THE ROLE OF PHILOSOPHICAL INQUIRY IN HELPING HIGH SCHOOL STUDENTS ENGAGE IN LEARNING AND SEEK MEANING IN LIVES

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Dedication

To my father, who taught me to pursue my dream with heart and determination.

To my mother, who taught me never lose the hope for life.

To my husband, who made me believe I am an ordinary woman but can do extraordinary things.
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ABSTRACT

Studies have characterized high school students as bored, alienated, and disconnected with their class and the learning process. In order to address students’ learning needs, this study explores the impact of philosophical inquiry on the development of adolescents’ academic engagement and psychological well-being, and adds to the scholarly research on Philosophy for Children Hawai‘i. In determining an appropriate and holistic approach to investigating students’ learning experiences, this study involves multiple forms of data collection, specifically including surveys, student work, focus group interviews, classroom discussions, and reflective notes. Applying both qualitative and quantitative methods, this study developed a deeper understanding of what classroom contexts, conditions, discourses, tools and practices promote positive adolescent learning experiences.

This research consists of two studies; the first study is a multiple case study, and the second study is a descriptive quantitative study. Through six real-life case studies and one cross case analysis, Study One developed a conceptual framework of student academic engagement in a philosophical inquiry class and summarized reasons why the participants engaged in learning and their perceptions of a meaningful life. First, students believed that maintaining a safe and positive classroom environment is a fundamental condition for learning. Second, they reported that asking questions, sharing ideas, listening attentively, thinking deeply, and making connections are the manifestations of an engaging classroom in the philosophical inquiry process. Third, students reported that they transcended their learning experiences by living a new philosophy.

In Study Two, findings related to the Philosophical Inquiry Questionnaire indicated that the philosophical inquiry participants’ global learning outcomes, including students’ abilities to
engage in philosophical reflection, to make decisions, to be a responsible and ethical member of the community, and to show empathy to others was improved after the Philosophical Inquiry experience. The Sense of Coherence Scale results suggested that students’ global sense of coherence was improved as well. Participants reported that they made more sense of the world and the events that occurred in their daily lives. They believed that they were more able to manage resources to solve problems and make informed decisions. The most interesting finding in the Sense of Coherence Scale was that participants did not improve their Meaningfulness score, which implied that these adolescents were still in the process of figuring out their identities and what their future lives will hold.
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LIST OF ABBREVIATIONS

The following are three abbreviations that will be used often throughout this dissertation.

Philosophy for Children Hawaiʻi (p4cHI) - p4cHI is an innovative approach to education that attempts to transform the schooling experience by engaging people in the activity of philosophy. p4cHI aids students and teachers in converting traditional classrooms into intellectually safe communities of inquiry. Together, participants develop their ability to think for themselves in responsible ways by exploring meaningful questions that arise from their interests, experiences, and learning contexts. To learn more visit p4chawaii.org.

Philosophy for Children (P4C) - P4C converts traditional classrooms into reflective communities of inquiry where students and teachers continue to develop their abilities to think for themselves in responsible ways. P4C began around 1969 when Matthew Lipman, a Columbia University philosophy professor, became disenchanted with the educational system. He observed that children did not think as well as they could or should in a democratic society. He observed and was concerned that schools encouraged children to have a negative view of their own intellectual abilities. To address these issues, Lipman created a curriculum that incorporated the skills of logic and reasoning found in the practice of philosophy to improve students’ thinking in the K – 12 setting. In an effort to extend Lipman’s original curriculum and vision to a variety of geo-cultural contexts, a number of P4C Centers have been established worldwide. To learn more visit p4chawaii.org.
Philosophical Inquiry Course (PI) - Philosophical Inquiry is designed to help students understand and gain facility in transforming what they learn into knowledge. “Philosophy,” as understood in this course, is the activity of inquiring into our own experiences and beliefs as well as the accumulated knowledge of humanity. It is a participatory process, or “inquiry,” which requires students to seek more than just the memorization of names, dates, and ideas. As members of an “intellectually safe” philosophical community of inquiry, students and teachers use dialogue, Socratic inquiry, responsible thinking, and empathy to examine questions and issues that arise from the study of history, contemporary society, economics, political science, geography and social interaction. Interdisciplinary links are made between these content areas, and students learn tools for thinking philosophically and ethically across a wide range of topics and issues introduced in each area of scholarship (Hawai‘i public schools course description catalog, 2014)
CHAPTER 1. INTRODUCTION

Philosophical inquiry, or the practice of “thinking together” is an educational approach that originates from philosophical pragmatism. It upholds that knowing is not merely an acquisition of knowledge that is external to the knower, but arises from a community of inquiry that students engage with and construct together. This pedagogical approach involves logical questioning and broad discussions among students and their teachers. The teacher is the students’ co-participant. In the process of constructive dialogue, students and their teacher clarify thinking, raise questions, record discussions, explore meanings, listen carefully, and respond to the ideas of others respectfully and nonjudgmentally (Millett & Tapper, 2011). The philosophical inquiry is open to revision, which means the participants are capable of changing their views and priorities based on their interests and needs (Sharp, 1993).

Considering the benefits of philosophical inquiry, the Hawai‘i State Department of Education (HI DOE) newly developed a standards-based social studies course called Philosophical Inquiry (PI) that helps students understand and gain knowledge in transforming what they learn into daily practice and problem solving. Students inquire into their own experiences and beliefs as well as the accumulated knowledge of humanity in this course. In the community of inquiry, students will build an intellectually safe place (Jackson, 2001) where students and teachers use dialogue, gentle Socratic inquiry, responsible thinking, and empathy to examine questions and issues that arise from their genuine wonderings about the study of history, psychology, contemporary society, economics, political science, geography and social interaction. During the inquiry, students learn tools for thinking philosophically, critically and ethically across the wide range of interdisciplinary topics and issues introduced in each area of scholarship (Hawai‘i Public Schools Course Description Catalog, 2014).
The PI course is grounded in the philosophy for children Hawaiʻi (p4cHI) approach to education. p4cHI is an outgrowth and unique expression of Matthew Lipman’s (1988, 2003) original Philosophy for Children (P4C) movement. p4cHI is an innovative approach to education that transforms the schooling experience by engaging students in intellectually safe communities of inquiry (p4cHI Website, 2014). p4cHI now has become the namesake of the educational movement associated with doing philosophy with K-12 and university students in the Hawaiian islands (Miller, 2013). The concepts of community, inquiry, philosophy, and reflection serve as the pillars of PI classroom activity. Students and teachers practice listening to one another with respect and empathy, building on each others’ thoughts, and using thinking skills to understand each other’s perspectives as they work toward finding possible answers to the confusions and concerns confronting their lives and the world (p4cHI Website, 2014). Although the acronym of P4C has been widespread and P4C has been practiced in many countries, it rarely has been considered as a mainstream curriculum. This paper will use philosophical inquiry interchangeably with p4cHI because this term is considered as having considerable overlap with p4cHI (Millett & Tapper, 2011; Lam, 2012).

The Philosophical Inquiry course is

a new social studies elective that was developed by educational researchers, teachers, and students in the State of Hawaiʻi. Unlike traditional social studies coursework, Philosophical Inquiry is an interdisciplinary course that emphasizes students and teachers working together to improve their thinking and community. (Makaiau, Shiroma-Ming, Miller, & Fukuda, 2014)

It is the first social studies class at Kailua High School that focuses on teaching and using philosophical thinking tools, and provides students with opportunities to think about things that
really matter to them in their lives. It is a new paradigm of social studies coursework that values global perspectives, multicultural views, depth of understanding, student experiences and interactions (Makaiau, Miller, & Shiroma, 2013). The PI course was piloted in the HI DOE at Kailua High School (KHS) in fall of 2013. This research will examine the effects of the PI course on students’ learning, engagement and their efforts with regard to seeking meaning in their lives. The following sections will describe the PI course, the development and design of its curriculum, assessment and instructional practices and course objectives.

Philosophical Inquiry Course Curriculum Development

In 2012, the curriculum developer, Dr. Amber Makaiau of the University of Hawai‘i Uehiro Academy for Philosophy and Ethics in Education was contracted by the Hawai‘i State Department of Education (HI DOE) to design and evaluate a new high school social studies elective titled, “Philosophical Inquiry.” The curriculum was designed collaboratively by Makaiau, Miller - the Philosopher in Residence of KHS, Fukuda - the Social Studies Director of HI DOE, and Shiroma-Ming - the Philosophy Inquiry course instructor at the KHS. While Shiroma implemented the course in fall 2012 semester, Makaiau and Miller visited the Philosophical Inquiry course one or two times every week, observed Shiroma’s teaching/facilitating practice, provided suggestions, and modified the curriculum. Before each class, they spent about 20 minutes discussing the previous week’s course implementation, addressing challenges they encountered, specifying expectations and making new plans for the next week’s teaching.

Philosophical Inquiry Course Curriculum Design

Makaiau, Miller, and Shiroma constantly examined their beliefs as p4cHI educators while designing the curriculum ((Makaiau & Miller, 2012). They reported that they incorporated their
senses of wonder, curiosity, interests, and critical analyses of life’s meaning into the curriculum they designed and into the relationships they developed with their students. They realized that students were more willing to engage in this process of philosophical inquiry when they observed their teachers engaging in genuine inquiry about life’s experiences, situations, world problems, and their own questions. In the Philosopher’s Pedagogy article, Makaiau and Miller (2012) hoped that the curriculum would guide students to internalize the skills, knowledge, and attitudes needed to engage thoughtfully in an examination of their lives. With regard to national movements in contemporary social studies education, the Common Core (English Language Arts) Standards and the College, Career, and Civic Life (C3) Framework for Social Studies State Standards were used to create the PI course curriculum (Philosophical Inquiry Standards, 2014, p. 18). The course was designed to directly address many of challenges faced by students and educators in the 21st century. The curriculum represents

a dramatic shift from traditional social studies courses which typically focus on: narrow perspectives, a predominantly Western view, studying ‘about’ democratic citizenship, chronology as a way of organizing content, coverage, text-books, interpreting texts, the separation of disciplines, emphasis on the past, individualism, and tests that emphasize recall. It, however, represents a newer paradigm of social studies coursework that values global perspectives, multicultural viewpoints, “practicing” democratic citizenship, theme/issue based studies, depth of understanding, experience and interaction. (p. 2)

In the course, students construct their own meanings from multiple resources and integrate them with their past experiences and prior knowledge.

**Philosophical Inquiry Course Assessment Practices**
The class has a strong emphasis on peer and teacher collaboration, and alternative forms of assessment such as evaluating community building and inquiry strength and depth (Makaiau et al., 2014). Philosophical Inquiry was designed to provide students with the skills, knowledge, dispositions, and processes “necessary for achieving 21st century student outcomes and is one component of an effective standards-based education that will help Hawai‘i’s students be ‘college and career-ready graduates’” (Philosophical Inquiry Standards, 2014, p. 2).

**Philosophical Inquiry Course Instructional Practices**

Philosophical Inquiry teachers are taught to transform their role into teacher-facilitators. They use the philosopher’s pedagogy (Makaiau & Miller, 2012) in shaping the student experiences in the course. Philosophical Inquiry focuses on processes for thinking and learning, and the development of ethical relationships among students and teachers in and beyond school. As a co-inquirer, the Philosophical Inquiry teachers are taught to think and work alongside their students to create and maintain an intellectually safe classroom community. The PI teacher uses the following methods to implement curriculum that promotes a safe and productive philosophical inquiry in the communities of inquiry:

- maintain intellectual safety;
- encourage participation;
- pose and respond to questions that probe for reasoning and evidence;
- ensure a hearing for a full range of positions on a topic or issue;
- clarify, verify, or challenge ideas and conclusions;
- promote divergent and creative perspectives. (Philosophical Inquiry Standards, 2014, p. 3)
The PI teachers engage students in discussions and facilitation activities, because it is “through the process of engaging in activities that the [student] learns” (Dewey, 1980, p. 176). Teachers are equally engaged in these learning activities, because they believe that “learning occurs during situated joint activity” (Samaras, 2002, p. xxii). They remove themselves from the center of classroom activities. In the Philosophical Inquiry class, both teachers and students become “self-activated makers of meaning,” (Schiro, 2008, p. 103) as they work together to construct knowledge. Traditional social studies classes emphasize the transmission of content knowledge to students, but the Philosophical Inquiry encourages teachers to “develop or employ strategies to help their students understand and retain a certain set of skills and knowledge specific to their content area” (Makaiau & Miller, 2012, p. 12). The classroom materials such as philosophy for teens, stimulate students’ prior knowledge and wonder, invite multiple perspectives, and are “relevant to the diverse backgrounds and experiences of . . . students” (p. 13).

The teachers “develop a theory or philosophy of education that centers their work and clarifies their actions and judgments in the classroom” (Makaiau & Miller, 2012, p. 13). They commit to activities that encourage students to engage in personally meaningful learning by integrating their thoughts, feelings, cultures, and experiences in the community of inquiry. However, “Due to a variety of pressures, both internal and external, the typical classroom teacher does not appear to have time for children’s genuine wondering and questioning from which structured inquiries can grow” (Jackson, 2001, p. 459). The PI teachers “create opportunities for their students to engage in the activity of philosophizing in their classrooms and via their assignments” (Makaiau & Miller, 2012, p. 14). They do not just arrange students in circles, but
use their creativity, knowledge of subject matter, and inquiry experiences to nurture quality thinking, coherent learning experiences, and integrated development in students.

**Philosophical Inquiry Course Objectives**

Students who participate in philosophical inquiry learn to actively engage in course materials to deepen their understanding of themselves, their peers and teachers, and the world. The course is designed to improve students’ abilities in:

- complex problem solving, critical thinking, good judgment, reasoning, interpersonal communication, personal reflection, group facilitation, note-taking, and writing skills;
- ethical relationship building, and process for thinking responsibly as a member of a reflective *community of inquiry*;
- interdisciplinary methods for conducting research;
- thinking philosophically about historical, economic, geographic, and political science content, issues and concepts;
- wonderment, and connecting thinking across content areas and other areas of life;
- habits of mind necessary for meaningful and purposeful engagement in their current and future schoolwork and life;
- successful completion of the course is worth ½ general social studies elective credit (Philosophical Inquiry Standards, 2014, p. 1-2).

In order to address the problems and dilemmas teachers have while implementing the curriculum, the curriculum developers conceptualize education as a shared activity between teacher and students. Troubleshooting any problems is based on students’ needs and interests,
and the mutual thinking and shared communication between teachers and students. They believe that “knowledge develops as one engages in dialogue with others” (Palinscar, 1998, p. 347). The teachers reflect conscientiously on their daily teaching practice and allot time for critical, honest awareness of their own thinking and the thinking of others (Makaiau & Miller, 2012).

**Overview of the Study**

In this study, each chapter carries with it the central theme of this research – youth academic engagement and the search for life’s meaning. The meaning of life is “the sense made of, and significance felt regarding, the nature of one’s being and existence” (Steger, Frazier, Oishi, & Kaler, 2006, p. 81). The operational definition of the life’s meaning in the PI course refers to the life purposes, goals and objectives that students work towards and try to achieve. Chapter one is a statement of the research problem and the concerns that led to the study. Chapter two presents educational and psychological theories and approaches regarding learning and development. Most importantly this chapter briefly points out the gaps in the literature on Philosophy for Children in order to fill the void in P4C and p4cHI scholarship. Chapter three is an attempt to define the population of students who are being studied and an examination of the research methods used. Chapter four is concerned with answering the research questions using both qualitative and quantitative data. A philosophical inquiry student academic engagement framework is designed in light of the most salient themes that emerged. Chapter five is the conclusion of this study, and includes recommendations for future research. It is hoped that the theoretical frameworks developed from this project will be able to assist educators to develop curriculum and pedagogy, and classroom practices and learning environments that foster increased academic engagement and meaningful lives for all students.
Statement of the Research Problem

“Learning and succeeding in school requires active engagement – whether students are rich or poor, black, brown, or white” (National Research Council, 2004, p. 1). Studies have characterized high school students as bored, alienated, and disconnected with their classes and the learning process (Goodlad, 1984; Larson & Richards, 1991). Without counting those who drop out, an estimated 40 to 60 percent of high school students are chronically disengaged; they exert little effort on schoolwork (Marks, 2000). When students from disadvantaged economic and social backgrounds become disengaged, they are more likely to dropout. The dropout rate of students with less than nine years of schooling was 18 percent in 2012 (National Center for Education Statistics, 2014). Consequently these students fail to gain the most basic educational credentials or basic skills needed to succeed in postsecondary education and in their future careers, which leads to unemployment, poverty, poor health, and involvement in criminal activities (National Research Council, 2004).

