while attending one of the 11 network schools. Phase one involved descriptive work and launched an initial investigation to determine the transformational potential of the semester school model. Building on Phase one, we advocated shifting the focus from transformational learning in a general sense to examining how semester schools facilitate identity development in adolescence. Thus, Phase two sought to understand if and how students at semester schools were experiencing identity formation. The third and final phase used interviews to further understand both transitions home as well as how semester school experiences shape post attendance trajectories and decisions. Aside from preliminary interview data with school staff in phase one, data in this report represent the perspectives of semester school students and should be viewed as incomplete explanations of the teaching methods employed at semester schools.

PHASE ONE (Spring 2018)

Phase one consisted of two parts: collecting data from past semester school participants and collecting data from current semester school students. In part one, we collected retrospective data from semester school alumni to determine the outcomes deemed valuable to participants' daily lives and determine the educational processes used to achieve those outcomes. Part two consisted of surveying and interviewing students who were enrolled in semester schools during the spring of 2018 using the Learning Actives Survey method (King, 2009).

PHASE ONE: PART ONE
Sampling Procedure
We surveyed alumni over 18 years of age who attended each of the 11 semester schools between 2010 and 2017.

Sample
Data were collected from 797 respondents representing each of the 11 SSN schools. Within the sample, 73% were female, 87% identified as white, and respondents ranged in age from 18-25, with the average age being 20.

Instruments
Data for this study were gathered using an online retrospective questionnaire comprised of four distinct sections. Section one contained demographic questions. Section two asked participants to rate how important the semester school experience was to the development of 20 skills, abilities, or beliefs. Section three asked participants to rate how important the 20 skills, abilities, or beliefs from section two have been in their daily life. Finally, section four comprised of a series of open-ended questions designed to capture any additional outcomes. The 20 skills, abilities, and beliefs were culled from previous research on outcomes from residential outdoor education programs (e.g., Wilson & Sibthorp, 2018) that were consistent with the reviewed literature and corroborated via interviews with faculty members from each of the 11 semester schools. They included identity development, willingness to try new things, appreciation for differences, communication, relationship skills, self-confidence, empathy, college/career orientation, leadership, appreciation for learning, appreciation for school content outside of school, teamwork, responsibility, decision-making, appreciation for being present in the moment, planning/organizing, help-seeking, emotional regulation, perseverance, and independence. Full instrumentation and items can be examined in the Instrument Supplement to this report.

Data Analysis
To analyze the quantitative data, the mean score for each of the 20 possible outcomes was plotted on the two corresponding dimensions: the attribution of the outcome to the student's semester school experience, and the importance of the outcome to daily life. The grand-mean of each dimension divides the plot into four quadrants for interpretation. To analyze the open-ended responses from randomly selected participants, two researchers coded the data independently and then collaboratively to identify emergent themes.

RESULTS
Figure 1 displays the different learning outcomes at semester schools with the importance of the outcome in daily life. The top right quadrant demonstrates the most reported learned outcomes that are most important in daily life: willingness to try new things, appreciation for differences, appreciation for learning, perseverance, self-confidence. The top left quadrant represents the outcomes that are a strength of semester schools that were considered less immediately useful: identity development and appreciation of school content outside of school. The bottom right quadrant represents useful outcomes that are learned both at semester schools and also in other settings. The lower left quadrant displays the least reported learned outcomes that were least significant in students' daily lives. Note: that quadrants are formed by the grand means for each dimension to allow relative comparisons; all means remain relatively high on the 10-point scale and are at least somewhat linked to semester school experiences.

Figure 1: Comparison of Outcomes Learned at Semester School vs. importance to Daily Life
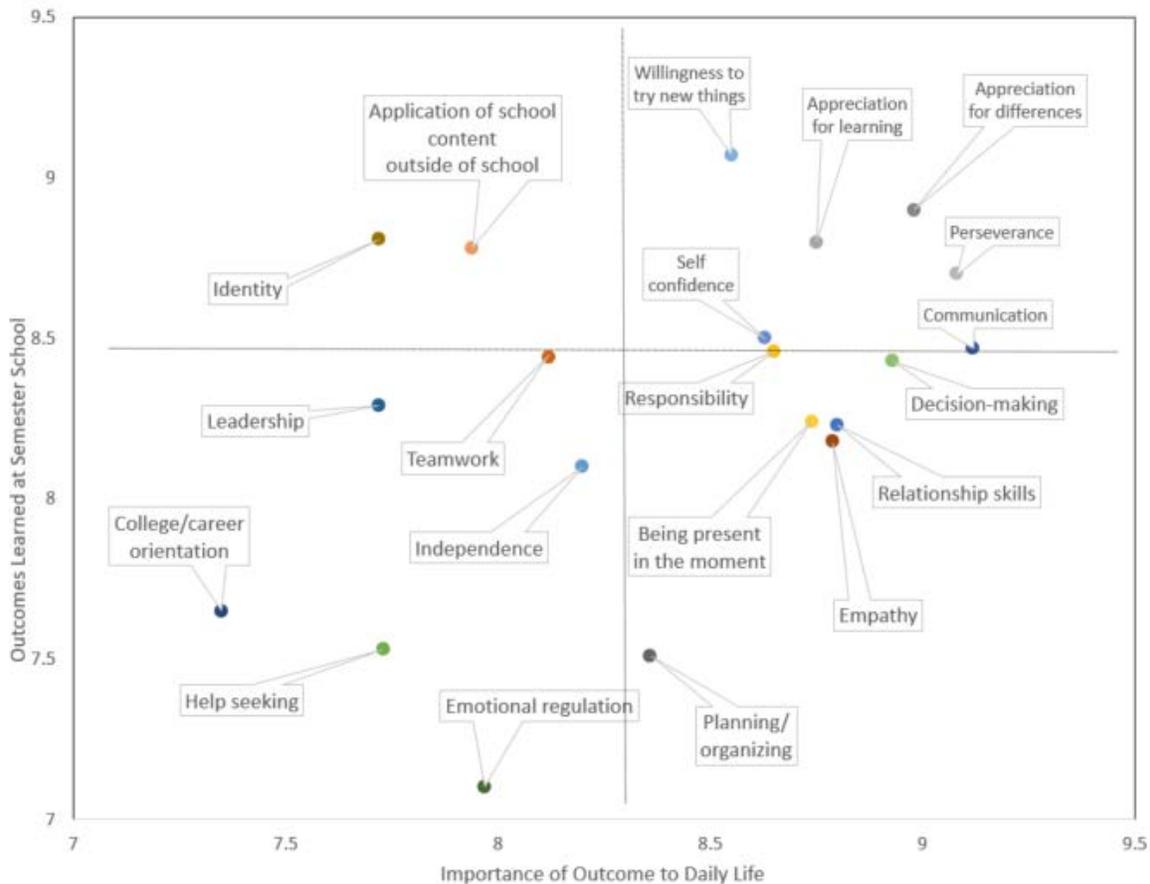
The following represents the most frequent themes that emerged from each of the four open-ended responses.

Question 1: Identify the most valuable learning outcome gained from participating in the semester school program. More detailed reporting for these themes is presented in Appendix A, Table 1.

Six broad themes emerged:
(1) intrapersonal development *(e.g., I become more confident with myself)*
(2) development of personal values *(e.g., I realized I value the environment)*
(3) interpersonal development *(e.g., I learned to appreciate differences in others)*
(4) a formative experience *(e.g., This experience changed what I want to do in life)*
(5) a new way of understanding or thinking (e.g., *I learned to ask questions and dive deeper into a topic*)
(6) skill development *(e.g., I was able to go backpacking, something I had never done before)*

Of the six themes, outcomes related to intrapersonal development, development of personal values, and interpersonal development were coded most frequently.

Question 2: Why was the particular outcome from question one important or valuable?

Responses segmented into five themes:
(1) the outcome created future opportunities
(2) the outcome was relevant and useful in their lives
(3) the outcome helped participants better understand themselves
(4) the outcome changed them
(5) the outcome exposed them to an important learning opportunity

Question 3: Complete the following sentence, "I would not have learned nearly as much about [what they found most valuable] if it had not been for..." More detailed reporting for these themes is presented in Appendix A, Table 2.

The mechanisms identified include:
(1) relationships with faculty and peers *(e.g., I felt like I could talk to my teachers about anything)*
(2) the pedagogical approach used by semester school teachers *(e.g., My teachers focused on helping me ask questions and learn for myself)*
(3) the non-traditional structure of the semester *(e.g., I was away from my family and living with an entirely new group of people)*
(4) Curriculum-based coursework or learning activities *(e.g., We were not limited to the classroom, some of the learning took place backpacking)*

Question 4: Why was the previously identified process important to your learning?

Reasons include:
(1) Teachers were supportive and responsive to student needs. They were also good role models and delivered the curriculum.
(2) The supportive environment fostered by other students and the teachers allowed students to take risks and try new things.
(3) The pedagogical approach encouraged students to take ownership of their learning.
(4) The structure and place of the schools created space for powerful learning; the places were special and also different from home.
(5) The curriculum Integrated material across all subjects, was experiential, and included challenging and thought provoking activities such as expeditions, semester-long projects, and leadership curriculum coupled with leadership opportunities.

The following two quotes help highlight some of the results found in the retrospective study:

> *"I realized I no longer needed to be the 'perfect' student according to the textbook definition. It was more important to me to form meaningful connections with my peers and really take in the experience. I also went back to my home high school with new expectations of what a classroom environment should feel like – an emphasis on the process, not product and an atmosphere of love of learning for the sake of awareness and enrichment instead of memorizing for a test only to forget everything by the next week."*
>
> *"I think being in such a different environment allowed me to change more than I would at home. At home there are certain expectations, certain routines, and certain things that I guess we just don't talk about. But something about being put in this same crazy experience allowed me to break from these routines and talk about real issues in my life and find solutions."*

PHASE ONE: PART TWO

Sampling Procedure

We surveyed semester school students in the first 2 weeks of the semester and 2 weeks after they completed their semester school experience in spring 2018. We interviewed 30 students by telephone in summer 2018 between June and August after students returned home from their semester schools. Interviews were conducted to better understand the answers to survey questions.

Instruments

The Learning Activities Survey was developed by King (2009) to measure the 10 stages of transformational learning (TL) and perspective transformation (PT), which is the outcome of TL. It includes a survey with four sections and a semi-structured interview. Section one asks students whether they agree with a series of statements that align with the 10 stages of TL. Section two asks whether they experienced TL and to describe what transformed. Section three asks them to identify what contributed to their transformation. Section four contained demographic questions. The interview protocol mirrored many of the questions in the written LAS. Full instrumentation and items can be examined in the Instrument Supplement to this report.

RESULTS

Matched Pre and Post semester Survey Results

In the semester before their semester school, 28 (38%) students reported TL, and 46 (62%) did not whereas, after their semester school, 69 (93%) reported TL, and 5 (7%) did not. The results of an exact sign test showed that significantly more students reported TL after their semester school, $p = <.001$.

Post semester Only Survey Results

Based on the LAS, 164 (95%) of students reported TL after their semester school, and 9 (5%) did not. Figure 2 shows the frequency that students identified different activities or processes as being associated with TL at their semester school. The categories that reported the highest frequencies were teachers and students, indicating the importance of social support in the transformational learning process at semester schools. Reflection and other reflective practices were also found to be important in the transformation process.

Figure 2. Frequency of activities associated with TL.
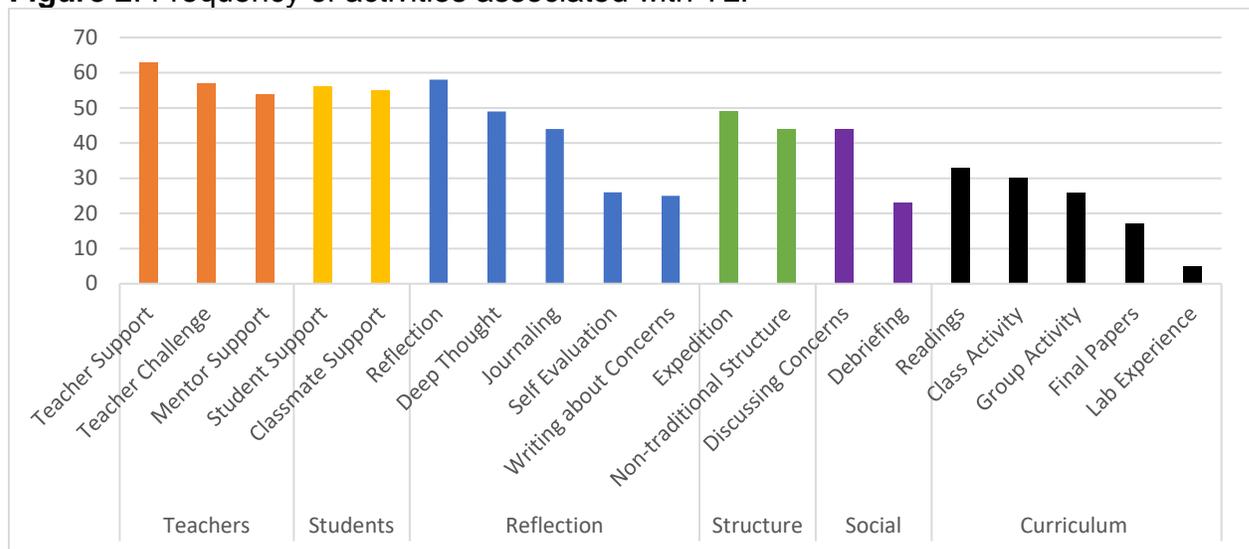
Appendix B contains illustrative quotes portraying each overall category in Figure 2.

The open-ended LAS questions revealed the ways in which students reported being transformed during their semester school. When students described how they transformed, they identified that they primarily developed new values, gained confidence, uncovered their values, became more intentional, and broadened their worldview.

Figure 3 shows the frequency counts of the different ways students reported being transformed during their semester school (N = 117); many participants did not provide complete answers to the open-ended questions. Table 1 describes how students reported transforming.

Figure 3 Frequency of what transformed based on open-ended responses to LAS (Only counts above 5 were included)
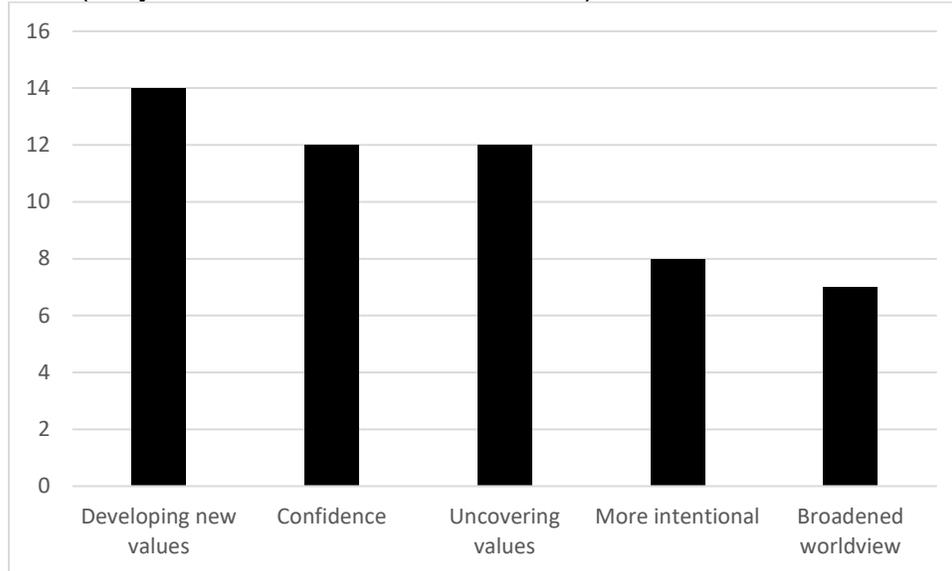
Table 1: Descriptions of Reported Transformation

Theme	Description
Developing new values	Students adopted a value, ethic, or belief that they had not previously held. They might have decided to be more environmentally conscious after semester school.
Confidence	Students became more comfortable with and certain of themselves.
Uncovering values	Students gained a greater understanding of values they already found important but did not realize they held because they had not consciously examined them.
More intentional	Students' awareness of their impact and influence increased, and they became more deliberate with their actions.
Broadened worldview	Students came to understand that there is a larger world around them and that they are only one piece of a larger picture.

The following quote illustrates several of the ways students report being transformed:

> *"I would say it was a transformational experience. It confirmed a lot of assumptions I had about the ways the world worked in what we learned in classes … I came to a confident conclusion about the ways the world works in that way… It's hard to say whether I really came to new conclusions or whether I became open to accepting new conclusions."*

Figure 4 shows the activities or characteristics of the experiences that were most important to how they transformed based on open-ended LAS questions (N = 117). The three overarching categories were similar to the activity classifications identified in Figure 2: structure, relational (including teachers and other students), and curriculum. Within these categories, students specifically described being away from home, supportive community, like-minded peers, and overcoming challenges as the most influential activities and characteristics.