Academic engagement decreases significantly from the early grades of elementary to high school. One reason for disengagement is that adolescents do not fully appreciate the value of academic achievement and successful schooling experiences (Eccles & Wigfield, 1992; Eccles, Wigfield, & Shiefele, 1998; Marks, 2000). Schools need to do a better job of motivating and engaging the great majority of young people to be responsible learners and productive citizens (Dewey, 1956; Hall, 1969; Cremin, 1961). Although there has been a growing awareness of the significance of adolescents’ engagement in education, there has been little scholarship documenting p4cHI or philosophical inquiry’s effects on students learning experiences. To fill the void, this research examines how the PI course and p4cHI approach to education promote involvement of economically disadvantaged youth in academic engagement.
Many high school students abandon their sense of wonder when they step into their history, psychology, civics, or philosophy classrooms. They often stop asking questions, make fewer connections with their prior learning and personal experiences, and fail to find meaning and purpose in their general classroom experiences (Makaiau, 2013; Steinberg, Brown, & Dornbusch, 1996). Although teachers work extraordinarily hard to provide their students with the practical uses and meaningfulness of their lessons, and use various teaching strategies to motivate and engage their students to participate in class activities, young students still tune out and disengage from their studies (Toshalis & Nakkula, 2012). In order to fulfill external goals and excel in high-stake testing, many students’ special and precious sense of wonder is being lost. Their genuine questioning and thinking attitudes are often being ignored in today’s classroom (Jackson, 2004). “Too many students are falling through the cracks – physically dropping out and psychologically turning out” (National Research Council, 2004, p. 20). Figuring out what motivates and engages high school students in social studies class is a critical question that needs to be addressed.

Education today is increasingly neglecting student’s inner development – the sphere of values and beliefs, socio-affective maturity, spirituality, and self-understanding, which plays an important role in students’ psychological and physical well-being (Astin & Astin, 2003; Werner, 1989). Though education often awakens intellect, inwardly it may leave human beings un-integrated with their emotions, intuition, and self-knowledge (Krishnamurti, 1953).

Substantial empirical evidence has shown that psychological mediators such as beliefs about competence and control, values and goals, and a sense of social connectedness affect educational conditions that promote intellectual engagement (Dweck, 2000; Ryan & Deci, 2000). One of the psychological mediators, life meaning plays an important role in human behavior.
Human thriving is based on the premise of “will to meaning” – human beings’ inborn urge (Frankl, 1955, 1958, 1959, 1966). When a person fails to find meaning in life, and/or feels a state of vacuum in his or her personal existence, he or she is characterized by an existential vacuum and boredom (Crumbaugh, 1968). “There is a greater urgency to find meaning and new solutions to problems” in adolescence (Dreyfus, 1972, p. 3). While there are studies demonstrating that personal beliefs and purposes are protective factors in adolescents’ developmental resilience (Lerner & Galambos, 1998; Smith & Carlson, 1997), there is limited empirical exploration of how the meaning of life is related to and affects adolescents’ academic development.

“Engaging adolescents cognitively and emotionally in school and academic work is a challenge regardless of the social or economic status of the students or the location of their schools” (National Research Council, 2004, p. 211). What would be helpful to increase adolescents’ engagement in learning? How does the meaning of life affect youth academic engagement and development? How can philosophical inquiry that students engage in be structured to facilitate exploration of purpose or meaning in life both in breadth (by considering different purposes) and in depth (by exploring one kind of meaning thoroughly)? This research synthesizes, summarizes, and criticizes evidence that can be used to guide efforts and moderate school failure to improve adolescents’ learning and schooling experiences from students’ own voices.

Significance of the Study

Over 30 years of U.S. and international research, including recent studies done in Hawai’i indicate that the use of philosophical inquiry with a group of students who are supported by trusted facilitators and peers to interact respectfully and critically as they explore intellectually challenging questions, known as an intellectually safe community of inquiry, sharpens students’
abilities to “think for themselves” (Lipman, Sharp, & Oscanyan, 1980, p.53). This activity also positively affects students’ cognitive and social-affective abilities, engagement, moral dispositions, and self-confidence (Jones, 2012; Lukey, 2004; Makaiau, 2013; Toyoda, 2012; Yos, 2012). Even so, there has been very little written about the intersection between students’ learning experiences and p4cHI in the education of adolescents in a social studies course at a Hawai‘i public high school.

Adolescence is a critical psychological stage between childhood and adulthood that deserves particular attention. The onset of adolescence is a time of rapid physical growth, sexual maturation, social and emotional changes, and it also implies a wide range of behavioral and emotional health problems. Pubertal development and brain maturation shape adolescent development and presumably later behavior (Forbes & Dahl, 2010; Erikson, 1963; Board of Children, Youth, and Families, 2004). This work will extend adolescent research to students’ learning experiences in the association of philosophical inquiry.

Students hunger for meaning, but get turned off by schooling because it ceases to be meaningful for them. P4C is “based around the notion that [the students] must construct meanings for themselves, rather than simply accept those which are handed down to them” (Splitter & Sharp, 1995, p. 99). With an intention to understand what is an effective education, it is very important to inquire into the meaning of living as a whole (Krishnamurti, 1953). Participants in former studies were devoted to this quest of meaning and truth (Butnor, 2012; Makaiau & Miller, 2012), but personally meaningful classroom and life experiences for secondary students in a philosophical inquiry class in the Hawai‘i context is a research area that needs to be explored.
Philosophers from all around the world have dedicated their teaching and scholarship to addressing issues of virtue, morality, ethics, and other elements that are essential for human learning and development (Xu, 2012). Many educators have realized that philosophical inquiry is a trustworthy educational alternative that could develop students’ thinking abilities and practical judgment (Lipman, 1988). Yet, some believe that “amid the clamor of competing proposals, the voice of the philosopher is nowhere to be heard; it is missing from the conversation about the future of schooling” (Schrag, 1995, p.1). Philosophical education contributes to peace and trains free and reflective minds that are able to face the challenges of propaganda, fanaticism, exclusion and intolerance in the contemporary world (UNESCO, 2007). The emphasis of philosophy is the transformation of one’s thinking, one’s life, and one’s mode of being in the world through constant inquiry and self-reflection. Hence, educators have argued that philosophical inquiry is necessary for the study and practice of education in a democratic society (Jackson, 2013; Lipman, 1988; Sharp, 1993; Snauwaert, 2012).

With reference to this, it is important to elucidate that one problem for school in general is how to promote both an active and a contemplative life, because schools do not often cultivate students’ own thoughts and reflections (Arendt, 1958). p4cHI integrates philosophical inquiry, thinking, and reflection in its daily classroom activities. Bringing philosophy to schools is one way to address the sense of disconnectedness, fragmentation and alienation in adolescents’ schooling experiences (Splitter & Sharp, 1995). In light of the advantages of embedding philosophical inquiry in school curricula, this study will address the gap in research literature by describing the possible benefits of incorporating philosophy in high school classrooms. This study aims to explore the students’ learning experiences from their own perspectives, and will examine how philosophical topics (i.e., what is the meaning of life? Am I the same person that I
used to be?) that are discussed in the PI course can help high school students construct meaning in their schooling and lives.

The PI is a newly developed social studies course utilizing the p4cHI approach in the HI DOE. It is critical to investigate and evaluate this course’s effect on adolescents’ cognitive and socio-affective development and learning experiences. Several approaches, including classroom discussions, student writings, surveys, and focus group interview are employed in the present study to comprehensively understand philosophical inquiry’s effects on adolescents’ academic engagement and psychological development. The results carry direct implications for local secondary teaching of the p4cHI approach in particular, which in turn can expand the research base in the worldwide P4C approach. Although this work is focused on high school students at one school site, it is believed that the mixed methods design applied and the results yielded may be applicable to examine the effectiveness of philosophical inquiry in other contexts. The investigation and description of various factors that contribute to students’ academic engagement in the PI course from the perspective of students themselves will provide educators, researchers and policy makers with important insights into the practicalities of PI course design, revision, and implementation, especially in regards to the complex educational and psychological development of adolescents. Such insights may provide suggestions and implications for teachers to implement more effective p4cHI education in and beyond the Hawaiian islands.

**Purpose of the Study**

The purpose of this mixed methods research is to explore the learning experiences of students in a philosophical inquiry course that utilizes p4cHI educational approach featuring a community of inquiry, philosophical thinking and reflection. Modern life often leads to fragmentation of human life and society, but modernity provides little guidance to foster human
connections and deep reflections (Dalai Lama, 1999, 2012). The PI curriculum addresses these problems by encouraging students to inquire philosophically and ethically together into their personal concerns for their lives and the world, and helping students make meaningful connections with their peers, teachers, and schools as well as specific academic content. The questions and issues that students examine arise from their own interests and wonderment. This research will explore how the PI course contributes to adolescents’ engagement to learning and helps students construct meaning in their schooling and lives.

**Research Questions**

The major research question driving this study is: In what ways does the PI course influence high school students’ learning experiences? More specifically it will investigate:

- Do students feel more engaged in their learning during and after taking the PI course? If so, what reasons for this do they report?
- How did the PI experience shape students’ attitudes with regard to seeking meaning in their lives and schooling?
- How do students’ Philosophical Inquiry Questionnaire scores change over the course of the project? Is this different for students enrolled and not enrolled in the PI course?
- How do students’ Sense of Coherence scores change over the course of the project? Is this different for students enrolled and not enrolled in the PI course?

**Theoretical Framework**

Deweyan and Vygotskian educational theories are used to support this study. Five key criteria were considered when selecting these theories. First, there should be evidence of applying these theoretical perspectives to p4cHI research, such as p4cHI’s impact on students’
learning and cognitive, social, emotional, and psychological development. Second, the theoretical framework should be consistent with the PI curriculum and classroom practices. Third, the theoretical framework should inform the selection of survey instruments, the design of students’ assignments, and the construction of focus group interview questions. Fourth, the theoretical framework should encompass varieties of data (i.e., classroom discussions, documents, survey questionnaires) included in the study. Finally, the theoretical perspective used should be both comprehensive and specific enough to inform and support data analysis.

Over the last 30 years, research on p4cHI has been viewed through a variety of theoretical perspectives: multicultural educational theory, social constructivist learning theories, learner centered ideology, identity exploration theories (Makaiau, 2010, 2013), constructive grounded theory (Miller, 2013), social cognitive theory, community of inquiry theory (Jones, 2012), Deweyan and Vygotskyian theories (Bleazby, 2011, 2012; Lavrentbiva-Grass, 2006; Makaiau & Lukey, 2013). Previous studies provide the rationale for the selection of Dewey’s theory of education and Vygotsky’s social constructivist theory for this study. Their theories provide scholars and practitioners with a common language and a frame of reference for understanding this dissertation’s research questions. They set a strong foundation to analyze students’ interactions in secondary school classrooms to better understand strategies that encourage academic engagement and ultimately socio-emotional, psychological and cognitive development. An overview of Dewey’s theory of education and Vygotsky’s social constructivism theory will be given in the following section, along with the rationale for their use in the current study. This will position this theoretical framework within a broader context of related frameworks, concepts, and models.
**Essential theories of John Dewey.** “The development, learning, sharing, and experiencing of meanings were central to Dewey’s philosophy” (Kestenbaum, 1977, p. 2). Dewey (1997) argued that the problem of modern education is that schooling tends to be “abstract and bookish” (p. 8). Learning becomes over-formalized and too disconnected from the interests and projects that students find in their real lives and experiences that give meaning to students. The purpose of school education is to unify and enrich students’ experiences. The revitalization of schooling should create opportunities for “reproducing situations of life” (p. 169). Schools should give students opportunities to discover the connections between their experiences and the subject matter. Students become active participants in learning when classroom activities are based on their needs and preferences (Dewey, 1930).

In order to live a worthwhile life, a person must spend time and energy on finding meaning, or the purpose that makes his or her existence significant.

Fundamental to Dewey’s entire philosophy is his belief that ‘meaning is wider in scope as well as more precious in value than is truth, and philosophy is occupied with meaning rather than with truth’… ‘the characteristic human need is for possession and appreciating of the meaning of things.’ (Kestenbaum, 1977, p. 2)

The nature of education is continuous reconstruction of students’ existing meanings as a result of new experiences they encounter. In general, people are conceptualized as active makers of meaning, and “self-propelled agents” naturally intended to satisfy the need for meaning or understanding (Schiro, 2008, p. 103). People can “sense a joy of constant discovery and growth if they search for meanings and values that serve as means to reveal a fuller and more significant future experience even in their troubles and hardships” (Campbell, 1995, p. 64).
Human beings are perpetuated through communication and transmission. “We are social creatures whose identities and fulfillment are grounded in communal participation” (p. 25). The social interaction and learning are central to the educational endeavor since “individual mind is a function of social life” (p. 39). In a classroom, the teacher should not take control of the situation or determine the direction of learning, yet the teacher should be a learner and a participant who engages in discussion and shares the work with students. Students’ inclination to learn, and know for the sake of knowing is the best product of education. The purpose of education according to Dewey is

to help the students develop as problem-solvers in the new and difficult situations of the new world, to help them to learn to *how to think* rather than to simply fill them with whatever we think that they will need in later life. (Campbell, 1995, p. 215)

Dewey (1997) believed that education becomes humanistic if it liberates human intelligence and sympathy, but if a subject matter cannot accomplish this goal, it is not a real education.

**Essential theories of Lev Vygotsky.** A fundamental Vygotskian principle is that education not only focuses on cognitive development but it is embedded in sociocultural activities. Learning is socially constructed (Moll, 2014). Vygotsky (1962, 1978, 1994) believed that (a) social and cultural factors influence development; (b) learning best takes place through joint productive activity, where “experts and novices work together for common product or goal” and have opportunities to communicate in the shared experience; and (c) cultural mediation, especially language, plays an essential role in the formation and development of cognitive abilities (Tharp, Estrada, Dalton, & Yamauchi, 2000, p. 21; Crawford, 1996).

Vygotsky’s social learning theory promotes a constructive learning community where students and teachers can interact with, communicate and support each other. Vygotsky
examined how social processes and cultural resources influence human thinking and learning. Our rules, skills, and abilities to interact with others are shaped by our culture and social circumstance (Moll, 2014). Vygotsky (1978) wrote, “All the higher functions originate as actual relations between human individuals” (p. 57). Every function in human cultural development appears twice. First, it is on a social level, where people communicate with each other interpsychologically, such as during an engaging conversation. Later, it is on an individual level, where people internalize new knowledge and understanding intrapsychologically. The higher-order mental functions, including reflective thinking, arise as a result of social interactions (Lightbrown & Spada, 2006). “It is the collision of our thought with the thought of others that engenders doubt and calls for verification” (Vygotsky, 1978, p. 47).

Vygotsky (1978) argued that the social learning precedes development. Learning occurs in the zone of proximal development (ZPD), and takes place through students’ interactions with their peers, teachers and experts. The ZPD indicates the distance between a student’s ability to perform a task under adult guidance and/or collaboration with more capable peers and the student’s actual ability to solve problems independently. The important learning moment occurring within a person is mediated through his or her social interaction with a skillful tutor. The ZPD can help us assess students’ true potential for new learning (Crain, 2000). The teacher may model behaviors and/or provide semiotic mediations as students interact with each other (Tharp & Gallimore, 1991).

For Vygotsky (1962), knowledge construction occurs in the social context, and students and teachers build on each other’s language, skills, and experiences. Learning becomes a reciprocal experience for students and teacher. In the learning process, teachers need to give students more challenging tasks that they can solve with assistance from capable and
knowledgeable others who can guide students to navigate through their ZPD. An effective pedagogy in teaching is to establish deep teacher-student relationships (Moll, 2014). More interactions between students and teacher will facilitate intersubjectivity with each other. In this way, instruction can stimulate students’ development and help them realize their potentials (Crain, 2000).

Researchers have found the sociocultural perspective to be a useful framework to explore students’ academic engagement. It provides a theoretical link between students’ active participation in discussion with their cognitive growth and social development (Mercer, 1996). When students encounter others with different experiences and perspectives, they are provoked to critically reflect on their own beliefs and thoughts, consider alternatives, and search for meanings and reasons to justify their understandings (Bleazby, 2007). Based on Vygotsky’s theory, individuals learn to think for themselves by internalizing these social or communal inquiries or dialogues (Lipman, 2003).

Dewey and Vygotsky’s theories provide scholars and practitioners with a common language and a frame of reference for understanding this study’s research questions (Makaiau, 2010; Miller, 2013). Informed by their theories, this study explored high school students’ academic engagement in a philosophical inquiry class, and examined whether the aforementioned factors, such as interests and experiences in Dewey’s sense, and sociocultural factors and interactions in Vygotsky’s sense contributed to students’ learning experiences.

Dewey’s perspective includes ideas about growth and meaning enhancement, as well as the desire for making meaning and self-realization. “Dewey’s naturalistic metaphysics is ultimately a call to answer for our humanity, for the demands placed on us by a world that alternately facilitates and frustrates this human eros” (Granger, 2000, p. 166). Human beings
need a sense of meaningfulness to guide their life and behavior. The desire for meaning is the “spiritual dimension of human existence” (Frankl, 1969, p.160). Since engagement includes meaningfulness, choice, competence, and growth (Kenneth, 2009), developing a sense of meaningfulness would enhance students’ academic engagement.

In Vygotsky’s theory, the social-historical environment can significantly influence students’ learning (Vygotsky, 1994). It is necessary to describe the influence of the research site and participants’ prior experiences. “The human being is completely and unavoidably influenced by his surroundings” (Frankl, 1969, p. 99). It is necessary to describe Hawai‘i and Kailua High School’s unique historical and cultural context, such as the geographical region, students’ socioeconomic circumstances, the Philosophical Inquiry classroom’s physical layout, and the cultures of the Philosophical Inquiry and traditional social studies classrooms.

Dewey and Vygotsky’s theories inspired p4c Hawai‘i researchers to design philosophical inquiry curriculum (Makaiau & Miller, 2012). Dewey (1997) argued that what is required in a classroom is that every student should have opportunity to employ his or her own powers in activities that have meaning. In the PI class, students are the active agents in participating in inquiries and reflections. The aim of students’ work is to make connections to students’ lives and the world they live in, relate personal experiences to content in text or dialogue, and to reflect on a different perspective or point of view they have learned in the classroom. The activity designed in the Philosophical Inquiry class was to build an intellectually safe community where students could exchange their understandings and ideas through philosophical inquiry and reflection.

Vygotsky (1978) maintained that learning occurs within the learners’ ZPD and that knowledge is socially constructed. In the PI class students’ discussions and interactions are highly valued.

In summary, Deweyan theories mainly focus on connecting students’ real life experiences,
interests, needs, preferences and present skills to the classroom, and reconstructing students’ existing meanings. Vygotsky’s sociocultural theory focuses more on communication and social interaction, and the influence of culture and social context on students’ learning and development. These theories define a theoretical understanding of academic engagement and meaning construction, explain the nature and challenges of these phenomenon, and allow me to describe, in depth, students’ learning experiences and the key features that characterize the Philosophical Inquiry classroom. It is hoped that, the results of the study will be able to assist educators to develop curriculum and pedagogy, classroom practices and learning environments that foster increased academic engagement and meaningfulness for all students.
CHAPTER 2. LITERATURE REVIEW

An education-based review of the literature offers a probing exploration of philosophy and education, philosophy for learning, contemporary mission of education, moral education, humanistic education, inquiry-based learning, reflection and education, learning communities, and the community of inquiry. Following it will be a presentation of psychology-based literature, relating to scholarship in the areas of engagement and motivation, social context of learning, adolescent psychosocial and cognitive development and meaning of life. The third section begins with an introduction to the history of the Philosophy for Children movement both nationally and locally in Hawai‘i. It describes the growth of Matthew Lipman’s P4C movement, Thomas Jackson’s p4cHI movement, and Amber Makaiau and Chad Miller’s context-sensitive version of p4cHI: the Philosopher’s Pedagogy. Following that will be a description of the procedures of doing p4cHI in classrooms, and a synthesis of research outcomes related to P4C and p4cHI.

Education-Based Literature Review

In shaping perspectives and approaches to this study, it is evident that there are many education theories and empirical research. This section of literature review will explore literature that is most relevant to the educational philosophy in the Philosophical Inquiry course.

Philosophy and Education

Philosophy means love of wisdom in ancient Greek. In ancient times, philosophy was understood as search for wisdom. Aristotle viewed philosophy as “aris[ing] from the natural wonder or curiosity, from the desire to know just for the sake of knowing” (Campbell, 1995, p. 60). He believed that philosophy begins from astonishment and questioning. When Socrates engaged his interlocutors in philosophical dialogues, he did not expect a certain right answer, rather, an important role of philosophy is to help us introduce and nurture openness to wonder.
and confusion (Lukey, 2012). Philosophy “brings intellectual order out of the confusion of beliefs” and awakens humanity’s consciousness (Campbell, 1995, p. 91).

Human life has philosophical dimensions, including aesthetical, ethical, logical, metaphysical, epistemological, and social dimensions. “Wonder is the feeling of a philosopher, and philosophy begins in wonder” (Plato, 1953, p. 251). Human beings have a natural tendency to wonder about the nature of knowledge and reality, and an innate disposition to search for meaning in life through philosophical reflection (Lipman, Sharp, & Oscanyan, 1980). Yet, wonder, the “wellspring of philosophy” and a particular quality of thinking and feeling is often overlooked by education (Jackson, 2004, p.4). The distinction between philosophy and many other professions is that philosophy is a field that aims to cultivate the human soul and provide fundamental guidance (Xu, 2012). Philosophy focuses on fundamental ideas that can offer deepened and comprehensive thinking about what schools can and should do. Philosophers can pose and answer the most basic questions and try to capture the essences of a phenomenon (Schrag, 1995). Yet, although philosophy is conceptualized as the “bedrock of the Western humanistic tradition,” in the United States few K-12 institutions incorporate it into their curricula (Romano, 2012, p. 12).

Despite the fact that philosophy has faced many challenges embedding into mainstream curriculum (Miller, 2013), there are instances where it has been used in the pre-collegiate classroom (Thompson, 1971). Matthew Lipman, a Columbia University philosophy professor began to bring philosophy to children in 1969. He incorporated the skills of logic, reasoning, and philosophical ideas found in the practice of philosophy, into a curriculum of seven novels/textbooks aimed at improving students’ thinking in K-12 settings. According to Lipman, the aim of education is to “help children learn how to think for themselves” and make better
judgments and choices (Lipman et al., 1980, p. 53). Education and philosophy are inextricably linked, because “the craft of philosophy contains itself a pedagogy – the need for dialogues, the need for questioning and a method of inquiry – which are essential characteristics of education in general” (Lipman & Sharp, 1978, p. 259). Philosophy plays an important role in the education of reflective practitioners and systematic and critical thinkers. The practice of applied philosophy can provide students with a calm and open mind in the face of frustration, difficulty and danger. Through philosophical inquiry, students can develop attitudes and skills that help them cope with unstructured situations with both effectiveness and sympathetic insight (Dahlbom & Mathiassen, 1992).

Philosophy, can promote education in three ways. First, it can promote reflective thinking and thinking about thinking. This element in philosophy is essential for systematic self-correction and development of thinking ability. Second, because there is no definitive answer to a certain philosophical question, answers often need discussion, dialogue, and systematic inquiry. Philosophical questioning encourages students’ further inquiry and reflective thinking. Students are inspired to inquire deeper into their educational experiences. Third, philosophy can stimulate students’ imagination and creativity through confronting questions like “How should I live?” and “Is there a greatest virtue?” These philosophical questions can inspire students to think in multiple directions. Students thus can learn to re-examine the way they understand themselves and the world (Splitter & Sharp, 1995; Miller, 2013).

The Community of Inquiry

Communities of inquiry have been used to promote education for decades, and are supported by the ideas of both Dewey and Vygotsky. This section will address how ideas of community have been used in education, and definitions of common practices in educational
communities such as discussion and inquiry. Community implies dependency, intersubjectivity, autonomy and citizenship (Bleazby, 2007). It is a way of living in which a group of people share, reflect and direct one another’s individual interests together. Communitarian citizenship emphasizes building up relationships and promoting shared interests, practices, goals, and values (Dewey, 1997). Through sharing thoughts and subjectivities, communitarian citizens have less racial and gender discrimination and violence, and they become more inclusive and embracing toward each other (Etzioni, 1993; Waghid, 2005). Since people treat the community members with love, respect and dignity, a unified and harmonious atmosphere can be formed (Yos, 2012).

**Learning communities.** Learning communities are sometimes defined by classroom structures or configurations, such as “group work,” “cooperative learning” or “whole class discussions” (Freese & Strong, 2008). They are characterized by individuals working together to learn with and from each other (Wright & Williams, 2003). The goal of a learning community is to create a learning culture and advance individual knowledge and performance through collective efforts and support (Scardamalia & Bereiter, 1994; Bielaczyc & Collins, 1999). When building a learning community, students need to be prepared to listen to other’s perspectives and willing to allow their beliefs to be questioned. The resulting caring and trusting environment can enhance students’ opportunities to develop supportive relationships, and increase students’ participation in philosophical inquiry (Makaiau & Freese, 2013; Makaiau, 2010; Samaras & Freese, 2006).

In a learning community, students work collaboratively and individually to explore issues that are both collectively meaningful and self-significant (Samaras, Freese, Kosnik, & Beck, 2008). Students expect a sense of connectedness and a feeling of belongingness in the classroom (Kohn, 2004). This environment often encourages and supports students’ personal development.
such as self-concept and self-esteem (Jones, 2012; Hittie, 2000). Learning communities nurture conditions for achieving better communication, interaction and collaboration in open and flexible learning environment (Hudson, Owen, & Van Veen, 2006). Because of “orchestrated interdependence” in the learning community, students are aware of cultural differences and how people interact with each other (Hudson, Hudson, & Steel, 2006, p. 747). Zhan, Xu and Ye’s (2011) study provided evidence and support that both active and reflective learner’s learning performances and attitudes toward learning were enhanced by engaging in a learning community in face-to-face courses. Learning in a community could effectively improve student attendance and school grades, as well as their human and personal interaction both on and off campus (Shumer, 1994).

Community of inquiry. Since Peirce coined the phrase community of inquiry, it has been extended and broadened into all kinds of inquiry. John Dewey and Matthew Lipman put learning by thinking, inquiring, and reflecting in a context of democratic community as the basis of educational practices and aims (Millett & Tapper, 2011). A community of inquiry is characterized by a group of people who engage in a shared experience, voluntary communication, and a cooperative search for knowledge and understanding. They participate in a democratic practice that emphasizes question making and student-to-student interaction through dialogue (Cleary, 2011). In a supportive classroom context, a community of inquiry encourages students to clarify ideas, offer examples and counter-examples, make assumptions, explain reasons, and use analogies to develop the skills, knowledge, and dispositions required for full participation in a democratic society (Fisher, 2008). Knowledge that results from such a community of inquiry is often more general, objective, and comprehensive because it has been investigated and examined in a constructive and diverse field of experience (Bleazby, 2007).
Inquiry strategies. Communities of inquiry are often characterized by opportunities for in depth discussion and inquiry. Discussion is the action or process of talking about something. It is a conversation or debate about a certain topic, typically in order to reach a decision or to exchange ideas (Zhan, Xu, & Ye, 2011; Ru, 2008). Inquiry starts with exploration and questioning and leads to investigation and examination of a question, issue, concern or idea (Hagemans, Van Der Meij, & De Jong, 2013). Inquiry is the struggle with real living doubts, which arise from the surprise or shock that is generated from the novel experience, resulting in states or times that make people uneasy and uncomfortable. The aim of inquiry is to challenge and examine fixed beliefs in order to understand future surprising or disappointing experiences. Inquiry is not just uttering a question or adopting a certain intellectual attitude, it must involve a stimulated mind to doubt and question old beliefs (Goudge, 1950). Dewey believed that inquiry is initiated when people are exposed to a situation that they find confusing, problematic, perplexed, unsettled or indeterminate in some sense. Such situations interrupt established belief systems and habitual interaction with the world. Learners need deliberate efforts to create an orderly, resolved, determined, and unified situation that they can respond to in a purposeful, intelligent manner (Dewey, 1997). Inquirers maintain a cautious attitude of openness and fallibility which indicates, “no questions are unanswerable; no answers are absolutely true; no formulations are final; no level of examination is ultimate, and so on.” Many possibilities should be considered in an inquiry (Campbell, 1995, p. 16).

Lipman (2003) described that in a community of inquiry, “students listen to each other with respect, build on one another’s ideas, challenge one another to supply reasons for otherwise unsupported opinions, assist each other in drawing inferences from what has been said, and seek to identify one another’s assumptions” (p. 20). Students can explore issues of personal concern,
develop their own ideas, and make reasonable judgments, yet examine and challenge others’ ideas with respect. Participation in a community of inquiry often develops students into active thinkers, discoverers, and valuable and valued human beings (Splitter & Sharp, 1995). The community members may be driven by inherent initiatives to organize and articulate their ideas in a responsive environment where free choice and rich interactions are valued. In this community, there are often diversified forms of intelligence and different learning styles (Kennedy, 1993). If a classroom is transformed into a community of inquiry, dialogue will likely flourish (Lipman, 1993).

The collaborative community of inquiry solves the contradiction between students and teachers (Freire, 1965), teachers become co-learners with their students instead of a source of authority merely conveying information. When teachers give students autonomy to direct their inquiry, they learn to value their own thinking as equal to the teacher. In this context, knowledge is created and discovered by group inquiry. The role of a teacher changes into a facilitator that coves the community of inquiry forward within a broad range of parameters that stress critical thinking, reflection, clarity, open-mindedness, and good judgment. The facilitator keeps philosophical inquiry on track, respects the natural flow of inquiry, enriches and bridges the discussion, and gently direct the discussion, but without imposing his or her ideas and agenda. By emphasizing dialogue as a way to create a community and improve thinking, students share insights, clarifications, questions, and experiences, cooperatively, so that each participant learns how to listen as well as how to speak respectfully and empathetically (Costello, 2007; Kennedy, 2004).

**Inquiry-based learning.** As a pedagogical approach, inquiry-based learning is widely recognized and advocated in education (Brew, 2003; Healey & Jenkins, 2009; Spronken-Smith
Walker, 2010). Oliver (2008) described inquiry-based learning as teaching approaches in which “some form of problem or task serves as a catalyst for student engagement and participation . . . , learning comes as a consequence of the information processing that occurs as students work to explore the problem setting and to seek a solution” (p. 288). Inquiry-based learning takes a constructivist approach, in which students have ownership of their learning. They ask questions, gather and analyze information, participate into discussions, generate solutions, make decisions, and justify their conclusions and take informed decisions. Other researchers refer to “a range of instructional practices that promote student learning through student-driven and instructor-guided investigations of student centered questions” (Justice, Rice, Warry, Inglis, Miller, & Sammon, 2007, p. 202).

Inquiry-based learning is a curricular and pedagogical imperative designed to promote reflection, critical thinking skills, and productive usage of knowledge for real life problem solving (Dewey, 1933; Schön, 1983). This conception serves as a basic teaching approach to the PI course. On one hand, the conceptualization of inquiry-based learning is that it is a learning activity that is student centered, and question or problem driven. On the other hand, the class excludes teaching methods that are primarily focused on knowledge transfer or content exposition. In the PI course, the function of education is to cultivate minds capable of thinking, wondering and reflecting. Students are taught to use well-reasoned supporting evidence to justify their assumptions and make decisions about social affairs and their own personal lives. Through the process of asking critical questions and answering them beyond preformed knowledge, students can learn to think for themselves (Millett & Tapper, 2011).

Some parents support inquiry-based learning because it teaches students how to think, but not what to think. It does not impose particular values or ideas on students. Scholars consider the
community of philosophical inquiry as a “political laboratory, a method of wisdom training, an operational application of social learning theory, a means of raising philosophical questions across the school subjects, a method of religious exegetics and education, and even a contemplative or spiritual practice” (Maughn, 2011, p. 212). However it also attracted conflicting criticism from

- religious and social conservatives who don’t want children to question traditional values,
- from educational psychologists who believe certain kinds of thinking are beyond children of certain ages, from philosophers who define their discipline as theoretical and exegetical, from critical theorists who see the programme as politically compliant, and from postmodernists who see it as scientistic and imperialist. (p. 109)

Some critics argue that inquiry-based learning is inefficient because students waste time in discovering incorrect answers before they arrive at the correct one. Since time is limited, teachers may not be able to teach students all the content that should be mastered. Other critics assert that some students cannot make the correct discoveries on their own and thus require systematic support and instruction in order to reach a certain level of knowledge (Hirsch Jr., 1996). Inquiry-based learning was used predominantly in Western countries, and some researchers believe that it may be difficult to integrate into Asian countries due to the influence of Confucian beliefs and values (Ku, 2008).