Figure 4 Frequency of activities identified in open-ended survey questions (only counts above 5 were included).
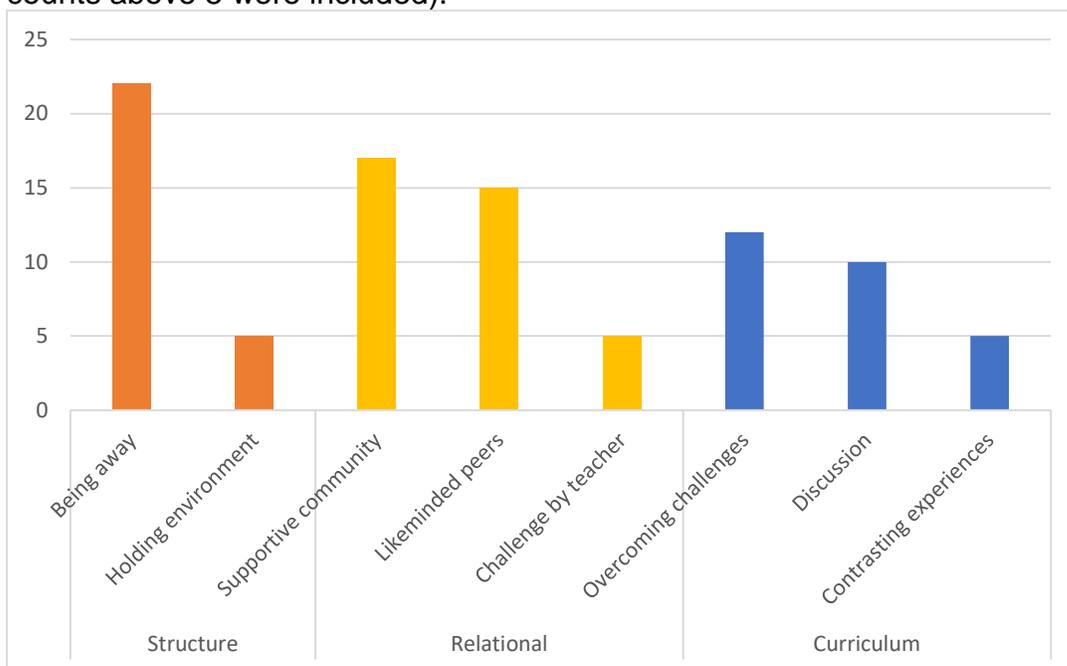
The following is an illustrative quote reflecting many of the activities described above:

"Attending my semester school allowed for students like myself to speak our minds in an open and judgment-free setting. These conversations often led to me questioning what I previously believed and valued as important. Following such conversations or interactions, the close-knit dorm life provided by my semester school allowed me to not only reflect on my ideas and thoughts but also to use my dorm mates as prospective second opinions that may give me even more perspectives that I may not have perceived. This led to a new and more fleshed out conclusion that felt more satisfactory and facilitated long-term growth in my character."

Semi-structured Interviews

The LAS is an instrument that pulls together multiple data sources so that researchers can better assess whether students had a transformative learning experience that aligns with commonly accepted definitions of TL. The survey has close-ended questions with defined answers, and it has open-ended questions. See the Instrument Supplement for specific questions. The close-ended questions ask students to check a box determining whether they transformed, and the open-ended questions ask students to describe their transformational experience in their own words. The survey results provide a coarse overview of whether students transformed, and what aspects of the educational experience contributed to their transformation. The overview is coarse because of how difficult it is to quantify transformative learning. In the final component of the LAS, the researcher conducts semi-structured interviews with participants. The interview protocol replicates the written survey but has the advantage of allowing the interviewer to better understand the specific details and nuances of the student experience.

Transformation Defined Via Semi-Structured Interviews

The survey results showed that the majority of students experienced transformative learning at their semester school (93%) and that they characterized their transformation in five ways (See Figure 3 and Table 1). Consistent with the survey research, students confirmed in semi-structured interviews conducted in summer 2018 that the semester school provided transformative learning and qualified what transformative meant to them. Some students, for example, reported that they were exposed to different ideas at the semester school that they eventually adopted as their own (developing new values). Other students said the processes that occurred at their school required them to articulate their opinions, which helped them clarify – or uncover – their values (uncovering values). Students also offered descriptions of how their behaviors or ways of being changed. They felt more confident to question or disagree with their teachers and share their opinions with others even when they conflicted with other people's perspectives. Increased confidence allowed them to be more vulnerable and take risks they might otherwise have avoided (confidence). They made deliberate choices about how they wanted to behave as opposed to falling into their traditional, unexamined behaviors. One student described how she learned to prioritize time for herself as opposed to using every spare moment to work on her academics, whereas other students described how they became more consciously engaged in the classroom (more intentional). Finally, students also offered examples that aligned with the notion that they had gained an understanding of themselves in relation to others (broadened worldview). The broader worldview encompassed both local and global shifts in perspective. One student might now see how their actions impacted those around them at their semester school, whereas another saw how their actions as

a U.S. citizen affected people in the global community, but in each case, students had a broadening of their perspective about their position in their/the world.

The following quote demonstrates some of these ideas:

> "*I became more cognizant of my every decision, thinking beyond the self and instead of the greater community around. I chose to be more intentional with my actions, more deliberate with my words, and found more satisfaction with the day as a result. When I really realized my beliefs had changed, I wanted to be sure to maintain the change when I returned home and began to consider how I could facilitate that.*"

Learning Mechanisms Defined Via Semi-Structured Interviews

The reoccurring activities and processes uncovered in the interviews confirmed the results found in the survey and deepened our understanding of the mechanisms thought to fuel transformation. The teachers, students, school structure, social aspects, and curricula structure all contributed to transformational learning.

Teachers were more egalitarian rather than authoritarian. Students said they appeared enthusiastic and excited to teach; they held high expectations for their students, and they were (at many schools) younger and appeared closer to the students' age. Teachers made more of an effort to know the students, which helped students turn to them for help outside of class. Because teachers knew the students, they could help them through challenges and students felt more confident about taking risks later in the semester. The teachers also encouraged students to be responsible for themselves and direct their own lives.

> *It was an environment where the adults and the adult figures were treating us like capable human beings and listening to what we had to say.. they were engaged.. they wanted to be doing what they were doing.. When they treated us like capable and mature, that helped me rise to the expectations..*

Students said it was important that all of them wanted to be at the semester school, and that they were interested in the curricular theme (e.g., sustainable agriculture, outdoor adventure) and wanted to complete the academic assignments. Though they were united in purpose, they had unique experiences and differing viewpoints, which meant they were exposed to diverse perspectives. The school environment fostered positive affirmations and support which allowed students to engage in challenges and take part in honest and open communication. Students found it powerful to be vulnerable and open with one another, which they attributed in part to the discussion teachers initiated at

the semester's start about difficult topics. The below quote demonstrates the importance of student relationships:

> *"I was around people who really valued my opinion but also vocalized their assent or disagreement. I was in a school where everyone cared about each other and therefore was able to express their opinion. After hearing so many personal stories it began to change some of my beliefs and   opinions."*

Scholars have recognized reflection as a key driver of transformative learning, and the survey results supported this finding (see figure 2). Reflection showed up in multiple different ways. Some of the written work required students to engage in deep reflection. Other assignments required students to be alone. Many initially struggled with the solo time. One student described this experience:

> *At first it was hard to figure out what I'm going to do with these two hours .. We went out to a spot in nature for two or three hours, and had only a blanket and water. No books. It was hard to figure out what I'm going to do for two hours.. I realized that I started to think about myself.. I wouldn't force it.. I would write about what was I feeling or doing naturally because I wanted to explore that.. If I tried to force it, it wouldn't feel right, so I let it go naturally.. wanted to write about myself and my feelings and my life in that place book. Getting it on paper was useful and helpful for me. It was a way to get inner thoughts out.*

Another student admitted that at the semester school, he resented being asked to reflect on his experiences before class. That said, he appreciated the emphasis the school placed on reflection, and found that when he did it of his own volition, reflection proved fruitful.

Aspects related to the structure of the semester school experience also appeared important to students' transformation. Students said that being away from home created circumstances that supported their learning as did exposure to a new group of people with whom to build relationships. Another important structural aspect was the fact that they lived together on campus with their peers and with faculty. They lived with peers in dorm-like settings for one of the first times in their lives. Dorms introduced a host of both positive and challenging relationship dynamics for students to navigate. For example, they could stay up with their friends, talking for hours, but if they did, they might arrive in class the next day exhausted. They also spent significant periods outside of the classroom with their teachers, which seemed to allow both students and teachers to see each other outside of their academically defined roles. The structure of the environment contributed to how relationships unfolded. Similarly, the lack of or decreased access to technology caused them to spend more time communicating with others in person rather than electronically.

A component that shared similarity to the structure focused on social dynamics. In particular, students described feeling a strong sense of belonging at the school. They also said that the myriad opportunities for discussion were important. They discussed their ideas both inside and out of the classroom, and the social environment provided a space for them to explore what they thought. The social components of the semester schools overlapped with teacher and student relationships as well as the structure of the school in how it drove transformative learning.

Students also identified curricular components that facilitated their transformation learning, albeit less frequently. This finding may stem from the fact that students cannot easily tease apart how the curriculum presents itself on a daily basis. Students mentioned that being vulnerable with one another led to a strengthening of their relationships. But they also mentioned that prompts from teachers prompted the conversations that required them to be vulnerable. Thus, some mechanisms interacted with one another to create transformative learning outcomes. Other mechanisms were more clearly linked to curricula. Students specified that papers where they needed to articulate their opinions were important as were assignments where they had to sit alone in reflection, and assignments that allowed them to repeatedly revisit the same topics (such as reading a poem at the start and end of the semester or spending time each week at a particular spot at their semester school). Several students identified research projects as being a pivotal experience for them.