**Reflection and Education**

Reflection is a strategy used in inquiry-based education and in collaborative learning communities. It is an approach with a long history in education, and yet, it is not often a part of traditional direct instruction in schools. Zimmerman and Schunk (2011) included reflection as the final component of self-regulated learning, and Dewey (1993) included reflection as a key
component of learning. Reflection is used often in higher levels of education, particularly for teacher candidates (Coffey, 2014; Liu, 2013), but it has been used less often in elementary and secondary education because of the demands of time (Makaiau, 2010). Procee (2005) believed that “Reflection and reflective practice is one of the most promising innovations in education” (p. 237). Dewey (1933) described that “reflective thought” constitutes “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends” (p. 6).

The function of reflection is to “transform a situation in which there is experienced obscurity, doubt, conflict, disturbance of some sort, into a situation that is clear, coherent, settled, harmonious” (Dewey as cited in Campbell, 1995, p. 57). By reflecting on one’s experiences and actions there can be new knowledge and realization of one’s interests, which in turn introduces opportunities to learn or informs new action (Habermas, 1968). Reflection allows students to look back on and examine their old knowledge, beliefs and thoughts, and inspires them to develop new knowledge and construct a better future. Reflection is grounded in self-awareness, and serves as a bridge between experiences and learning (Kinsella, 2001; Hatton & Smith, 1995).

The following quote summarizes the characteristics and qualities of a reflective practitioner:

Reflective practitioners think about their experiences in practice and view them as opportunities to learn. They examine their definitions of knowledge, seek to develop broad and multifaceted types of knowledge, and recognise that their knowledge is never complete. Reflective practitioners are concerned about the contexts of their practices and the implications for action. They reflect on themselves, including their assumptions and their theories of practice, and take action grounded in self-awareness. Finally, reflective
practitioners recognize and seek to act from a place of praxis, a balanced coming together of action and reflection. (Kinsella, 2001, p. 195-198)

Van Manen (1995) added to this definition when saying, “The aim of critical reflection is to create doubt and critique of ongoing actions” (p. 43). Reflection is an essential component in education, because it serves as an effective tool to develop knowledge and skills, and lead to a transformative learning experience (Bengtsson, 1995; Mezirow, 1990; Zeichner, 1996). Schön (1983) described reflection as a process that can be used to reveal hidden or tacit knowledge. Students’ abilities to reflect make their lives move forward. Every reflection can leave a double effect: one direct effect is that they reorganize a situation, uncover connections and relationships, and find more intrinsic meaning in their experiences. The other indirect effect is to indicate subsequent investigations and inform future decisions. Through reflection students are often able to develop, build upon, and change existing behavior and practice. It becomes a transformational process (Campbell, 1995; van Manen, 1990; Brookfield, 1987). Reflection in education improves professional proficiency, fosters personal growth and understanding of ourselves, and increases social justice. It develops “sensitivity for (combining) heterogeneous elements, in professional work, in personal life, and in social relations” (Procee, 2006, p. 253; Fowler, 2014). Because reflective education provides students with more time to reflect and think more deeply into the topic before voicing their opinions, and after the teaching and learning, it helps to enhance the quality of student learning (Zhan, Xu, & Ye, 2011).

The philosophy for children Hawai‘i researchers found that students learned to reflect on their experiences, confusions, and inquiries. Reflection made them realize the importance of uncertainty and find comfort in cognitive disequilibrium (Makaiau & Miller, 2012). Conscientious reflection and adaptation gave educators “a renewed sense of purpose and aided
their success in teaching (Jones, 2012, p. 63).

**Philosophy for Learning**

Learning “refer[s] to changes in observable behavior” (Hergenhahn, 1976, p. 3). After learning, the learner is capable of doing something that he or she could not do before learning took place, and this behavioral change is relatively permanent. The best learning environment is where learners feel that they can learn and take responsibility for their learning (Ballantyne, Bain, & Packer, 1999). Good teaching stems from valuing students and their perspectives and experiences. Students learn the best when they can relate concepts and values to their own experiences (Splitter & Sharp, 1995). Students learn and grow holistically by taking other people’s views and interests into consideration. They learn by watching what other people think and how they live, and the consequences they experience (Snowman & Biehler, 2000). They also learn by reexamining and reassessing their own beliefs and fixed knowledge structures in terms of an increasingly larger and broader social context with multiple perspectives (Matsuoka, 2007). In order for this type of learning to occur, the p4cHI classroom creates an intellectually safe place where students engage in their own sense of wonder and natural curiosity, and participate freely and meaningfully in educational activities (Jones, 2012). Intellectually safe is defined not as a place of comfort, but as an openness to discomfort in order to learn. One definition is, “a feeling of trust in oneself and one’s community to honestly and genuinely engage in thinking together” (Butnor, 2013, p. 31). As Butnor (2013) said, in an intellectually safe community,

Not only do we openly share our own partial interpretations of the truth, but we must also relinquish our stake in those ideas in order to fully hear and be present to the positions of others. And all participants must then be invested in a quest for truth and meaning and willing to follow the inquiry where it leads. (p. 30)
Teachers are not viewed as the “know-it-all, end-all authority figure,” but as facilitators who “encourage students to think through and discover their own view” (Odierna, 2012, p. 46).

**Mission of Contemporary Education**

Students may forget the knowledge that was learned in schools, but the continuing attitudes toward learning, and the habits of mind that were developed will live within them. It is human beings’ curiosity about the world and themselves that results in their school experiences. Educators should discover what ultimately matters to students, and fire students’ passions to pursue their wonders (Schrag, 1995). Education should help students think, inquire, discover, and understand the whole process of life (Dewey, 1933).

**Diversity.** Based on the premise that we live in an increasingly diverse society, much more cultural, ethnic, and historical content appears in social studies textbooks today than in the past. A major goal of education is to help students to understand concepts, events, and people from diverse backgrounds and cultural perspectives. School curricula should be restructured to enable students to pursue topics and activities that reflect their own cultures, experiences and perspectives (Makaiau, Leng, & Fukui, 2015; Schoorman & Bogotch, 2010; Turgeon, 2004). Another essential mission of contemporary education is to help students develop empathy and care, and more democratic values, beliefs, skills, knowledge, and attitudes that can contribute to humanitarian and democratic changes (Banks, 2013).

**Morality.** One of the prime functions of education is to prepare moral citizens. Education offers students opportunities to learn better values, and eventually to integrate these moral beliefs in their lives. In the 1970s, Lawrence Kohlberg developed a theory of six stages of moral development that suggested that individuals who have reached the higher levels of moral development could make choices between good or bad values (Turgeon, 2014). Kohlberg
believed that moral development could be accelerated through moral education (Lockwood, 1978; Snowman & Biehler, 2000). In a world that commercialism and technology have permeated, and in social conditions that have changed faster and have been more challenged, some educators believe that moral education should be an integral part of school curricula (Xu, 2012). Moral education prepares students from kindergarten to college with the skills of ethical inquiry by giving them opportunities to deliberate together on ethical issues related to their experiences. Students develop better moral awareness when given opportunities to discuss all kinds of real moral dilemmas that occur in their daily lives (Snowman & Biehler, 2000). Moral education nurtures students’ perspective taking abilities. When students learn to accept human differences, they obtain more thinking and reasoning abilities and exercise more ethical virtues in their life (Turgeon, 2014).

**Meaningful.** The humanistic approach to education focuses on the role of non-cognitive components in learning, particularly, students’ emotional needs, beliefs, values, and self-perceptions (Snowman & Biehler, 2000). Students will be highly motivated to learn when the content is personally meaningful, when they understand the reasons why they need to learn, and when they believe the learning atmosphere facilitates their learning (Groeben, 1994). Learner-centered education establishes conditions that allow self-directed learning to happen, and motivates students to learn inherently in a supportive classroom environment. Teachers and parents play a significant role in preparing students to make good decisions by satisfying their psychological and emotional needs. (Maslow, 1968, 1987; Rogers, 1983).

**Role of the teacher.** In humanistic education, the role of a teacher is to facilitate, encourage, help, assist, and become a colleague and a friend of students (Combs, 1965). Good teachers believe every student has the ability to learn. They strive to help students realize their
full potentials. They are also sensitive to the feelings of students. Teachers who adopt a humanistic orientation seek to create a classroom atmosphere in which students believe that the teacher’s primary goal is to understand their needs, values, motives, and self-perceptions. Teachers guide students in the right direction based on students’ decisions and perceptions (Joyce & Weil, 1996). In order to generate authentic discussions among students, the p4cHI teachers give priority to student interests and independent choices over the facilitation and acquisition of knowledge (Jackson, 2013; Jones, 2012).

**P4cHI and contemporary education.** The p4cHI style of instruction gives students and teachers time to reflect on the purposes and value of education, and students’ interests and wonders instead of devising lesson plan solely for content mastery or meeting rigid standards (Lukey, 2012). Philosophical inquiry can address many educational goals by helping children learn to evaluate information and opinions, to see from different perspectives, and to think for themselves (Toyoda, 2012; Makaiau & Miller, 2012). In addition, p4cHI developers and instructors often incorporate moral education into its curriculum. The curriculum encourages students to think about moral issues through morally rich student-centered inquiry.

**Psychology-based Literature Review**

In addition to establishing the educational foundation of this study, it is necessary to construct a firm understanding of psychology-based literature that is related to scholarship in the areas of engagement and motivation, the social context of learning, adolescent psychosocial and cognitive development, and the meaning of life. This will provide further background on the p4cHI approach to education and the PI curriculum that is designed to assist adolescents as they engage in their learning and development.
Engagement and Motivation

Graham, Trip, Seawright, and Joeckel (2007) stated, “The idea that students must be actively engaged in the learning process in order for it to be effective is not new. The roots for active learning reach back in the literature to John Dewey” (p. 233). Engagement is “…the student’s psychological investment in and effort directed toward learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote.” Engagement in schoolwork involves both behaviors (i.e., persistence, effort, attention, attendance, attitude toward philosophical inquiry course and school) and emotions (i.e., enthusiasm, interest, social relationship, making connections to previous knowledge and experience, pride in success) (Newmann, 1992).

Motivational research suggests that motivation has an emotional foundation. When teachers make emotional connections with their students and help students make emotional connections with a subject or task, students are more engaged in learning (Suarez-Orozco, Onaga & Lardemelle, 2010). In a learning environment, threats and accusations almost never work to motivate students to do their best. Stress can damage neurons in the human brain and reduce students’ performance (Schenck, 2011). But if the classroom is grounded in loving relationships, students’ potential can be more fully activated and they have a greater potential to live a flourishing life (Yos, 2012). A climate of trust and safety is essential for students’ learning (Bluestein, 2001). Students are “most likely to thrive in an atmosphere of trust… This involves maintaining a warm, caring relationship with students, one in which teachers can be ‘real’ with themselves and others” (Purkey & Novak, 1996, p. 50). Therefore building relationships of care and trust is a prerequisite to all forms of classroom engagement, including higher levels of cognitive thinking (Noddings, 2002).
The National Research Council (2004) published a comprehensive study concerning the lack of engagement in today’s public high schools. Many of the students who are retained at schools attend irregularly, exert modest effort on schoolwork, and learn little. This situation can be changed if schools “help the young make sense of life, of experience, and of an unknowable future” (Brady, 2006, p.47). Students are more likely to show both short and long-term commitment to learning if the class activities are consistently personally relevant, enjoyable, and appropriately challenging (Csikszentmihalyi, Rathunde, & Whalen, 1993; Csikszentmihalyi & Schneider, 2000).

People have a basic need to feel competent, successful, autonomous, and affiliated with others when doing a task (Deci & Ryan, 1991). Student’s psychological investments promote learning, understanding, and mastering of knowledge, skills, or crafts of academic work (Newmann, 1992). When students learn subjects that they are interested in and have autonomy in making choices, they tend to perform better (Stipek, 2002; Pintrick & Schunk, 2002). If students pursue an activity out of genuine interest, their commitment will be both more persistent and more successful than those who do not (Armes, 1992). Research has shown that the more educators give their students choice, control, challenge, and opportunities for collaboration, the more their motivation and engagement are likely to rise (Toshalis & Nakkula, 2012). Students who have a positive self-concept tend to be intrinsically motivated. They have a high level of curiosity, are interested in schoolwork, and prefer moderately challenging tasks. The motivational orientation leads to high levels of achievement, and in turn maintains high levels of self-esteem (Harter, 1988).
Social Context of Learning

Substantial empirical evidence shows that educational conditions promote academic engagement (Board of Children, Youth, and Families, 2004). Bronfenbrenner (2005) introduced a theory on human development known as Bioecological Theory. The bioecological model of development explains how everything in the microsystem, mesosystem, exosystem, macrosystem, and chronosystem constantly interact with and influence each other. Positive youth development recognizes the importance of interactions within and across these five environmental systems, processes occurring between individuals and their ecological settings and how these connections set a foundation for adolescents’ development (Bronfenbrenner, 2000; Benson & Saito, 2001; Fredricks & Eccles, 2005). This framework suggests that all young people have strengths or potentials to realize their strengths, provided that they have developmental opportunities that align them within their ecologies (Witt, 2002; Lerner, 2005; Damon, 2004).

Bandura’s social learning theory (1977, 1986) suggests that the environment largely affects human life. Rewards and punishments through operant, and classical conditioning can often explain a person’s behavior. A safe and challenging environment is critical in developing and maintaining a good learning environment. It promotes students’ authentic intellectual growth. When students feel safe and respected by their peers and teachers, this sense of trust makes them become more engaged in learning. They become more willing to share their thoughts, invite questions and comments, and jump out of their comfort zone to embrace challenges (Greely, 2000).

Adolescent Psychosocial and Cognitive Development

When examining the impact of a secondary philosophical inquiry class on adolescent
academic engagement and searching for meaning, it is necessary to understand and become familiar with the wide range of literature relating to adolescence. These areas of scholarship are important for this study, because it closely connects with the research questions and data analysis. The goal of the Philosophical Inquiry course is to prepare empathic, responsible, and ethical human beings who can think deeply and appreciate multiple perspectives. Student learning experiences include their cognitive, social, and emotional development, so literature review in the field of adolescent psychosocial and cognitive development, and parent and adolescent relationships will provide a foundation to understand Philosophical Inquiry student’s PI classroom experiences.

**Adolescent psychosocial development.** “Young people are searching within themselves and outside of themselves for a handle on what life is all about and where they fit in if they fit at all” (Dreyfus, 1972, p. 4). Adolescence is extremely important period for teenagers as they are building social networks and intimate friendships that help them develop a deeper sense of understanding of themselves and others through shared activities and self-disclosure (Huntley & Owens, 2006). The onset of adolescence is a critical time of social changes, which includes increased self-consciousness and social anxiety. Influenced by pubertal hormones, adolescents tend to increase their sensation-seeking and aggressive behaviors (Forbes & Dahl, 2010). The transition from childhood to adolescence makes adolescents become more likely to spend time with peers, often with reduced oversight by parents. Peers become a significant resource for emotional and social support. In the meantime peer relations help to mold the development and lives of adolescents (Brown & Larson, 2009).

Erik Erikson (1963) described psychosocial development from infancy through old age. His theory portrayed people as playing an active role in their own psychological growth through
their attempts to understand, organize, and integrate their everyday experiences. In Erikson’s view, personality development occurs as one successfully resolves a series of turning points, or psychosocial crises. The crises refer to extraordinary events when people need to adjust to the normal guidelines and expectations that society has for them. They are called crises because people are often not certain that they are fully prepared to fulfill these demands (Snowman & Biehler, 2000). Erikson identified eight stages of personality development across the human lifespan. Identity versus role confusion is a primary psychosocial issue that students must resolve during their middle and high school years (Erikson, 1963). An optimal sense of identity, as defined by Erikson (1968), is a sense of psychosocial well-being, which is a feeling of being at home in one’s body, a sense of knowing where one is going, and an inner assuredness of anticipated recognition from those he or she cares about. A high school student tends to have a sense of psychosocial well-being if he or she is pleased with his or her appearance, has already decided to go to college, or is admired by parents, relatives, and friends (Snowman & Biehler, 2000).

**Adolescent cognitive development.** At the core of adolescent cognitive development is the attainment of a more conscious, self-regulated and self-directed mind, and better executive functioning (Keating, Lerner, & Steinberg, 2004). During early adolescence, individuals show significant improvements in reasoning, information processing, and expertise. They exert higher level abstract, multidimensional, planning and hypothetical thinking abilities from late childhood to middle adolescence (Steinberg, 2005). Because of changes in brain structure and function, especially in the prefrontal area and systems of inhibition such as calibration of risk and emotion regulation, adolescents’ cognitive and behavioral systems mature at different rates. This period
of vulnerability increases the risk of depression, violent delinquency and substance abuse (Steinberg, 2005; Sylwester, 2007).

Jean Piaget theorized that human beings have two tendencies governing both physiological and mental functions. One tendency is to systematize and combine processes into coherent general systems – organization. The other one is to adjust to the environment – adaptation. He postulated four stages of cognitive development, sensorimotor, preoperational, and concrete operational, and formal operational. Adolescents are in the formal operational stage where they are able to deal with abstractions, form hypotheses, and engage in mental manipulations (Snowman & Biehler, 2000). Although there have been many criticisms of Piaget’s stage theory, his conception of the cognitive skills of adolescents is often used in schools.

**Parent-adolescent relationships.** “The family is a social system that exerts a profound influence on the development of an adolescent” (Caprara, Scabini, & Regalia, 2006, p. 98). Collins and Laursen’s (2005) research showed that the content and quality of parent and adolescent relationships, rather than the actions of parent or adolescent alone determines and shapes adolescent development in and beyond adolescence.

In periods of adolescent rapid transitional changes, parental expectations often are violated. These violations may generate emotional conflict and turmoil between parents and children. Adolescents’ relationships with peers and extra-familial adults tends to be closer than those with their parents. They perceive less companionship and intimacy with parents and are less satisfied with family life (Buhrmester & Furman, 1987). The hormonal changes at puberty contribute to impulse control problems and anxiety, as well as rebelliousness and distance from the family (Freud, 1958).
Meaning of Life

Adolescents often find themselves trying to make sense of conflicting information, pressures, and experience of confusion. Finding something meaningful which to direct themselves can help them develop their identities (Brassai, Piko, & Steger, 2012). Identifying the meaning in their lives can be a central purpose during adolescence as they figure out who they are. The need to evaluate and reconsider their internal and external life experiences often inspire adolescents to search for a true self and stimulate them to explore the meaning of life (De Vogler & Ebersole, 1985).

Meaning is proposition expressed, which “involves the relationship between sentence meaning and the entities,” and assumes a relationship between what a speaker asserts when uttering a sentence and the semantic content of the sentence uttered (Soames, 2010, p. 2). The meaning locates in “thought, perception, and the cognitive acts of agents” (p. 8). The meaning of life is “the sense made of, and significance felt regarding, the nature of one’s being and existence” (Steger, Frazier, Oishi, & Kaler, 2006, p. 81). Jacobsen (2007) defined that, “life meaning refers to the content with which people fill their lives. Life meaning imbues life with form and direction. A related concept is life goal. It refers to the objectives that people work towards and try to achieve” (p. 132). The meaning of life is the purpose of one’s life. The structured purpose gives meaning of life (Ronald, 2013). The search for meaning is defined as “the strength, intensity, and activity of people’s desire and efforts to establish and/or augment their understanding of the meaning, significance, and purpose of their lives” (Steger, Oishi, & Kashdan, 2009, p. 200). One important aspect of the human condition is “a native impulse to live with a funded sense of meaning and value. One might call it the human eros” (Alexander, 1993, p. 203). This “eros” urges us to unify our experiences and to form a greater meaningfulness.
Life meaning and life goals are generally selected based on a person’s basic life values. Allport (1961) made an attempt to create a theoretical system that explains human beings’ life values. He classified six types of people according to their essential values. First is the theoretical person who lives to discover or uncover truth. Second is the economic person who is oriented towards the utility of things. Third is the aesthetic person who is oriented towards the forms and harmonies of things. Fourth is the social person who cultivates love for and affinity with other people as the life value that has highest priority. Fifth is the political person who is interested in power. Sixth is the religious person who seeks unity with something that lies beyond the everyday world (Allport, 1961; Jacobsen, 2007). Some people claim that there is no certain way of life or life goal that is superior or more worthwhile than another (Jacobsen, 2007).

When a person identifies a purpose in life, he or she would commit personally to a chosen way of life (Sartre, 1990).

Some psychologists believe that how people pursue ways of life has something to do with their chronological age. In other words, certain life meanings and values belong to a particular stage in the course of life. According to Jung (1981), the process of individuation comprises two main phases. The first and the second life cycles are bridged by a mid-life crisis. The way a person pursues life goals may be dramatically different in these different phases. Bühler (1968) differentiated the life cycle into five phases; each was identified by a person’s concern with life goals. From approximately 15 to 25, people seek out and make preliminary decisions regarding their life’s purpose. After 25 until 45 or 50, people become increasingly specific and definitive with regard to life goals. Kierkegaard (1845) distinguished three stages of life, which are called the aesthetic, the ethical and the religious, respectively. In Frankl’s (1959) view, man’s search for meaning is the primary driving force. People need a sense of meaningfulness to guide their
lives and behaviors. They are often prepared to live and die for the sake of their ideals and values. He called the will for meaning the “spiritual dimension of human existence” (Frankl, 1969, p.160).

Maughn (2011) described that conflict may be caused when a student gets “the disciplinary knowledge, the intellectual, social and technological skills, and the cultural capital [he or] she needs to compete in the economic market,” without considering “whether [his or] her life has any meaning or purpose beyond that, and without knowing how to cultivate personal or collective wellbeing” (p. 202). Philosophy for Children researchers Laurence Splitter and Ann Sharp (1995) explained that philosophy is the quest for meaning; all formal education is a systematic search for meaning. Sternberg (2003) and Nussbaum (1995) suggested that Philosophy for Children could promote students’ emotional, ethical, and personal development. Bringing philosophy to classroom practice is one way to address the sense of disconnectedness, fragmentation, and alienation that many students experience. The personal growth, the desire for making meaning and the goal of self-realization and transcendence are inseparable from the philosophical inquiry classroom.

**Philosophy for Children**

This third part of this literature review begins with the history of Philosophy for Children, which describes the growth of Matthew Lipman’s P4C movement, Thomas Jackson’s p4cHI movement, and Amber Makaiau and Chad Miller’s context-sensitive version of p4cHI – the Philosopher’s Pedagogy. Then it will describe the procedures of doing p4cHI in classrooms, and synthesizing student outcomes related to p4cHI. This section will acknowledge the original proponents’ of P4C theories and research that inspired this study, and demonstrate the need for the current study.
Philosophy for Children (P4C)

P4C began in the late 1960s when Matthew Lipman found that children had a negative view of their own intellectual abilities. He decided that there needed to be a way to better teach his students to think and reason in a democratic society and that this effort needed to begin much earlier than college. To address these issues Lipman created a curriculum that incorporated the skills of logic and reasoning found in the practice of philosophy to improve students’ thinking in the K–12 setting. He saw that P4C converted traditional classrooms into reflective communities of inquiry where students and teachers continue to develop their ability to think for themselves in responsible ways (Lipman, 1993). Lipman wrote, education “will cease to treat children as passive blotters whose education consists merely of learning of inert data and will instead stimulate their capacity to think” (1988, p. 110).

To support the ongoing growth of P4C, in the early 1970s, Matthew Lipman and Ann Margaret Sharp established the Institute for the Advancement of Philosophy for Children (IAPC) in Montclair University, located in New Jersey. “The IAPC soon attracted international attention” (Jackson, 2012, p. 3). Each year scholars, mainly those connected with departments of philosophy, came for a three-week workshop conducted by Lipman and Sharp to learn this new approach to doing philosophy. By the early 1980s, the IAPC developed a complete K-12 P4C curriculum which consisted of seven books with seven accompanying teacher’s manuals that were designed to promote philosophical thinking in U.S. schools. Later Lipman’s P4C approach received “national validation” and became “eligible for federal money to support costs associated with the professional development of school faculty who wanted to implement the program” (p. 3). P4C subsequently became a well established and developed educational philosophy with several centers around the world and thousands of individual practitioners in many countries -
ranging from Austria to Iceland, Bulgaria to Brazil, and Canada to China (Makaiau, 2010). The idea of the classroom as a community of inquiry is the foundation and primary pedagogy of the P4C program (Millett & Tapper, 2011).

**Philosophy for Children Hawai‘i (p4cHI)**

In 1984, Jackson (2012) learned about Matthew Lipman and P4C, and attended a three-week workshop at Montclair. He was impressed by Lipman’s approach of thinking together philosophically and experienced a sense of belongingness in the community of inquiry. He observed that during the inquiry students were animated, engaged, and thoughtful. They shared their personal views with each other, and developed insightful views into the questions that they voted to discuss. In an effort to extend Lipman’s original curriculum and vision to a variety of geo-cultural contexts, Jackson brought P4C to Hawai‘i. People “from many different parts of the world have adapted the program to blend with local methods” (Maughn, 2011, p. 212), Jackson also adapted P4C to meet Hawai‘i students’ needs.

When P4C was being practiced in the context of Hawai‘i, several limitations of Lipman’s approach became apparent regarding the geo-cultural context:

Among them were: (1) the reliance of the curriculum on the presence of someone in the classroom with philosophical training; (2) the perception of K – 12 classroom teachers that philosophy should be reserved for education at the college level; and (3) the cultural incongruence between Lipman’s novels and the experiences of many children in Hawai‘i. (Miller, 2012, p. 31)

Thus after several years, Jackson, transformed in important way Lipman’s original curriculum, creating philosophy for children Hawai‘i (p4cHI) and developing it with children and teachers in Hawai‘i public schools, China, Japan, and around the world. Jackson’s p4cHI provided a more
flexible approach than Lipman’s original P4C by changing the focus of classroom activity from curriculum with a Western oriented philosophical content to a more inquiry based approach focusing on developing inquiries (rather than arguments) from the wonderings, thoughts, ideas, and questions of students (Miller, 2013).

**p4cHI in Classroom Practice: Four Pillars of p4cHI**

A p4cHI approach to education is based on four pillars – “community, inquiry, reflection, and philosophy,” and a set of teaching strategies that can guide teachers to translate theoretical foundations into classroom practices (Jackson, 2012, p. 6). The following section describes the four pillars of p4cHI, which are incorporated into the PI curriculum.

**First pillar: community.** After thirty years of p4cHI development (1984-2014), the values of community, inquiry, reflection, and philosophy have become the four pillars of p4cHI. Among the four values, community needs to be developed first. According to Jackson (2013), a p4cHI community develops in three stages – a beginning, emerging, and mature community. In the beginning phase, the teacher/facilitator’s role is strong and direct. As students and their teacher “internalize the roles, vocabulary, and protocols (social and cognitive) that are the hallmarks of an intellectually safe philosophical inquiry community” (p. 100), both in a mature community teachers and students become facilitators and participants.

**Form a circle.** In a typical p4cHI philosophical inquiry classroom, students and their teacher will sit in a circle. One student expressed “this is not a graveyard classroom; we’re a community and I’m not above you, I’m not below you, I’m with you at your level” (Miller, 2013, p. 73). Students view themselves as equal participants in the learning process in circular seating that promotes a new power relationship in the classroom. Students and teachers recognize that circular seating facilitates communication and collaboration, allows ideas flow more freely, and
promotes a higher level of personal and intellectual acknowledgement among the students and their teacher.

Create a community ball. A signature technique incorporated into p4cHI classrooms is the creation of a community ball (CB). The CB is made during the first one or two class periods by the classroom community. After that, every p4cHI session is conducted in a circle with the use of the CB to indicate who is the speaker of the moment, as well as to whom everyone else should listen and pay attention. Students and teachers can always pass the CB to designate the next person to speak. However, if circumstance requires, the teacher has the right and responsibility to intervene in the discussion even without a CB (Jackson, 2013). The CB plays an important role in keeping the classroom organized. One student remarked,

That is what I really, really liked about the community ball because it kept everything in order and organized. Because we weren’t having people yelling all across the room, but then at the same time, everyone had their say. Everyone threw it to everyone that wanted, felt like they needed to say something, and everyone was able to do that. (Miller, 2013, p. 75)

So as inquiry develops, the CB becomes a tool of facilitating the philosophical community of inquiry that empowers students with ownership of their session. Students’ ideas can be heard and respected by their peers (Miller, 2013). The CB makes the other students willingly concentrate on the speaker’s thoughts, instead of worrying about how they physically appear to their peers. The CB “takes away a lot of the anxiety…. Because people that don’t really want to talk or people that are nervous about what it is they want to share, having something there to fidget with and play with takes your attention off” (p. 75).

Create an intellectually safe place. In order to develop a safe classroom environment,
p4cHI classrooms always take more than one period to introduce and develop an important concept, Intellectual Safety, to the community. p4cHI aims to cultivate a K-12 philosophical schooling experience in an intellectually safe environment that encourages students to think collaboratively about meaningful topics and questions in responsible and respectful ways (Jackson, 2012). An intellectually safe community, as Jackson (2001) defined, is a place that is physically, emotionally, intellectually safe and hence conducive to collaborative, intellectually rich inquiry.

In an intellectually safe place there are no put-downs and no comments intended to belittle, undermine, negate, devalue, or ridicule. What develops is a growing trust among the participants and with it the courage to present one’s own thoughts, however tentative initially, on complex and difficult issues. (p. 460)

In the intellectual safe environment, “all participants in the community are free to ask virtually any question or state any view so long as respect for all is honored” (Jackson, 2013, p. 102). Students’ curiosity, their natural sense of wonder, their eagerness for inquiry, and their desire to make their voices heard need a trust and safe place to “grow, breathe and make sense” (Bluestein, 2001, p. 210). Learning in this safe classroom culture, students are able to express their authentic, raw, or tentative thoughts more spontaneously. Even the most sensitive topics can be discussed and explored. Students do not fear the feedback to their contributions; they are more willing to support and build a psychologically safe and caring community of inquiry, which is considered a foundational context for all future inquiries (Jackson 2013; Jones, 2012; Makaiau, 2010; Miller, 2013).

To sum up, in p4cHI, the concept of community primarily indicates building an intellectually safe community where students and teachers sit in a circle and feel free and
respected to share their thoughts and ask questions. While forming this safe community, a community ball is created and used to facilitate communal discussion and empower each member of the community.

**Second pillar: inquiry.** p4cHI philosophical inquiry includes five key elements. The first is the source of the inquiry which is always inclusive of topics that are questions of interest to the students. “Whenever possible, the inquiry arises out of the questions and interests of the community, begins where the community is in its understanding, and moves in directions that the community indicates” (p. 103). Once the students realize that the questions and topics can indeed come from their wonderings, questions, concerns, and experiences, they are more motivated and engaged in learning, and explore and find joy in the learning process (Butnor, 2012; Makaiau & Miller, 2012). The second is co-inquiry. No one is committed in advance to a certain answer, and it is not known where the inquiry will lead. Concurrently, Jackson (2013, p. 103) found that “the quality, creativity, and insight in their thinking is truly astounding.” The third element is the self-corrective nature of the inquiry. The fourth element includes the inquiry tools such as The Good Thinker’s Toolkit (WRAITEC). The final element is reflection (Jackson, 2013).

**Plain Vanilla.** There are a variety of ways to initiate an inquiry. The *Plain Vanilla* format of inquiry is one strategy Jackson (2013) suggested in order to identify a topic and develop a p4cHI inquiry. The process generally follows four steps: (a) the community reads something, watches a video, or listens to a piece of music; (b) each member of the community poses a question, and all questions are posted for all to see; (c) the community votes democratically on the question they would like to inquire into; and (d) the community begins the inquiry using WRAITEC (Jackson, 2013).
In a Plain Vanilla inquiry, the person whose question is chosen starts the discussion. In the community of inquiry, no one knows where the inquiry will lead. “A p4c inquiry develops its own integrity, its own movement, going where ‘it’ wants or needs to go” (p. 104). Each member of the community co-inquires together, opening an unexpected inquiry journey. The goal of an inquiry is not to persuade anyone to accept a particular answer, but rather for everyone to reach a deeper and richer understanding of the questions and complex issues involved (Jackson, 2001).