PHASE ONE SUMMARY

Taken as a whole, the various parts of phase one suggest that most semester school students do attribute powerful learning to their semester school experiences. The most common and impactful lessons reported include changes in values, more confidence in their life choices, and robust skill development, especially in interpersonal domains. Semester schools generally facilitate this learning in four ways: 1) by fostering a challenging and supportive social system involving both teachers and peers, 2) by employing an engaging and experiential pedagogy that includes reflection and dialog, 3) by using curricular aspects that are intentional and integrated across the semester, and 4) by using the immersive and curated structure of a school environment that was simultaneously different and separated from home.

While this phase of the study demonstrated the potential of transformational learning in semester school students, it also led the research team to consider that a transformational learning lens might not be the best lens for this study. Adolescents are inherently in the process of transforming due to their developmental stage (Illeris, 2014). So, the results confirming that students at semester schools experience transformational learning are not surprising. Their stage of development is ripe for transformation, and, consequently, identity formation.

Some may perceive transformational learning to be a specific type of identity formation. Identity formation is a process whereby a person makes commitments to components (e.g., I am an environmentalist) that establish their sense of self (Berzonsky, Cieciuch, Duriez, & Soenens, 2011; Grotevant, 1987; Luyckx, Soenens, Vansteenkiste, Goossens, & Berzonsky, 2008). Developing a stable identity during adolescence and young adulthood is linked to many positive benefits over time (Crocetti, 2017; Erikson, 1968). Consequently, developing one's identity has long been seen as the primary task of adolescence because of how it can determine one's future trajectory (Erikson, 1968). For this reason, phase two shifted from studying transformational learning to identity formation in semester school students.

PHASE TWO Crossover Design (Fall 2018/Spring 2019)

Phase two of this study employed a crossover design to compare students' experiences and development during a semester school semester to a semester at their sending schools. This phase involved both pre-academic-year (pre), mid-academic-year (post), and year-end (end) surveys to assess learning and context variables. In addition, daily data were collected to better understand what is happening during the respective semesters.

Sampling Procedure
We administered surveys to students who were attending a semester school in Fall of 2018, and those who would be attending a semester school in the Spring of 2019 served as a waitlist control for comparison purposes. We gave students a pre, post, and academic year-end semester survey that measured variables as they changed over the semesters. These surveys were administered at the beginning of Fall 2018, beginning of Spring 2019, and end of Spring 2019. Additionally, we gave students an *in situ* survey twice daily for three, 1-week periods that measured variables in the moment.

Sample
The sample included 214 students that completed pre and post semester surveys. Within this sample of 214 students, 96 students completed each of the pre, post, and year-end surveys.

Instruments
The study included pre/post semester and *in situ* surveys, each with multiple subscales. The semester survey measured outcomes over the semester: reflective thinking, discussion, the new experiences subscale of the Youth Experience Survey (YES) 2.0, Teacher to Student Relationship subscale of the Panorama Student Survey, Sense of Belonging subscale of the Panorama Student Survey, and Dimensions of Identity Development (DIDS). The DIDS measures five dimensions of identity development (See Table 2): 1) commitment making, 2) identification with commitment, 3) exploration in breadth, 4) exploration in-depth, and 5) ruminative exploration (Luyckx et al., 2008). These five measures reflect the identity formation process where an individual explores possibilities and makes commitments to those possibilities and ultimately makes deeper commitments that reflect that identity. This cycle could be interrupted however by ruminative exploration. Ruminative exploration is when a person worries about available possibilities and fails to make a choice. More on these five dimensions will be discussed in the results section.

Table 2. Dimensions of Identity Development (Luyckx et al., 2008).

Commitment making	When a person establishes a component of their identity, such as, "I am an environmentalist."
Identification with commitment	When a person deepens their existing identity commitments. For example, after the environmentalist goes to a protest, they now further identify with their commitment, and might say, "I really AM an environmentalist."
Exploration in breadth	When a person tries out multiple different potential identities, such as debating whether they are an environmentalist, an actress, or a scientist.
Exploration in depth	The process whereby a person explores their potential identity commitment. They could join an environmental club, attend a protest, and write an editorial to the newspaper. During each activity, they are exploring whether the identity (I am an environmentalist) is an appropriate fit.
Ruminative exploration	When the identity formation process is halted because a person is unable to decide whether they will or will not adopt an identity commitment.

The YES was designed to look at adolescent developmental experiences (Hansen & Larson, 2005). The Sense of Belonging and Teacher to Student Relationship subscales of the Panorama Student Survey were designed to assess student perceptions of these two constructs in educational contexts as they are related to student success (Panorama Education, 2015).

The *in situ* surveys were given to students for three weeks during their time at semester school as well as three weeks when they were home. This allowed for comparisons in the semester school and home contexts. Full instrumentation and items can be examined in the Instrument Supplement to this report.

CROSSOVER RESULTS

Results for the semester surveys showed students at semester schools demonstrated higher rates of all DIDS variables except ruminative exploration, where they scored lower than students in the waitlist control at the end of the semester. This indicates students are exploring possibilities about who they could become more widely and deeply than while at their sending school. At the semester school, students are also making commitments that reflect the possibilities they are exploring which could then lead to an internalized identity. Table 3 displays the descriptive statistics for the DIDS variables during the Fall

2018 semester. These data reflective two time points, pre Fall semester and post Fall semester. Following the two time point data, the changes across pre Fall semester, post Fall semester, and year-end data are displayed; there were about half as many respondents for the three time points compared to the two time points.

Table 3 Descriptive Statistics for DIDS During Fall 2018 Semester

| | Waitlist Control (N = 113) | | Semester School (N = 101) | |
| | Pre | Post | Pre | Post |
	M (SD)	M (SD)	M (SD)	M (SD)
Commitment Making	3.15 (1.12)	3.19 (1.13)	3.18 (1.06)	3.70 (.73)
Identification with Commitment	3.52 (.82)	3.52 (.88)	3.51 (.82)	3.85 (.76)
Explore in Depth	3.57 (.63)	3.64 (.69)	3.57 (.69)	3.83 (.65)
Explore in Breadth	4.35 (.57)	4.33 (.56)	4.28 (.65)	4.45(.60)
Ruminative Exploration	3.42 (.91)	3.49 (.93)	3.53 (.87)	3.23 (.87)

As stated previously, students are exploring possibilities for their identities and making commitments towards an identity more than students who have not attended a semester school. Semester school students are less hesitant and fearful about making commitments, as demonstrated by the low ruminative exploration. However, results also showed students do not necessarily continue on the same trajectory when they return to their homes. Table 3 displays the mean scores and standard deviations for both groups. Figures 5-9 depict the shifts in the five areas of identity development over time.

Table 4 Descriptive Statistics for DIDS Variables

| | Semester School (N = 39) | | | Waitlist Control (N = 57) | | |
| | Pre | Post | Year-End | Pre | Post | Year-End |
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Exploration in Breadth	4.32 (.54)	4.42 (.55)	4.42 (.58)	4.21 (.59)	4.22 (.71)	4.53 (.51)
Commitment Making	3.24 (1.09)	3.17 (.77)	3.57 (.99)	3.24 (1.11)	3.32 (.96)	3.84 (.72)
Exploration in Depth	3.53 (.77)	3.77 (.65)	3.98 (.65)	3.57 (.75)	3.58 (.59)	3.76 (.62)
Identification with Commitment	3.54 (.71)	3.76 (.69)	3.69 (.73)	3.58 (.77)	3.62 (.70)	3.85 (.76)
Ruminative Exploration	3.42 (.99)	3.28 (.89)	3.56 (1.04)	3.45 (.89)	3.46 (.86)	3.21 (.90)

A commitment is an aspect of one's identity that has been integrated into their sense of self (see Table 2). Commitment making occurs when a student initially decides upon an aspect of their identity. In contrast, identification with commitment reflects a deepening of the commitment whereby a student integrates that aspect into their identity. Students at semester schools are making and identifying with commitments more so than at their sending schools. While there is a decline in students' levels of commitment making and

identification when they return home, they are more highly engaged in these processes than before their semester school experience. This suggests that students are more committed to aspects of their identity than they were prior to their semester school experience. The slight declines in some of the variables once students return home suggests that the context where they spend their time is impacting their identity formation process. For example, without the reinforcement from the semester school community, students may find themselves switching from being sure of an identity commitment (commitment making) to questioning its fit (exploration in depth).