Inquiry tools. A p4cHI inquiry is more than a conversation or sharing of ideas within a community. It contains thinking and intellectual rigor, and certain cognitive tools – WRAITEC is one tool that is used to help facilitate students’ inquiries. The following are examples of WRAITEC-based questions:

W – What do you mean by…?
R – What are your reasons…?
A – What assumptions are you making?
I – Can I infer…from…?
T – Is what is being said true and what does it imply if it is true?
E – Are there any examples to prove what is being said?
C – Are there any counter-examples to prove what is being said?

The more familiar students become with using the toolkit, the more depth of inquiry they create both during and beyond the p4cHI sessions (Jackson, 2013). WRAITEC is an essential component of the Kailua High School philosophical inquiry curriculum. Students are required to use WRAITEC when they pose their questions and engage in classroom discussions. They are “an important means for giving shape and direction to the notion that, although we aren’t in a rush to get anywhere, we do have an expectation that we will get somewhere” (p. 104).
WRAITEC represents a type of philosophical question or response that one can ask individually or with others to move inquiry to a deeper level (Jackson, 2012). Following are some examples of questions that high school students raised in an ethnic studies class using the Good Thinker’s Toolkit (GTTK) (Makaiau, 2013),

• What does it mean to be Hawaiian? (12th grader)
• Is it reasonable to assume that for me culture, race and ethnicity are all the same thing? (12th grader)
• What are the reasons I don’t always feel empowered? (12th grader)
• If it is true that I make rude remarks about other people’s biases, then does that imply that I am a hypocrite? (9th grader)

**Evaluation.** At the end of the philosophical inquiry, community members are asked to reflect on the day’s inquiry or classroom activities. The following categories of criteria are suggested by Jackson (2013): 1). How did we do as a community? (a) Listening – Was I listening to others? Were others listening to me? (b) Participation – Did most people participate rather than just a few who dominated? (c) Safety – Was it a safe environment? And 2). how was our inquiry? (d) Focus – Did we maintain a focus? (e) Depth – Did our discussions scratch beneath the surface or open up the topic? (f) Understanding – Did I increase my understanding of the topic? (g) Thinking – Did I challenge my own thinking or work hard at it? and (h) Interest – Was it interesting?

To conclude, the community of inquiry features the p4cHI approach as well as the philosophical inquiry classroom activities. p4cHI inquiry arises from students’ wonderings, interests, and questions that matter to their lives. They are encouraged to remain open to multiple perspectives, learn from their experiences, and challenge their belief systems in the process of
inquiry. The p4cHI provides participants with the thinking tools embodied in WRAITEC and the Plain Vanilla technique for discussion and inquiry. At the end of a philosophical inquiry, community members are encouraged to reflect on the day’s inquiry or classroom activities.

**Third pillar: reflection.** In addition to the above criteria, students are often asked to write a written reflection on whether or not they experienced any progress or change in their own thinking as a result of the inquiry session. In a p4cHI classroom, students are provided with opportunities to pause, stop what they are doing and question such things as what they assume to be true about the content they are learning about, the world around them, and their relationships with others (Makaiau, 2010). By the end of the semester, students learn that they will experience some sense of confusion or uncertainty over the course of philosophical inquiry, that perplexity and disequilibrium is an important stimulus for reflection, and one form of progression and growth. Philosophical inquiry provides time and opportunities for students to engage in reflective thought concerning the questions and issues that are of most importance to them (Miller, 2013; Jackson, 2013). The “student must be educated to see that…no claims of fact will be made without evidence, no opinions will be proffered without accompanying reasons, and no judgments will be made without appropriately relevant criteria” (Jackson, 2013, p. 18).

In summary, reflection is an important component in p4cHI classroom practice. “From the perspective of a philosopher’s pedagogy, sustained and meaningful learning can only occur under the conditions of conscientious reflection” (Makaiau, 2010, p. 60). In p4cHI reflection, self-correction and a questioning attitude are essential attributes. Participants recognize that reflection is effective in helping them organize thinking, make connections, and in directing future actions to promote personal growth.
**Fourth pillar: philosophy.** Many people tend to have a neutral to negative view of philosophy because they consider philosophy as “something rather esoteric, removed from everyday experience and concerns, difficult to understand, perhaps not even suitable to children” (Jackson, 2013, p. 108). However, p4cHI offers an addition to this view that enriches people’s understanding of philosophy through its concept of philosophy as both “Big” and “little”.

According to Jackson (2013), philosophy can be experienced in two versions: Big-P philosophy and little-p philosophy. Each of these experiences involve content and activity. Big-P content includes a) philosophers, for example, Socrates, Aristotle, Kant and Confucius; b) areas, such as metaphysics, ethics, and aesthetics; and c) schools, movements, and worldviews, for instance Taoism, feminism, and phenomenology. Big-P Activity refers primarily to academics who teach, research, write, read, and present their work at conferences based on years of study devoted to the aforementioned content.

Little-p content refers to, “The set of beliefs we begin to acquire at birth that continue to inform our experience, becoming the framework with which we make sense of our world. To the extent that we have beliefs, we have a philosophy” (p. 108). Philosophy recovers itself when it deals with “the problems of men” (Campbell, 1995, p. 92). little-p activity is grounded in the extraordinary sense of wonder we live with. We are not passive but active from the beginning, wondering, questioning, and seeking to create meaning for ourselves in the new world. Questioning is a life-long process of reflecting on our own beliefs and experiences. It can begin with any content or topic that comes from our thoughts, questions, reflections, and our concrete experiences (Jackson, 2012; Makaiau & Miller, 2012).

In brief, the concept of philosophy in p4cHI inquiry is not the Western philosophical model of argument, which is based on opposing, and defending one’s beliefs in an attempt to
understand more fully. Rather, it is built upon the notion of collaborative co-inquiry (Jackson, 2012). In addition, in p4cHI, philosophy becomes a pedagogical activity that is appropriate in all content areas. It is a practice of inquiring deeply and reflectively as well as communicating effectively and ethically. Philosophy is expanded beyond its current position as an academic discipline to a dialogical activity directly relevant both in the classroom as an important addition to pedagogic practice as well as in students’ lives (Lukey, 2012).

**The Philosopher’s Pedagogy**

Makaiau and Miller (2012) determined to create ways to incorporate p4cHI into their own practices as public high school teachers. In order to adapt p4cHI to more effectively meet the needs of high school students and to more concretely design and implement student activities within the school curricula, they pioneered a modified approach to p4cHI they called the “philosopher’s pedagogy” (Makaiau, 2010; Makaiau & Miller, 2012). This approach extends “the ongoing dialogue concerning philosophy for children and its relationship with philosophy, education, theory, and practice” (Makaiau & Miller, 2012, p. 8). The philosopher’s pedagogy expands upon the work of Lipman and Jackson in that it focuses on ways in which p4cHI can be included to teach across disciplines at the high school level (Makaiau & Lukey, 2013). These educators determined to use the philosopher’s pedagogy to bring back the notion that schools are places where human beings can work together to understand the purpose of our lives better, and to work to correct some perceived crucial shortcomings, such as students did not have chance and time to reflect on their learning experiences, students lack of motivate and engagement in learning in social studies classes, of the current school system (Makaiau & Miller, 2012).

Philosophy “encourages individuals to examine their lives and experiences in order to come to a deeper understanding of the world and their place in it” (Makaiau & Miller 2012, p. 6).
When it connects with our lived experiences and emotions, philosophy is also an activity of the human heart. The philosopher’s pedagogy is not just a curriculum or method, rather, it is an approach to teaching that requires a set of six interconnected educational commitments.

First, teachers must live an examined life. Socrates argued that life is not worth living if it is void of examining one’s beliefs and conceptions as well as others (Plato, 1961). When teachers live and model an examined life, both within their classrooms and beyond, students may become inspired and engage in examining their lives too (Makaiau & Miller 2012). Second, teachers must view education as a shared activity between teacher and student. In a p4cHI community of inquiry, teachers become co-inquirers alongside their students. “The-teacher-of-the-students and the students-of-the-teacher” share mutual understanding and communication to construct knowledge together (Freire, 1970, p. 80). Third, the teacher and students must re-conceptualize the content as a reflection of the interaction between classroom participants’ beliefs and experiences, and the subject matter being taught. The philosopher’s pedagogy expands the focus from specific subject content to include the thoughts, ideas, and beliefs of the students. Texts are used as a stimulus to initiate meaningful philosophical inquiry among students and teachers. Fourth, teachers must position philosophy as “the general theory of education” (Dewey, 1916, p. 328). The teachers should ensure that philosophical wonder is at the heart of classroom activities, and carry out their commitment to philosophical inquiry as a necessity for learning. Fifth, teachers and students must make philosophy a living classroom practice. p4cHI provides teachers with a set of classroom structures (i.e., community ball, Plain Vanilla), and assists students in learning to incorporate the GTTK to facilitate their philosophical inquiries. This facilitates bringing philosophy into actual classroom practice. Finally, teachers
need to be willing to challenge contemporary measures for classroom assessment (Makaiau & Lukey, 2013; Makaiau & Miller 2012).

**Student Outcomes Related to P4C and p4cHI**

The Society for the Advancement of Philosophical Enquiry and Reflection in Education (SAPERE) (2013) summarized P4C as a powerful educational approach that has been found through research studies to have cognitive and social benefits for schools. In P4C classes, students’ self esteem and self-confidence, concentration, engagement and motivation to learn, reflection and reasoning skills, abilities to communicate, behaviors in and out of the classroom, listening, cooperative and social skills, and emotional and psychological wellbeing were all improved (Biesta, 2009; Brown & Campione, 1994). The following section will describe student outcomes related to Philosophy for Children in three sections: (a) development in cognitive ability and thinking skills; (b) development in socio-affective skills; and (c) development in learning and engagement.

**Development in cognitive ability and thinking skills.** Sutcliffe (UNESCO, 2007) declared that P4C is widely accepted as a method to stimulate students’ creative and critical thinking abilities. The P4C community of inquiry provided students with opportunities to express their own views. “Through taking part in thoughtful, reflective discussions, children gain confidence in their ability to think on their own” (Lipman, et al., 1980, p. 131).

Seven studies used quantitative method to describe outcomes of P4C program. Lipman, Sharp, and Oscanyan (1980) utilized pre and post test design with two groups of 20 students over two and a half years and found that students’ reading and reasoning abilities, as well as critical thinking skills improved. Yet time involvement of experimental group is given but not of control group. Haas (1975) used a quasi-experimental design with 200 children and concluded that the
children achieved significant improvements in reading, critical thinking and interpersonal relations but was inconclusive about impact of P4C on curiosity and logical thinking. There were few details about how schools were chosen or matching of control and experimental children. In addition, sessions were led by teachers rather than P4C professionals. The Education Testing Service (1978) research studied 200 experimental and 200 control students aged 10 to 13 over two years. Teachers were given two hours training per week in the first year and students were exposed to the P4C program for two hours per week. The study demonstrated significant improvement in reading, mathematics, creative thinking and logical reasoning in experimental group. But the study provided little details on how schools were selected, and alternative activities that control group engaged with.

Williams (1993) did a similar study with 15 experimental and 17 control students aged between 11 and 12 years over 27 one-hour session of philosophical inquiry, and found that the London reading test revealed that the experimental group results were statistically more significant than the control group. However, this was a very short-term intervention of P4C. The Institute for the Advancement of P4C (IAPC) (2002), based at Montclair State University, concluded that students who had used P4C from diverse demographic and geographic sites from Hawai‘i to New York, spanning various socio-economic status, showed significant gains in reasoning ability. However it is not clear from this publication what social disadvantage indicators were used to categorize populations. It did note that the experimental schools were carefully selected on the bases that they had been committed to the P4C program for many years. The Scottish study conducted by Topping and Trickey (2004) at 18 primary schools in Clackmannanshire in 2002 and 2003 showed that even one hour’s use of an inquiry-based teaching methodology each week for seven months can have a significant impact on children’s
reasoning abilities. The length of student utterances in the experimental classes increased on average by 58%. They (2007) conducted a follow-up study on the same group of students after they enrolled into their secondary institutions. The research demonstrated that the philosophical inquiry group sustained their cognitive gains after two years despite the absence of further experience of philosophical inquiry in secondary schools.

These quantitative studies used experimental and control group design and applied norm-referenced tests, students’ reading, reasoning, cognitive and mathematical reasoning abilities were improved after the P4C Lipman approach’s intervention. Two qualitative were conducted by Echeverria (1992), and Daniel and Auriac (2009). Echeverria collected qualitative data through observing students in classrooms, the schoolyard and at home. Although there were some improvements in children’s thinking skills, some contradictions and inconsistencies were observed. Children had tendency to use their thinking skills in classrooms rather than in other contexts. Daniel and Auriac’s study found that P4C students mastered argumentative and critical thinking and increased knowledge of philosopher’s thought. In philosophy, the solving of philosophical problems is often done through individual critical thinking, while in P4C it occurs through the apprenticeship of critical thinking in a community of inquiry.

Different from the aforementioned P4C studies that mostly applied quantitative studies and were more focused on students’ reading, logical reasoning, critical thinking and mathematical skills, the p4cHI studies employed more qualitative methods in investigating p4cHI’s effects on students’ cognitive abilities.

Yos (2004) conducted his research in a Hawai‘i public elementary school, and found that philosophical inquiry empowered children to think well and understand themselves and others more deeply. p4cHI cultivated good judgment, which is an essential quality for human beings “to
lead lives that are rich, worthy and fulfilling” (p. 13). Mitias (2004) concluded that p4cHI offered students time and space to practice thinking alternatively. Philosophical inquiry promoted the application of logical and methodological analysis to questions and assumptions. Engaging in philosophical inquiry, students learned to analyze and inquire into problems “within a community of other thinkers and within a network of knowledge” (p. 17). Lukey (2004) worked with special needs children who were not in the mainstream curriculum for almost two years, and found that philosophical inquiry helped children with autism to develop their communication and thought processes. After consistence practice, children with autism improved their abilities to ask and answer questions.

Yuan (2004) conducted a comparative study with two groups of children from China and Hawai‘i who were made up of 1st, 3rd, 4th, and 5th graders. The study found that p4cHI introduced a kind of wisdom that beyond language, geographical location and culture, in which children always kept an open space for a sense of wonder. Tsuchiyama (2004) studied her six-year-olds, and found that her children could make sense of their questions by using their own personal experiences. The children demonstrated ability to skillfully engage in philosophical dialogue and reflective thinking.

Matsuoka (2004) conducted a longitudinal study for her dissertation, and she found that using GTTK, students developed mindful behaviors, such as using the GTTK to think creatively and flexibly, to reflect before taking action or making judgments, and enhanced problem solving abilities developed in their elementary school years in evidence after completing their first year of middle school. Lien (2004) interviewed teachers in Hawai‘i who had practiced p4cHI with their students for some years, and found that p4cHI provided an environment where inquiry naturally took place and students helped each other to nurture the ability to think cooperatively,
rather than competitively. In Makaiau’s (2010) Ethnic Studies class, she utilized the GTTK developed by Jackson (1998) to guide students’ thinking and inquiry. She found that this toolkit helped students explore what they wanted to know more about, seek clarification, think more deeply, and acknowledge and defend their assumptions by providing examples and counter examples. The GTTK provided an alternative way to teach students to communicate clearly and analyze information reflectively.

Thinking skills that philosophical inquiry can foster are life skills that are much needed by individuals in order to operate effectively in an increasingly complex world (De Bono, 1991). Lipman (2003) summarized that P4C provides the necessary skills to discuss concepts, inferences, arguments and reasons, and helps students become creative and imaginative thinkers, as well as be appreciative and caring toward others.

The following section will summarize and critique findings regarding student outcomes in socio-affective development. Although P4C researchers implemented rigorous large-scale quantitative studies, their participants were mainly elementary students. p4cHI researchers conducted systematic investigation into p4cHI’s effects on primary and secondary students’ socio-affective development, their research methods were predominantly qualitative.

**Development in affective and social skills.** Six studies used mixed methods research designs to study P4C’s effects on students’ socio-affective development. Hope (1975) selected 200 students in the experimental and 200 in the control group on the 6th grade level. The study noticed substantial improvements in P4C participants’ interpersonal relationships compared with the control group. Williams (1993) conducted teacher observations with 15 experimental students over 27 one-hour sessions of philosophical inquiry. The study also suggested improvement in students’ interpersonal relationships. Sasseville (1994) applied a pre and posttest
design with experimental group of 124 students and control of 96. Teachers were given 12 hours of training in P4C prior to the study and four days during the five-month span of the project. Sasseville’s study demonstrated that low self-esteem students could be able to find value in themselves through being listened to and taken seriously by their peers. However, no details were given of how the groups were selected or how they were matched.