Figure 5. Commitment Making
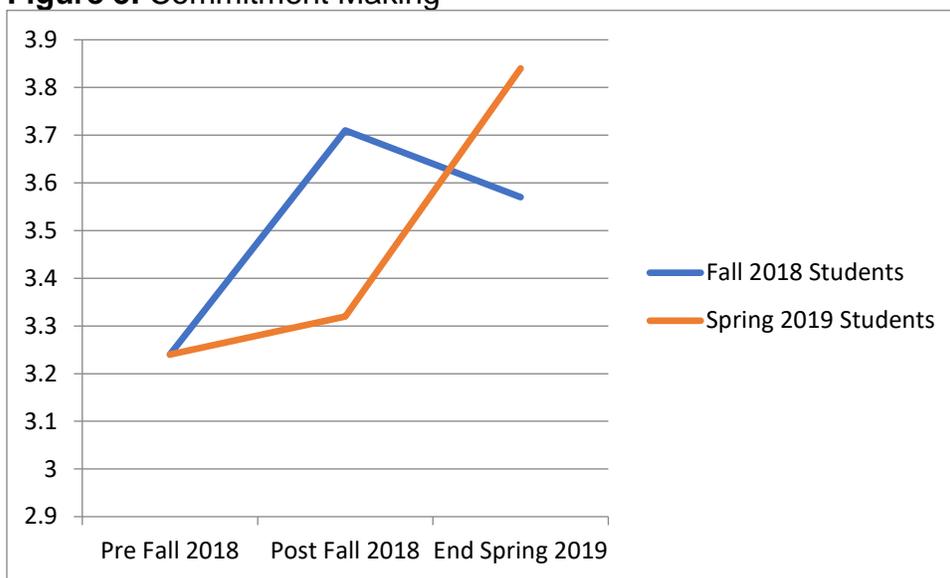
Figure 6. Identification with Commitment
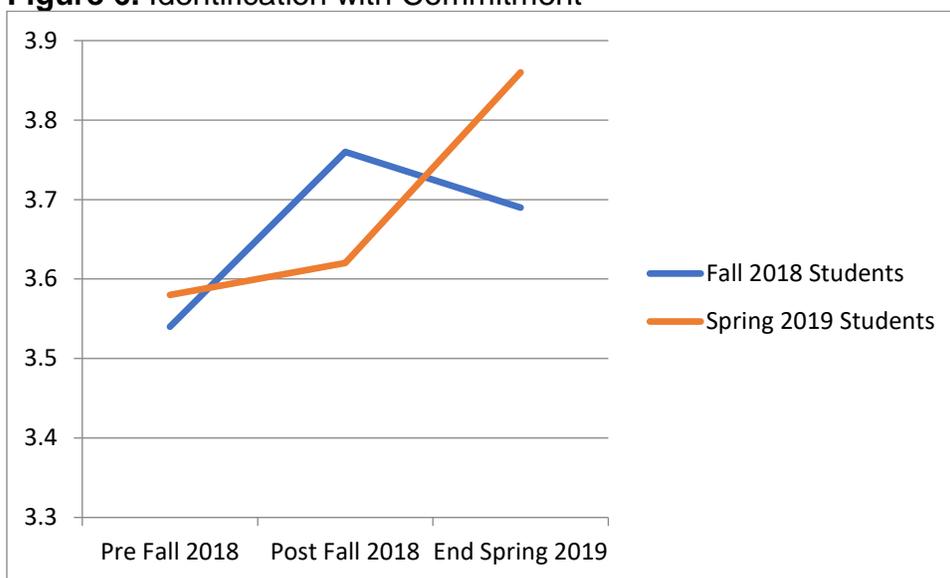
Part of the identity formation process is exploring possible identities. Exploration in breadth describes the examination of multiple options as potential identities (e.g., Am I an environmentalist, an artist, or a scientist?). Exploration in depth tends to be a precursor to identification with a commitment. In other words, a person engages in multiple activities surrounding their identity before they agree that yes, they are an environmentalist. Neither exploration nor commitment-making is an inherently better process; they are both equally critical in the context of identity formation. Students at semester schools are exploring both more in breadth and depth than at their sending schools. When students return home from their semester schools, they maintain similar levels of exploration in breadth but increase their exploration in depth. The increase in exploration in depth suggests that semester school students may be questioning the commitments they made at semester schools, and wrestling with the appropriateness of their fit as they return to their home context.

Figure 7. Exploration in Breadth
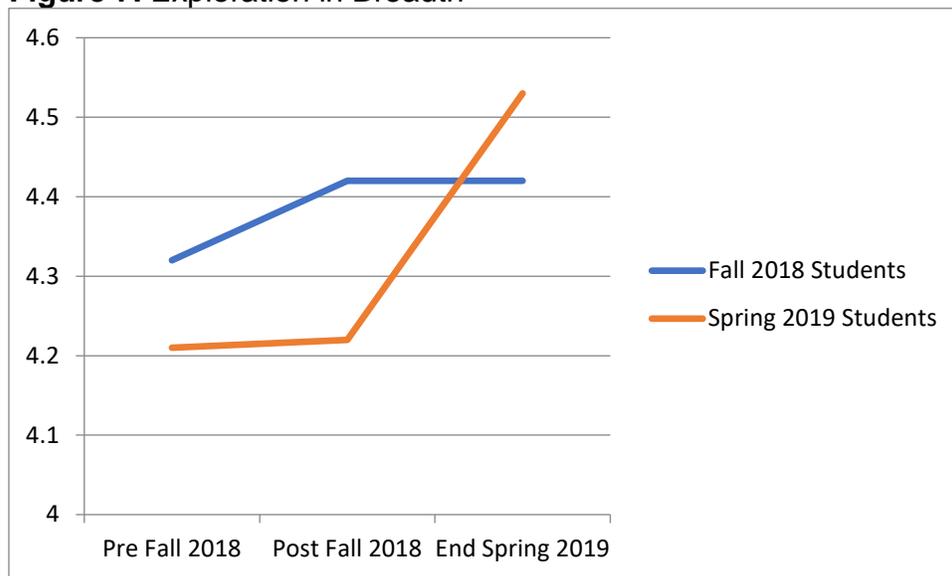
Figure 8. Exploration in Depth
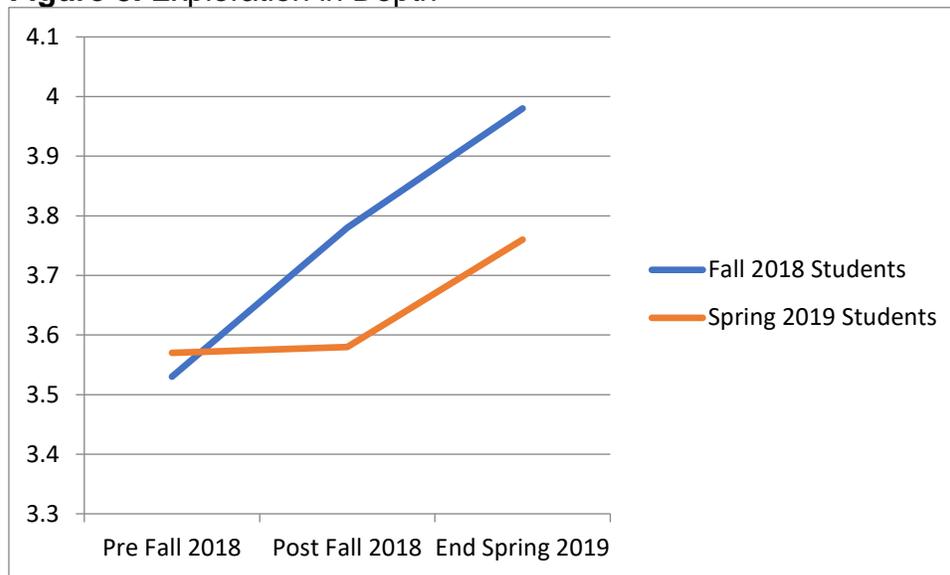
Ruminative exploration appears to halt the identity formation process temporarily. When an individual is unable to make decisions regarding the available choices, the identity formation cycle is put on hold. Students at semester schools experience less ruminative exploration; however, when students return home, there is an increase in ruminative exploration. This increase indicates some conflict inside the students who have returned home that has made it difficult to make choices.

Figure 9. Ruminative Exploration
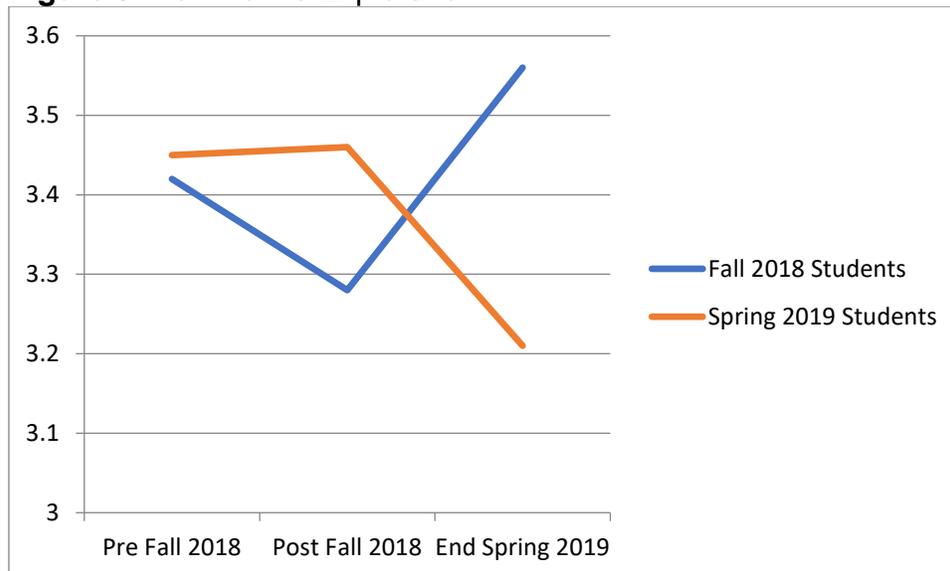
The results from the DIDS variables might be partially explained by the experience characteristics, which represent aspects of an experience that are considered central to identity formation. Results for the experience

characteristics showed students at semester schools reported higher presences of the experience characteristics than their peers who were still attending their sending schools. Thinking about their values and beliefs, discussing their values and beliefs, and a sense of belonging with peers and teachers account for much of the change in students' identity scores. Table 5 shows the mean scores and standard deviations for the pre, post, and year-end scores between both groups.

Table 5. Descriptive Statistics for Experience Characteristics: Pre, Post, and Year-end

	Semester School (*N* = 39)			Waitlist Control (*N* = 57)		
	Pre M (SD)	Post M (SD)	Year-End M (SD)	Pre M (SD)	Post M (SD)	Year-End M (SD)
Thought About Identity	4.29 (1.36)	5.41 (1.16)	4.87 (1.32)	4.00 (1.64)	2.7 (.59)	5.63 (1.07)
Discussed Identity	3.04 (1.22)	4.40 (1.38)	3.43 (1.42)	2.98 (1.25)	1.62 (.34)	4.97 (1.35)
Tried New Activities	3.50 (.84)	4.51 (.65)	3.80 (.96)	3.76 (.83)	3.83 (.73)	4.51 (.71)
Teacher and Student Relationship	3.46 (.90)	4.63 (.45)	3.57 (.96)	3.62 (.85)	3.53 (.92)	4.60 (.50)
Sense of Belonging	2.92 (.86)	4.31 (.86)	3.10 (1.05)	3.28 (.84)	3.20 (.74)	4.26 (.70)

Results showed that while students are at a semester school, they think about their identity more, discuss their identity more, try more new activities, have better teacher and student relationships, and feel a greater sense of belonging. Once students return home, the mean scores on the experience characteristics return to nearly the same levels students reported prior to attending a semester school. Semester schools appear to foster experiences that allow students to engage in the identity formation process and may do so through the relationships that are formed between students and their teachers. The relationships provide a safe and supportive environment for students to discuss and think about their identity. Upon their return home, students re-enter an environment that has fewer of the characteristics they experienced at the semester school. The difference between the two contexts appears to affect which identity formation processes they engage in, leading students to question their identity commitments even more as they return home. When students return home, they are no longer experiencing the characteristics that help foster identity formation to the same degree as during their semester school term.

IN SITU SURVEY RESULTS
The first part of the in situ survey asked students to identify the most meaningful activity they engaged in for two different portions of the day: when they woke through early afternoon, and early afternoon until they went to sleep. Some activities were more frequently identified as meaningful. Specifically, hanging out with others was noted in both the semester school and home environments as the most frequent meaningful activity. While there is some variability in the other activities noted as meaningful by SSN students, most are not surprising. While at semester schools, students report less sport/recreation involvement, more

unpaid labor (i.e., chores), more personal reflection, less connecting on technology, and less paid employment. See Figure 10.

Figure 10. The Most Meaningful Activities Reported by Semester School Students at Home and at the Semester School.

Most Meaningful Activities at Home and Semester School (SS)

At Home	Activity	At SS
23.9%	Hanging out with others	25.7%
11.7%	Other; idiosyncratic	12.5%
16.1%	Sports/recreation/leisure activities	11.3%
11.6%	Studying	10.9%
9.2%	Academic discussions	8.0%
3.1%	Physical labor, unpaid	7.1%
4.5%	Personal reflection	6.9%
4.8%	Academic labs/practice	6.5%
5.1%	Spending time with teachers/adults	4.5%
4.8%	Academic lectures	3.6%
3.6%	Connecting on technology	2.2%
1.7%	A paid job	0.4%

After reporting on the most meaningful activities, the students were asked to briefly describe why the experience was meaningful. A summary of these responses is presented in Figure 11. The people, the learning, enjoyment, effort/work, and the new experiences were generally central to making an experience meaningful.

Figure 11. Words Used to Describe what Made the Activity Meaningful

After describing the activity in their own words, the students were then asked to rate a series of activity descriptors we provided (See Table 6 for a list of the possible activity descriptors). Overall, regardless of activity, the semester schools were generally rated higher than home on these descriptors. Figure 12 below illustrates a typical pattern of responses for one of the activity descriptor questions: "During the (indicated) activity, I thought about my values and beliefs" across the span of activity options and segmented by whether the student was at a semester school or at home during the survey window. Interpretation of the data in Figure 12 show that students generally reported higher levels of thinking about their values and beliefs while at semester schools than when at home regardless of what they were doing (i.e., the activity category reported). While hanging out with friends, sports/recreation, and studying showed the fewest difference between home and semester school settings, the academics were notably different. Students at semester schools reported that curricular elements

such as academic discussions, labs/practice, and lectures were more meaningful and prompted students at semester schools to reflect, try out their ideas, do new things, challenge themselves, and think about their beliefs/values more so than the same academic experiences at home.

Table 6. Possible Activity Descriptors and Rating Scale

During the above Activity	Strongly Disagree						Strongly Agree
I made important decisions	0		1	2	3	4	5
I worked collaboratively with a teacher/coach/mentor	0		1	2	3	4	5
I did new things	0		1	2	3	4	5
I was challenged	0		1	2	3	4	5
I thought about my values and	0		1	2	3	4	5
I found it easy to focus on what was happening in the moment	0		1	2	3	4	5
I had ample opportunities to reflect	0		1	2	3	4	5
I felt understood	0		1	2	3	4	5

Figure 12. Thought about my Beliefs and Values
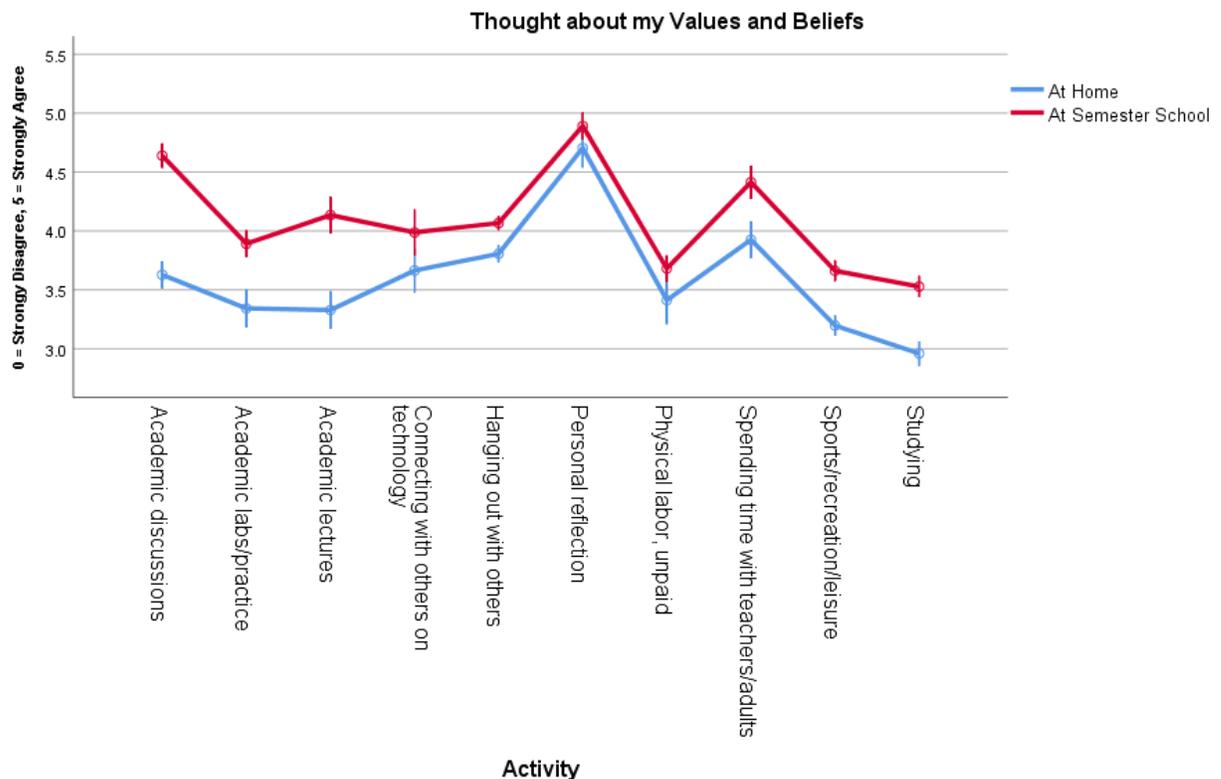
Note: error bars are 95% Confidence Intervals