Fields (1995) aimed to evaluate the outcomes of philosophical approaches with 123 children aged from 7-8 years over a period of one academic year. Experimental and control subjects were randomly selected from two schools, matched for intelligence quotient, age and sex, and assigned pairwise to conditions. Fields concluded a discernible increase in the displayed self-confidence of those participants who on completion of the study were identified as having introvert personalities. The result was linked with Sasseville’s finding above that the largest gains in self-esteem following involvement with P4C took place with children with the lowest self-esteem. The experimental groups were perceived as displaying markedly more motivation, curiosity, commitment and concentration. Yet, it would have been useful if this study had provided more details of the evaluation and of the selection of the groups and other experimental details. In Gardner’s (1999) two-year empirical study on P4C, the experimental group increased its scores on the social values and overall self-esteem. However, the scores decreased on self-protection, intolerance for ambiguity, and general external orientation.

Another strong empirical support for the social benefits of P4C was provided by Trickey and Topping (2007). In their program, Over 100 teachers received training and support and collaborated with two assistants working part time to develop P4C in the primary classroom for one hour a week with regular classes for 16 months. The study is comprised pre-post test design incorporating an experimental and a control group. A range of evaluation tools were used,
standardized quantitative methods, Cognitive Abilities Test (CAT), Myself as a Learner Scale (MAL), qualitative methods, such as video analysis and questionnaires. The experimental group were involved in an additional qualitative analysis in order to triangulate findings. The research demonstrated that students had significant improvements in communication, confidence, concentration, participation and social behavior following six months of philosophical inquiry.

Sharing the same characteristics while studying students’ cognitive and intellectual development, p4cHI researchers again applied qualitative research designs to examine p4cHI’s impact on students’ socio-affective development.

**p4cHI research in socio-affective development.** Jackson (1993) reported an evaluation of the implementation of p4cHI program during the 1990-1991 school year, which involved 56 teachers. The report was based on two questionnaires answered by students and teachers. Respondents believed that doing philosophy in a community of inquiry gave all students a voice as well as teaching them appropriate ways to express themselves and to have their contributions heard. The voices of all students were encouraged and included in classroom dialogue. A range of co-operative skills, such as listening to others, keeping open-mindedness, treating others’ views with respect, building on others’ ideas, being confident in self-expression, being willing to offer, accepting and responding to criticism, becoming committed to inquiry, valuing reasonableness, developing intellectual courage, and creating a space in which students can interact with both gentleness and rigor. In 2006, Jackson conducted a qualitative case study, and found that the p4cHI approach could help children keep authentic wonderings and philosophical inquiries. In the p4cHI environment, children placed much more emphasis on listening, thoughtfulness, care and respect for the thoughts of other. The community, inquiry, philosophy, reflection, and intellectual safety were the pillars of the p4cHI style. However, because of the
qualitative research design it limits to describing the phenomenon rather than predicting students’ future behavior.

A qualitative study conducted by Jones (2008) using survey to gauge primary, middle and secondary teachers’ perceptions of the effectiveness and impact of p4cHI on students’ learning. 39% surveys were sent out and 87 returned. The vast majority of respondents reported a range of positive effects on their students, including student motivation and cognitive, social and affective benefits. p4cHI was thought by respondents to contribute most to cognitive and social benefits whilst thinking strategies were more likely to aid motivation and engagement. The study indicated that future research might explore why it is that P4C appears to have a more visible effect on cognitive development.

Makaiau (2010) conducted an identity intervention study during the third unit of study within the Kailua High School ethnic studies curriculum, with 89 students across three-year period. The study documented and analyzed the impact of a p4cHI curriculum on adolescent process of identity exploration in Hawai‘i’s multicultural setting. The author analyzed students’ identity narratives using a constructivist approach to grounded theory methods. The results suggested that the socio-cultural setting where adolescents’ identity exploration took place is important in determining their exploration’s outcomes, since 61 out of 89 students identified place as central dimension in their identity exploration process. In a multicultural community context, students were inclined to accept the idea of ethnic identity pluralism. They saw the world as a complex place that is full of multiple perspectives.

Miller (2013) applied a qualitative constructivist grounded theory study to examine 13 students’ experiences with the Philosopher’s Pedagogy. Through the analysis of intensive interview responses, the study found that in p4cHI classroom environment, students could be
themselves and learn from each other. Students considered their teacher as an active participants in the learning process. The pedagogy also transformed students’ understanding of education, which is “knowledge moves beyond the acquisition of information and becomes the search for a feeling of satisfaction” (p. v). The study concluded by generating a theory of teaching that is different from traditional models of instruction.

Although these four p4cHI qualitative studies found positive results regarding students’ social, emotional, and psychological development, it is difficult to generalize these results because of the size, and descriptive nature of the studies.

**Development in learning and engagement.** P4C utilizes students’ viewpoints and personal experiences as vehicles for learning. The classroom activities encourage students to think about their own thinking and select questions or topics matter to them. This allows students to interpret what they have experienced into meaningful insights that can create opportunities for personalized useful learning (Allan, 1996). Fisher (2008) studied a small sample of two groups of 14 students, and found that children’s self-esteem as thinkers and learners improved after they engaged in community of inquiry. The study demonstrated that a group size of 14 is instrumental for class discussion, providing a good range of viewpoints and ample opportunity for students to contribute. In a meta-analysis that focused on studies using controlled experimental designs, Trickey and Topping (2004) found that children showed a decreased rate in conflict and bullying, as well as increased participation and engagement in learning. In their 2006 study, Tricky and Topping noted that children demonstrated improved self-esteem as a learner, reduced anxiety, increased level of empathy, and greater self-confidence.

The most striking findings with regard to student learning and engagement was from Buranda State School in Australian. In a study of the school, it was concluded that,
The changes at the school over the space of nine years include a significant increase in enrollments, improved programs and facilities, improved work practices, a very supportive school community and, most importantly, demonstrable, improved student outcomes. (Burgh, Field, & Freakley, 2006, p. 202)

Hinton’s (2003a, 2003b) studies showed that students improved significantly in their social behavior outcomes. Less behavior management problems occurred in the classroom. Bullying became a rare phenomenon. Students were more patient with each other. They were willing to accept their own mistakes as a normal part of learning. Student interaction and behavior outside of the classroom reflected cooperative learning environment.

There is other evidence that a philosophical community of inquiry is an effective pedagogical approach to teaching values (Millett & Kay, 2001). Russell (2002) conducted a qualitative study using an emergent research design, and found that children came to have a strong moral sense that was fostered in P4C type of community of inquiry. Another school study implemented by 143 schools in Australia reported positive effects on student engagement with learning, active listening, and evidence of more respect and care in student-to-student interactions. They “experienced the mutual benefits of a values-centered classroom environment” (Commonwealth of Australia, 2008, p. 28)

Makaiau (2010) concluded that the application of philosophical inquiry in the classroom makes students take the time to reflect, to doubt, to question their beliefs, values, schemas, and thinking that provide them with the stimulation that is essential for authentic engagement in learning. A newer study strongly suggested that philosophical inquiry improved students’ general learning and their attitudes to school and peers (Millett & Tapper, 2011). Oderna (2012) found that p4cHI learners became engaged listeners and respectful and assertive contributors. They
were excited and felt empowered in acquiring a new sense of autonomy and responsibility in their learning. With growing confidence in their thinking and communicating abilities and progress, students were more motivated to learn and explore (Butnor, 2012). Providing students opportunities to take control of their learning motivated their love for knowledge, and made them enjoy school more (Nakamoto, 2004). Since the class centered on students’ questions, students were engaged in learning from their peers and were motivated to think deeply about subjects (Miller, 2012). All of these researchers conducted qualitative studies. More rigorous studies such as mixed-methods can be used to increase the generalizability and validity of research findings.

**Gaps in p4cHI and P4C Literature**

As the literature review has shown, a considerable number of empirical studies into the effects of P4C have been conducted (Topping & Trickey, 2007; Trickey & Topping, 2004, 2006, 2007; Garcia-Moriyon, Robello, & Colom, 2005; Sutcliffe, 2003), and they have produced strong support for the practice of P4C or philosophical community of inquiry, in terms of cognitive, social and emotional benefits. Yet many of the studies have been more focused on reading, critical thinking and mathematical abilities than on social and affective benefits. Additional rigorous studies are needed to examine socio-affective benefits of using P4C.

Although p4cHI researchers have conducted some qualitative studies, almost all the previous research was non-experimental or non-empirical. UNESCO (2009) suggested that it is a matter of great significance for P4C findings to be replicated on a broad scale in a rigorous way and across cultures. A mixed methods methodology is desirable (Millett & Tapper, 2011). Although research has been conducted at KHS, the focus was on adolescent
identity exploration (Makaiau, 2010) and the Philosopher’s Pedagogy model (Miller, 2013), which are very different topics from the current study. Thus, a qualitative study exploring adolescent academic engagement and meaning construction from a perspective of educational psychology will begin to address this gap in p4cHI scholarship.

In Millett and Tapper’s (2011) meta-analysis of the benefits of collaborative philosophical inquiry in schools, they pointed out that future research would best add to the scholarship of community of philosophical inquiry if it includes one or more of the following:

• the research uses a mixed methods methodology;
• the survey population is ethnically and geographically diverse;
• the survey population includes both younger and older students;
• the study uses a diverse set of curriculum materials;
• students in schools where philosophy is an established part of the whole school program are studied. (p. 13)

They also recommended conducting research with a teacher/teachers that had experience of doing P4C or a community of philosophical inquiry.

The current study is designed to include many of those features, since it used a mixed methods design. The population was from a Hawai‘i island - Oahu, which is ethnically and geographically different from many previous studies. The survey population was adolescents, which adds to the population that previous P4C researchers studied. The PI course used a wide range of curriculum materials, such as creating a community of inquiry and daily reflections, ten lenses of philosophical inquiry, race and politics, class and environment, gender and society (Makaiau, Shiroma-Ming, Miller, & Fukuda, 2014). Students had been learning about and using
p4cHI during their entire school experience at Kailua High School. Lastly, the PI teacher was experienced in teaching p4cHI, and had been teaching it for at least five years.
CHAPTER 3. METHODS

Research Paradigm

This study will include two small studies to approach the research questions in two ways. The first will be a qualitative case study examining student work and classroom discussions across one semester. The second will be a quantitative study measuring students’ perceptions of the PI course and life’s comprehensibility, manageability and meaningfulness through two pre and post surveys.

The quantitative and qualitative strands of the study occur in a parallel manner, either simultaneously or with some time lapse. That is to say, the data collection either starts and ends at approximately the same time or one strand starts or ends later than the other (Teddlie & Tashakkori, 2009). The integration of statistical and thematic techniques triangulate the data and interpret it through statistical and qualitative methods (Miles & Huberman, 1994; Tashakkori & Teddlie, 2009). The triangulation refers to the combinations and comparisons of multiple data sources, data collection and analysis procedures, research methods, investigators, and inferences that occur at the end of a study (Denzin, 1978).

The mixed research methods were used in this project because multiple methods can (a) simultaneously address a range of confirmatory and exploratory research questions with both qualitative and quantitative approaches; (b) provide stronger inferences; and (c) provide the opportunity for a greater assortment of divergent views in a way that achieves “complementary strengths and non-overlapping weaknesses” to increase the reliability, validity and generalizability of findings (Johnson & Onwuegbuzie, 2004, p.18; Teddlie & Tashakkori, 2009).
Researcher Positionality

Born and educated in China, my motivation for achieving academically mostly has come from family expectations and my success in standardized examinations. In China, the passing of the exam depends on whether a student can provide the standardized answer that the teacher designates. Elementary and middle schools often emphasize filling student’s brains with information, but ignore their moral, physical, and aesthetic development (Li, 2004). Because of the fierce competition in the national exams and end-of-semester exams in China, it is difficult to build up a safe community to exchange ideas among students. The Little Emperor syndrome that many one-child families have also draws attention from Chinese educators and researchers. As parents and grandparents focus all their attention and affection on one child, many students begin to lack initiative, independence, empathy, and responsible thinking (Colvin, 2004). In order to change this situation, Chinese educators and officials are actively seeking out alternative ways of teaching to engage Chinese students in learning and assist them in developing more holistically.

So, I have wondered how to help students become more engaged in their study. I wanted to know how to stimulate students’ curiosity, interest, imagination, and their desire to learn. I wondered how to create a safe learning environment to allow students to really flourish, and how to make students become better human beings. I believe that educators should create an intellectually safe and loving environment that encourages and nurtures caring, mindful, and creative communities, and develops students who are capable of loving, listening, sharing, and being open to new ideas while working with others in a collaborative and respectful manner.

When I visited one of the p4cHI flagship schools, Waikiki Elementary School, I found a learning community that was engaging, collaborative, and nurturing. I felt, “This is exactly what I want! This is the way I want to be educated, and how I would want to educate others.”
My interest in learning and exploring more about p4cHI brought me to the University of Hawai‘i at Manoa’s Uehiro Academy for Philosophy and Ethics in Education\(^1\). I have had the singular good fortune to work together with the Philosophical Inquiry Longitudinal Project Principal Investigator, Dr. Amber Makaiau, the founder of the Academy, Dr. Thomas Jackson and other remarkable scholars together to collaborate on p4cHI related international exchanges and research. I am currently a researcher with the PI longitudinal project at the Academy. This dissertation study is a pilot for studying the effects of the PI classroom.

This dissertation not only studied the search for the academically engaged youth and the search for meaning on the part of adolescents, but it also represents my own search. The topics discussed are those that I found personally relevant in my life and Chinese secondary education as well as issues found of interest in adolescents across the world. In a sense, their challenge is my challenge, because the seed for searching for an academically engaged adolescent and a meaningful life was planted during my adolescence since I could only find school a necessary task that I should fulfill, and life felt absurd. I hope that I was able to remain more objective than subjective while conducting data collection and analysis and that my own interpretation did not significantly color my remarks.

Although researchers often have an illusion of objectivity while collecting and analyzing data, as Creswell (2007) explained, qualitative researchers approach their studies with a certain worldview or propositions that guide their inquiry. Hamel (1993) also observed,

The case study has basically been faulted for its lack of representativeness…and its lack of rigor in the collection, construction, and analysis of the empirical materials that give

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\(^1\) The Uehiro Academy is founded by Dr. Thomas Jackson. The Academy will prepare, support, and sustain educators, researchers and students who engage or are interested in engaging in p4cH worldwide.
rise to this study. This lack of rigor is linked to the problem of bias…introduced by the subjectivity of the researcher. (p. 23)

One method to minimize the effects of bias is to become aware and bracket out personal perspectives that may color or influence the research. As “the primary instrument of data collection and analysis” (Merriam, 2009, p. 39), I have tried my best to bracket out my biases. I have kept a reflective journal with two p4cHI researchers, and kept continued discussion with two of my trusted peers to help me identify and eliminate my biases. I have invited another researcher who had experiences with p4cHI research to help me look at the data and provide me with objective suggestions. I may bring values and expectations to the study, but I critically reflect on myself as a researcher (Lincoln & Cuba, 2000). My “assumptions, worldviews, biases, theoretical orientation, and relationship to the study that may affect the investigation” (Merriam, 2009, p. 229), but I consistently examine my interpretations and I am aware of the conduct and conclusions of this study (Maxwell, 2012).

An additional area for bias comes from my participation in the PI classes. The p4cHI circle respects and appreciates multiple perspectives, so they invite visitors to join their discussions. Because of my participation, I am in a unique position of knowing all my participants on various levels. Patton (2002) wrote, “the participant observer employs multiple and overlapping data collection strategies: being fully engaged in experiencing the setting while at the same time observing and talking with other participants about whatever is happening” (p. 265-266). Regardless of my stance, I “cannot help but affect and be affected by the setting, and this interaction may lead to some distortion of the situation as it exists under nonresearch conditions” (Merriam, 2009, p. 137). My participants’ ideas may have been influenced by my viewpoints.
On the other hand, the relationships that I built with my participants helped me gain deeper understandings of each individual student’s viewpoints, especially in the focus group interview. While conducting the research, I am aware that I am going into the world of real human beings who may be threatened or unsure of what my study will bring. Knowing that, “The trustworthiness of a qualitative study depends on the credibility of the researcher” (p. 234), whenever I designed or conducted the study, or analyzed the data, I have kept a sense of sensitivity and integrity as the investigator. I assessed my participants’ possible risks, especially whether their psychological or emotional health was affected by the survey and interviews, kept their confidentiality, obtained informed consent from them and their parents, and made sure only the principal investigator and I had ownership and access to student data. Insofar as interview procedures, I also tried to be fully respectful, nonjudgmental and non-threatening with each participant (Merriam, 2009).