PHASE THREE (Fall/Summer 2019)

The primary purpose of phase three of this study was to focus on the transition home as well as further elucidate the findings from the previous phases. As we moved through the earlier phases, we noticed that the students were often reporting that they were making life choices based on both external information and their internal metric. This evolution of thought is often termed self-authorship. Self-authorship is a way of being where a person depends on their internal compass to make decisions and direct their future (Baxter Magolda, 2001; Kegan, 1994). A young person who is self-authored may be better able to manage the myriad of decisions they face as they pick a career and make long-term decisions for their lives. There are three domains of development for self-authorship: epistemological (knowledge as certain versus contextual), intrapersonal (a sense of self and beliefs that influence behavior), and interpersonal (relationships with others in relation to one's own identity) (Baxter Magdola, 1999). As Baxter Magolda (2004) explained, self-authorship is important because the level of developmental capacity to self-direct is not only crucial to succeeding in higher education but to meet the demands of adulthood after graduation.

Sampling Procedure

All students who attended a Semester School in fall 2018 or would attend in spring 2019 were invited to participate in this phase. Participants completed an online survey consisting of six questions. Students were also invited to participate in a semi-structured interview.

Sample

One hundred and sixty-two students completed a survey instrument in the early spring of 2019 after completing a fall semester at a semester school. One hundred and fifty students completed the same survey in early spring 2019 before attending a semester school. This allowed us to compare responses both before and after semester school attendance. After cleaning the data and excluding responses that did not meet the criteria explained below, thirty-five responses remained for fall semester students and forty-four for spring semester students. Twenty students participated in semi-structured interviews.

Instruments

Six open-ended questions taken from a survey designed to assess for self-authorship were administered in the online survey (Pizzolato, 2005). The questions were: (1) What was an important decision you made? (2) When did you make the decision? (3) Why did you make the decision? (4) What options were available to you? (5) How did you ultimately make your decision? (6) Were you pleased with this decision, and why? (Pizzolato, 2005). The questions did not specify a time period, which lead to students responding with decisions made several years prior to attending a Semester School. In order to control for

developmental differences, only decisions made during or after Fall 2019 were included.

The semi-structured interviews further sought to understand the degree to which Semester School students are self-authored and to what degree the Semester Schools impacted their self-authorship trajectory. The interviews also included questions regarding participants' experience at semester schools, to compare and contrast findings from previous phases, in addition to questions concerning their transition home.

Data Analysis

The open-ended questions from the online survey were coded by two independent coders using an open coding scheme. The interviews were coded for recurrent themes.

RESULTS

Survey Results

The open-ended online survey questions revealed that there were similarities in how students spoke about the decision-making process both before and after semester school attendance, however the content of what they discussed differed for those who attended a semester school. For the students who had not yet attended the semester school, the majority of the decisions centered on the students' surrounding social and academic structures, like friend groups and extracurricular activities. For example, one student spoke of deciding between drama or soccer and how that would influence their group of friends. This focus on socially dictated relationships would not be considered self-authorship. In contrast, students who attended a semester school more frequently demonstrated a shift in their decisions to something that would have a greater impact on their personally defined identity long term. Students who had attended a semester school spoke more frequently about the type of person they wanted to be in the long term, independent of their current social structures. One semester student wrote,

> *"In my life I have experienced quite a bit of death, illness, and people leaving unexpectedly and so I have always thought that I need to take advantage of everything and do everything and do everything I can. Unfortunately, this led me to do many things that I didn't want to just because I thought that I should. At my semester school, I learned that I should take advantage of things but not things that will not benefit me or I will not enjoy. This was the first time I ever really said 'no' to anything just for me."*

This student made a decision that could potentially have a long term impact on the way they approach life based on an experience they had at a semester school.

Semi-Structured Interviews

The semi-structured interviews revealed further signs of advancement towards self-authorship in the three self-authorship domains: epistemological, interpersonal, and intrapersonal.

Epistemological

Students reported they were coming home more prepared academically and tried to continue some of the ways of learning that they had experienced at a semester school. Many students returned home viewing knowledge as exciting and the acquisition of knowledge as a co-creative process. Several students found the way their sending schools taught limiting and restrictive to their pursuit of knowledge. Some, like the student quoted below, talked about ways they tried to maintain the style of learning they enjoyed at a semester school.

> *"At my semester school, I learned the importance of learning through everyone sharing their thoughts and that there is not necessarily a right or wrong answer. I learned so much from my peers at the semester school, I wanted to take that home so I tried to ask my friends questions and start discussions in class and even when I was hanging out with friends."*

This student reflects the self-authored perspective that knowledge is more complex than a teacher presenting its face value for their students. Another student expressed this shift as less emphasis on grades and more on learning:

> "Before I was always stressed out about grades and it was always about getting good grades and I've tried to stay away from that more which is kind of hard in the end of junior year but I definitely focused more on actually trying to learn instead of just doing well in school."

Intrapersonal

Interviews also revealed students were coming home and making decisions about their friend groups at home. Students expressed they had a greater desire to get to know new people because of the positive experience they had getting to know new people at a semester school. Other students expressed that they chose to end some friendships made prior to attending a semester school because those friendships no longer reflected who they felt like they had become:

> *"Part of what I realized at my semester school is the type of people I want to have around me. I had a lot of manipulative friends prior to going and after going I realized you can have genuine connections and that there are people who really do want the best for you. It's not all about your social life and your image. So when I came home I had to make some changes and distanced myself from some people. That was difficult for a while but I wanted to stay true to myself and be the person who I wanted to be and not try to change myself to fit in."*

The self-authored idea of navigating relationships based on personal values and not external social pressures can be seen reflected in the above quote. The following further illustrates this idea of heightened awareness distinguishing between the self and the other:

> "Since returning home I thought a lot more about how my actions were affecting myself. I spent a lot of time beforehand thinking about how my actions affected other people but now I think I see how what I do affects myself and others. I feel like I have more self-awareness."

Interpersonal

Individuals on the trajectory towards self-authorship have an evolving awareness of their values and identity and how this interacts with others around them. Throughout the interviews, semester students often expressed a stronger identification with values they developed at a semester school. Students often expressed tensions between their new sense of self and their old home relationships and broader social/cultural environment. Some students expressed they were able to maintain the values they developed while at the semester school despite the pressure from previous friends to revert to their previous way of being. The quote below demonstrates a shift in interpersonal development:

> "I am more understanding of people. I feel like before the semester school I was more judgmental and now I realize that so many people have so many stories and each of us have our own challenges we're facing and that happened because I was able to meet people that were different at my semester school."

Another theme that frequently emerged was a shift in their college decision process. Several students expressed that upon returning from their Semester School, they no longer looked for the same things in colleges that they did prior to attending a Semester School. One student expressed that despite the expectations of those around him, he would not be attending the larger university his friends and family expected, rather he would be pursuing a degree in a

smaller liberal arts school in order to create a similar community he felt at his Semester School. The following quote illustrates this recurring theme:

> "I think my Semester School definitely influenced the way I think about the college process. Now my number one thing is to find a close community in a college like I had at my Semester School. Before I thought about going to big schools but now I'm looking at really tiny schools."

Synthesis of Findings

The semi-structured interviews revealed many of the important factors found in the previous phases continue to be important. For example, students in interviews referred to factors like relationships with teachers and students, the pedagogical techniques, and the experiential learning components. One student explained:

> *"I felt so much growth as I was living at my semester school and I could feel myself physically getting stronger and more comfortable talking with people and making deep connections with my friends and staff members and I was learning so many new things. And I felt mentally that these experiences were giving me self confidence that previously I had felt some turbulence with."*

The themes found throughout phase 3 were consistent with the findings throughout phases 1 and 2. The following table provides an overview of overlapping themes throughout the various phases.

Table 7, Integration of Findings Across Phases 1-3

	Phase 1	Phase 2	Phase 3
Key Outcomes	Intrapersonal Development Such as Self-Confidence		Intrapersonal Development Such as Self-Confidence
	Developing or Uncovering Values		Spoke of values developed at Semester School
	Interpersonal Skill Development		Interpersonal Skill Development
		While at SS, students explored their identities	
		While at SS, students made identity commitments	Students made decisions about who they wanted to be that extended beyond their current circumstances
			Students approached learning differently after attending a Semester School
Mechanisms	Teacher and Student Relationships	Teacher and Student Relationships	Teacher and Student Relationships
	Holistic, Experiential, and Challenging Pedagogical Approach	Meaningful, Challenging, and Engaging Experiences	Holistic and Experiential Pedagogical Approach
	Non-traditional structure e.g., being away from home	Trying New Things	Non-traditional structure, e.g., being away from home
	Curricular Elements such as specific courses or activities	Curricular Elements such as labs, discussions, lectures	Semester School activities
	Reflection	Reflection	
		Discussed Identity	

OBSERVATIONS AND RESEARCH RECOMMENDATIONS

We appreciate the Semester School Network's interest and enthusiasm for research and data. Making efforts to understand the power of semester schools in learning as well as how the educative potential might be improved is admirable. That said, the member schools in the network were differently invested in the project. These variations in commitment led to the suboptimal sampling of some schools' students. If the Semester School Network continues

to support research, candid discussions with each school regarding reasonable data collection support and expectations should be clear.

Future research might address:
1. Transitions home. Our data suggest that some students go through transition periods when they leave a semester school and return home. While academic transitions were generally handled through student and sending school actions, the implications of the social and emotional transitions are less clear. While we suspect that these transitions are inherent in the learning process, we cannot offer data-based recommendations for semester schools to aid this process.
2. Long-term effects of Semester Schools. From our current data, we know little of how semester school experiences shape college and career choices over the college-aged years.

CONCLUSION

Semester school students widely report their experience at the semester school as transformational. Students claim their lives are not the same. All three phases of our investigation showed students do indeed change. Phase one revealed over 90% of students report having experienced transformational learning in some form. Phase two found students are experiencing greater identity exploration and identity commitment, which are instrumental in the identity formation process. The final phase discovered students are returning home from their semester schools with a shifted perspective in the way they engage with learning and who they decide to surround themselves with. Throughout all of the phases, many of the same mechanisms were identified as major contributing factors to these transformations. The relationships with other students and faculty, the pedagogical techniques, the non-traditional structure of semester schools, and the curriculum all played important roles in the transformation students reported.

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APPENDIX A: DETAILED THEMATIC CODES FROM PHASE ONE

ALUMNI SURVEY

Appendix A Table 1. Most valuable learning at semester schools

Intrapersonal development	Perseverance	The ability to overcome challenges and take that challenge in order to make yourself better.
	Trying New Things	To try and take risks, especially when meeting new people. To be comfortable putting myself in uncomfortable settings.
	Expanding Comfort Zone	Being comfortable with ambiguity/the unknown.
	Independence	Establishing my place in the world as an independent individual.
	Confidence	Always, always, always trust yourself. Never let anyone dictate where you move or how you groove, and never let people hold you back.
	Agency	How to take ownership of my own education and success.
	Living in the Present	How to soak up the present moment.
Values	Appreciation for learning	One thing I learned that wasn't explicitly taught but I remember and think of almost every day is that I can learn from every single experience if I try to. Every experience I have can teach me something about what I did/should do, who I am, the people around me, the systems and environments I'm in, etc.
	Appreciation for diversity	My biggest lesson was how to live well with other people and how to form close friendships. I learned to appreciate and value the different things that everyone brought to the semester.
	College/career orientation	I learned that I am very interested in the environment and I want to pursue a minor in environmental studies.
	Identity	Understanding who I am and how I fit into the world.

Intrapersonal development	Leadership	One of the most important skills I learned while at [my semester school] was leadership and learning to take charge. I was very much a follower before I began at [my semester school] and after my semester there I became a true leader and someone who can take charge of a group to complete a common goal. This has helped me in my college experience, especially in Student Government, which I am now the current President. I am very proud of my leadership skills and am grateful that [my semester school] gave me those skills that will help me achieve my career goal of Event Management.
	Teamwork	It's hard to say definitely, but one of the most valuable lessons I learned at [my semester school] was definitely how to work well with others, and how to be a part of something much larger than yourself.
	Communication	How to give and receive feedback effectively.
	Relationship skills	How to relate to, get along with, and appreciate other people.
	Empathy	All people have a unique perspective shaped by their background and interactions with other people of different backgrounds and it's necessary to understand this in order to understand their view of the world.
An experience	Community	An appreciation for the place, and forming deep relationships with others. The most valuable things I learned while at [my semester school] was the importance of community. It helped me find the college I wanted to attend and it is something I now realize as being important when finding friends. Not just friendships but a community of supportive and caring people.
	Experiential Education	Learning by engaging directly physically with the world around you, nature and people.
	Sense of Belonging	What it feels like to be in the right place, with the right people.

Understanding	Transformed perspective	I learned to look at human issues, from climate change to conflict, in a broader and more global context.
	Reward for Effort	It's okay to struggle with something as long as you put in your best effort.
	Interconnectedness	I learned that my actions and emotions have a huge effect on others, so I have to be very self-aware in order to create a positive environment for others.
Skill	Application of learning	The transfer of knowledge--using what I'm learning in some classes to seemingly-unrelated ones or to life outside of class.
	Non-linear thinking	How to think critically and independently - how to apply learnings across subject matters to have a more complete picture.

Appendix A. Table 2. Learning Mechanisms

Faculty and Peer Relationships in the Living Learning Community	The chemistry of my particular class. The inclusive community my teachers and peers and I built together. The amazing group of people and the atmosphere we all lived in. Faculty Specific: The science teacher and English teacher who together were constantly asking questions that forced me and my classmates to think beyond our previous experiences and ideologies. Peer Specific: The really challenging and absolutist viewpoints of other students who helped me develop better devil's advocate skills and how to deal with frustration.
Experiential Pedagogy	The innovative "connections" classes that married science and history, or history and English, and allowed us to see connections between different fields of study, allows us to apply different critical lenses to an issue. Classes that revolved around place-based learning, being pushed to step outside of my comfort zone, brilliant

	teachers who presented their classes with gusto, and the group of motivated, dedicated, and inspiring girls I was so fortunate to experience TTS with. Speaking directly to people who had lived through or had been immersed in the events/cultures/movements we were studying.
Non-traditional Structure	The faculty and the distance from my previously known world. The ability to step out of my comfort zone and associate with people that I had never come in contact with gave me the ability to see others' points and how their life experiences and challenges affected their way of life now. Seeing how others lived gave me a map as to how I wanted to live my own life. The absence of electronics, WIFI, cell phones, tv, etc. The short time we were there.
Curriculum-based activities	Open-ended essay assignments, tight deadlines (e.g., a 3-page essay due the day after it is assigned), intimidatingly smart and respectable teachers, regular meetings and group reflection. Expeditions: The long hiking days during which my instructors would be cracking jokes after 10 hours of hiking. Major Projects: The opportunity to spend the entire last month of the semester working on a final project that I designed myself and had ownership over.

APPENDIX B: ILLUSTRATIVE QUOTES FROM PHASE ONE

INTERVIEW THEMES

Teachers –
   "Honestly having long conversations with teachers [changed me]. They were always pretty open. They were never trying to convince me. Which is exactly what ended up convincing me. We ended up having these long-winded, logical conversations about what we held to be true and why. By the end, their stance just made more sense to me … It was just really interesting back and forths that way. That is what ultimately changed my mind."

Students –
   "One of the first things was being around other girls and women who had the same mentality as you. They wanted to do more and be something different than the people at my high school. People at home don't change and are afraid of change. Being with the same people who have the same mentality as me, who want to travel, that changed me."

Reflection –
   "At first, it was hard to figure out what I'm going to do with these two hours on a Sunday. We went out to a spot in nature for 2 or 3 hours, and only had a blanket and water and no books. It was hard to figure out what I'm going to do for two hours. I realized that I started to think about myself. I wouldn't force it. I would write about what was I feeling or doing naturally because I wanted to explore that. If I tried to force it, it wouldn't feel right, so I let it go naturally. I wanted to write about myself and my feelings and my life in that place book. Having to write my thoughts down was important … getting it on paper was useful and helpful for me. It was a way to get inner thoughts out."

School Structure –
   "The freedom that you're granted is a big part of it. There's 'you need to be in class and show up for checks,' but the time that is not specifically designated is really unrestricted for the most part."

Social –
   "One of the first things we did as a semester is broke into little groups and did a talk about our identity … maybe I talk about this with my close friends but not really with 44 strangers. We dove right in ... I thought it was real interesting because I had to think about how people see me and how I see myself. I think one thing that I realized is that I accept a lot more of how people see me … I identify more with that than with how I identify with myself. I think that people around me also felt that way too. … That was a start to the semester where we all got to share how we see ourselves and that helped people around me and

myself included to see my peers as how they wanted to be seen. Throughout the semester, we talked more about parts of our identity like gender and sexuality and race and SES. SES was a big thing that we talked about. It was also a really interesting conversation. It's not something we normally talk about."

Curriculum –
      "Particularly at [my semester school], the English class we had there was very different from a standard high school class, and it was more challenging in the kind of thinking about why you're supposed to write in a certain way and thinking more about the content that you're reading deeply rather than just more menial surface level grammar and things like that. It influenced me in helping me think more about what I read. Not only what it's literally meaning but the meaning behind it and the context within when it was written may affect its implicit meanings."