**Study One: Case Study**

This case study is “interested in uncovering the meaning of a phenomenon” for the PI participants (Merriam, 2009, p. 5). The phenomenon in question is participants’ learning experiences in the PI classroom. Simultaneously with gathering the quantitative data, qualitative techniques such as document analysis, classroom discussion analysis, and focus group interviews that are central to understanding students’ lived experiences and perspectives in the classroom will be analyzed (Teddlie & Tashakkori, 2009) to answer the research questions:

- Do students report feeling more engaged in their learning through p4cHI, and if so, what are the reasons they attribute to this?
- How did the PI experience shape students’ attitudes with regard to seeking meaning in their lives and schooling?
This multiple case study will reflect the context and background of the PI course, and explain and add strength to the quantitative survey results, which will be discussed in Study Two. By talking directly with the participants, going into their places of study, recording their discussions, I will summarize meaningful findings from participants’ voices, insider perspectives, and lived experiences (Creswell, 2007). This study develops understanding of how the PI students engaged in their learning, how they constructed their worlds, and what meaning they attributed to their learning in the class (Merriam, 2009). Denzin and Lincoln (2009) described qualitative research as,

a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. . . . This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them. (p. 3)

Case study research is an empirical inquiry that emphasizes detailed contextual analysis of a limited number of events or conditions and their inter-relationships “especially when the boundaries between phenomenon and context are not clearly evident” (Yin, 1994, p. 13). It is “an in-depth description and analysis of a bounded system” (Merriam, 2009, p. 40), or “a phenomenon of some sort occurring in a bounded context” (Miles & Huberman, 1994, p. 25). It explains the “why” or “how” of a phenomenon and enables the researcher to go more in depth than a quantitative study (Yin, 2004). A real strength of case studies is that the phenomenon being studied is “anchored in real-life situations, the case study results in a rich and holistic account of a phenomenon” (Merriam, 2009, p. 41). The case study can give the researcher a greater understanding of the participants’ thoughts, and give complex and rich descriptions of context to their lived experiences.
Despite the fact that case studies as a research method have been viewed as lacking scientific rigor and objectivity, they are widely used because they offer insights and illuminate meanings that other methods could not achieve. Eisenhardt (1989) explained that case studies are “particularly well suited to new research areas or research areas for which existing theory seems inadequate” (p. 548). This study is designed to gather exploratory, descriptive and explanatory research findings to provide insights on the PI course that is part of the Philosophical Inquiry Three Year Longitudinal Research Project.

Examining the impact of philosophical inquiry on adolescent academic engagement and construction of meaning requires use of a suitable research methodology that can adequately describe and that can account for the nature of phenomenon. It involves an explanatory account of rich ethnographic data. In determining an appropriate and holistic approach to investigating student learning experiences, a number of approaches were used. This study involved multiple forms of data collection, specifically survey questionnaires, student work, focus group interviews, video/audiotape of classroom interactions, and class observation notes. These data collection methods make sure the quantity, quality and sufficiency of the data gathered can capture, interpret, and explain students’ complex learning experiences. The following charts show how the survey questions, student work, and interview questions arise out of Vygotsky’s sociocultural theory and Dewey’s theory of education, and how the research questions also fit these paradigms. Table 1, below, details the fit among research questions, theoretical paradigms, primary data sources and data analysis methods.
Table 1

Blueprint of research questions, theoretical paradigms, primary data sources and data analysis methods

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Deweyan principle</th>
<th>Vygotskian principle</th>
<th>Primary Data Sources</th>
<th>Data Analysis Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do students feel more engaged in their learning during and after taking the PI course?</td>
<td>Interests; Needs; Experiences; Prior Knowledge; Thinking; Inquiry; Reflection; Philosophy; Community</td>
<td>Socio-cultural context; Prior experiences; Disequilibrium; Internalization; Zone of Proximal Development; Learner's environment</td>
<td>Philosophical Inquiry Questionnaire (PIQ); Class Discussions; Focus Group Interview; Philosophical Insight Papers</td>
<td>Survey data: MSExcel and SPSS; Qualitative data: NVivo thematic analysis</td>
</tr>
<tr>
<td>How did the PI experience shape students’ attitudes with regard to seeking meaning in their lives and schooling?</td>
<td></td>
<td></td>
<td>Sense of Coherence Scale (SOC-13); Class Discussions; Final Reflection Paper; Focus Group Interview</td>
<td></td>
</tr>
<tr>
<td>How do students’ Philosophical Inquiry Questionnaire scores change over the course of the project?</td>
<td></td>
<td>Philosophical Inquiry Questionnaire (PIQ); Class Discussions; Daily Reflections;</td>
<td></td>
<td></td>
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<tr>
<td>How do students’ Sense of Coherence scores change over the course of the project?</td>
<td></td>
<td>Sense of Coherence Scale (SOC-13); Class Discussions; Daily Reflections; Final Reflection Paper</td>
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Trustworthiness

Although data around these cases focused on a single course in a single semester, much can be learned from these six cases. The force of this multiple case study cannot be underestimated (Merriam, 2009). Generalization can be achieved when case study design is informed by theory, and the empirical findings of the case study can therefore be considered as adding scholarship and knowledge to the established p4cHI field of study. If more than two cases are shown to support the same theory, then analytic generalization can be claimed. Multiple
cases can be considered as multiple experiments. The more cases, the more replications can be done, so the more robust the research outcomes are (Rowley, 2002). In order to increase the trustworthiness of Study One, the researcher used multiple sources of evidence (i.e. classroom discussions, daily reflections, student homework, focus groups). A chain of evidence and thorough documentation of qualitative data was established. For the purpose of increasing internal validity, I conducted cross case analysis after reporting six individual case study results.

**Setting: Kailua High School**

Kailua High School (KHS) was founded in 1955 and was moved to its present location in 1962. With its beautiful views of the Koʻolau mountain range, KHS is one of four public high schools that serve the Windward (eastern side) District on Oahu. The rural communities of Kailua and Waimanalo each provide about 50% of the population of just under 1,000 students at KHS (2014 total enrollment = 750), among those just under under 60% of the students are native Hawaiian. As more than 40% of the student population comes from low-income families, KHS receives Title I funding. Many students are faced with domestic violence, discrimination, and substance abuse (Makaiau, et al., 2014). The school utilizes programs such as p4cHI and Habits of Mind to prepare mindful, philosophical thinkers who will pursue their life goals and create positive changes in the world. The Habit of Mind program emphasizes doing tasks such as homework, sports, or music with quality as opposed to just getting it done (Kailua High School, 2013).

**Participants**

I recruited students from the Philosophical Inquiry course at Kailua High School in Fall, 2014. The students were also told that their decision whether to participate in the study was voluntary and would not impact their grade in the course, and if they did choose to participate
they could leave the study at any time. Of the six students in the course, all agreed to participate and returned parent consent and student assent forms indicating that they gave informed consent. Pseudonyms are used to protect the identities of the four girls and two boys. Their demographic information is provided in the Table 1.

Table 2

<table>
<thead>
<tr>
<th>PI participant demographics</th>
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<tbody>
<tr>
<td>Participants</td>
</tr>
<tr>
<td>Kalani</td>
</tr>
<tr>
<td>Nahele</td>
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<tr>
<td>Peleke</td>
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<tr>
<td>Liko</td>
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<tr>
<td>Makali</td>
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<td>Kanani</td>
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Data Sources

This multiple case study uses multiple sources of evidence including student classroom discussions, daily written reflections, focus group interviews, Philosophical Insight Paper homework, final reflection papers, and field notes to explain and generate insight not available through quantitative survey data. These documents help “uncover meaning, develop understanding, and discover insights relevant to the research problem” (Merriam, 2009, p.163). Because this study generated a large amount of data, systematic organization of the data was important. I created a database to assist with storing, categorizing, sorting, and retrieving data for future analysis (Sternberg, 1981).

Class Discussion. The Philosophical Inquiry class ran for eight weeks. Five classes were held each week, for 65 minutes each in the late mornings, except on Wednesdays when class was only 45 minutes for a total of 35 classes. Students engaged in philosophical inquiries (see Appendix A – Outline of Philosophical Inquiry Course) using the Good Thinker’s Toolkit and
Plain Vanilla on topics such as racial politics (i.e., race and ethnicity in Hawai‘i; what if there were no governments), class and environment (i.e., Karl Max – globalization; who will take care of the environment), and gender and society (i.e., Bel Hooks – feminism is for everyone; what is it like to be somebody else). Based on this cross-disciplinary curriculum, 20 student class discussions out of 35 classes were recorded. These included participants’ discussions five minutes before, five minutes after, and during the PI course. The full length of the video-recordings is about 21 hours.

**Student work.** Besides class discussions, additional student work was collected throughout the semester including student hand-written responses in class to a set of open-ended questions or sheets provided to them in the workbook named The Daily Record, Philosophical Inquiry Student Resources and Workspace (Makaiau, Shiroma-Ming, Miller, & Fukuda, 2014). Using this book, students’ reflections and thoughts in the PI course were systematically documented. The following section will describe student work in detail.

**Philosophical Inquiry Daily Reflection.** Students used the Philosophical Inquiry Daily Reflection (DR) (see Appendix B) in every class. In the Daily Reflection, they reflected on the prompt of the day (POD), which was a quote, a short video, a song, a poem, or movie related to the class. They needed to “use textual evidence and/or self-knowledge/experiences to support” their responses (Makaiau, Shiroma-Ming, Miller, & Fukuda, 2014, p. 63). At the end of the class, students explained “How does what you learned today connect to your life and the world you live in? Do you see a different perspective or point of view? Use textual evidence AND ideas/quotes from classmates/teacher to support your response” (p. 64). These students’ daily reflections were collected in each class.
**Philosophical Insight Paper.** Students used Philosophical Insight Paper (PIP) (see Appendix C) to continue thinking about the topic they philosophized about after each unit (e.g., what is the meaning of life? Am I the same person that I used to be?). The Philosophical Insight Paper was organized into five sections: (a) Evaluation of the Community of Inquiry; (b) Lenses of Philosophical Inquiry (not to be completed until after unit two); (c) Constructed Response using claims, assumptions, supporting evidence, and counter-example; (d) Personal Reflection and Action; and (e) References (Makaiau, Shiroma-Ming, Miller, & Fukuda, 2014, p. 225). These data were collected after each unit’s study. At the end of the semester, each participant submitted two PIPs.

**Inquiry Memos.** During each Plain Vanilla discussion, students used Inquiry Memos (see Appendix D) to record their questions and thoughts, as well as those of their peers. They cited specific spoken evidence that they found interesting or important. They usually used their inquiry memos and notes to write Part One of their Philosophical Insight Paper (Makaiau, Shiroma-Ming, Miller, & Fukuda, 2014, p. 173). The inquiry memo data was collected after each Plain Vanilla discussion.

**Final Take-Home Reflection Paper.** In the Final Take-Home Reflection Paper (FRP) (see Appendix E), students reflected on their experiences in the PI course at the end of the semester. They answered questions such as:

- What personal transformation have you experienced (or are you beginning to experience) from your participation in this course?
- How does what you experienced in this course give you a new perspective or help you to see a different perspective from your own?
• How will you use what you learned from your experience in this course in your future? (Makaiau, Shiroma-Ming, Miller, & Fukuda, 2014, p. 326)

This typed Final Take-Home Reflection Paper was collected from the participants only once at the end of the semester.

**Focus group interview.** After administering the post surveys, I conducted a follow-up focus group with four Philosophical Inquiry participants (originally there were six participants, but two of them did not continue in the class after mid-term) using a semi-structured interview (Merriam, 2009) approach (see Appendix F for a list of questions). The interview questions were designed to elicit participants’ thoughts and perceptions about their motives, feelings, growth, and transformations experienced during classroom activity. The reasons why the PI students felt more engaged in learning in philosophical inquiry and their perceptions of the meaning or purpose of their lives were investigated. The focus group was audio recorded.

**Field notes.** Field notes are a way to record stories and illustrations that could be used in later reports (Miles & Huberman, 1994). The direct record of classroom interactions “offers a firsthand account of the situation…when combined with interviewing and document analysis, [and] allows for a holistic interpretation of the phenomenon being investigated” (Merriam, 2009, p. 136). Field notes were recorded to capture my initial thoughts and impressions of the classroom interactions. My intuitive feelings and hunches, confusions and questions were documented as well.

Inspired by Vygotsky’s principles, my observational and reflective notes focused on lesson context information, lesson activities, classroom discussions and interactions regarding the research questions. I also focused on whether the changing of instructional format and the physical layout of the classroom, including positioning of students, teachers affected students’
learning experiences. All the data recognized student voice as a valid source of insight on the meaning of their philosophical inquiry experiences (Cook Sather 2006; Fielding 2004; Lodge 2005).

**Qualitative Data analysis**

Data from student written work, classroom discussions, and field notes were analyzed, as they were collected. While organizing and analyzing data, NVivo software, Mac trial version, was used. Welsh (2002) described, “The searching tools in NVivo allow the researcher to interrogate her or his data at a particular level. This can improve the rigor of the analysis process by validating some of the researcher’s own impressions of the data” (Paragraph 12). The NVivo allowed me to do content analysis more effectively and efficiently than the old method of cutting and pasting from Word documents or from hard copies. Although the Mac version of NVivo is different from the Windows version mainly because it cannot generate auto-coding, it helped me organize and integrate coding stripes I generated, and significantly increased my ability to link, create, reshape and reorganize my coding and nodes.

In order to triangulate different types of qualitative data, I grouped classroom discussions (CD), student daily reflections (DR), and observational notes (ON) together because they shared the same topics inquired about in the classroom, and the same themes emerged from these data. The focus group interview (FG), philosophical insight paper (PIP), and final take-home reflection paper (FRP) data were analyzed individually because the focus group directly addressed the research questions, the philosophical insight paper focused on evaluating the community of inquiry, and the final paper reflected students’ culminating learning experiences in the class.
Analysis of qualitative data occurred in three phases. In phase one, all qualitative data were entered into the NVivo software, and initial open codes were developed to highlight major themes occurring in each individual case study. The analysis made use of all of the relevant evidence, considered major rival interpretations, and addressed the most significant aspects of each case study. I repeatedly referred back to the research questions in order to focus attention on the purpose of the study, and also continuously compared and integrated coding and nodes developed in the NVivo software. Throughout the evaluation and analysis process, I attempted to remain open to new insights and opportunities (Yin, 1994; Rowley, 2002). Salient themes that appeared in each individual case study are reported in the format of concept maps and narratives based on the occurrence frequency that was shown in the NVivo software. I then described each case in a narrative.

In phase two, using the method of constant comparison (Strauss & Corbin, 1998; Merriam, 2009), similarities, differences, and complementarities across and within participants were examined in a cross case study analysis. I studied the six cases collectively in order to inquire into similarities and differences in students’ learning experiences (Denzin & Lincoln, 1998). I applied a categorical analysis strategy to break down the narrative data and rearrange those data to produce bigger categories that facilitated comparisons. I searched for commonalities and mutual exclusivity (i.e., distinctiveness) between the emerging categories, and classified and cross-referenced all evidence. I deliberately looked for conflicting themes to validate or disconfirm the original analysis (Spradley, 1979; Teddlie & Tashakkori, 2009). In order to provide intuitive data analysis results, flow charts were created to tabulate frequency of themes. Concept maps were used to categorize and recombine data.
To decrease researcher bias in the initial selection of categories and to assure trustworthiness, I worked together with another researcher as critical friends (Miles & Huberman, 1994) to gain a variety of perspectives and insights to examine the data and the patterns and seek validated interpretations of the findings (Lunenberg & Samaras, 2011). My critical friend was a graduate student who was a qualitative researcher. We read the data findings together and determined initial and second phase categories. Then we shared open codes and worked together to develop theoretical codes and analytic themes on which we agreed. When summaries conflicted, the conflicting perceptions helped me to reexamine data analysis results, and identify the cause or source of difference (Charmaz, 2006; Yin, 1994).

While analyzing the data, I kept both descriptive and reflective notes. During phase three, I triangulated three types of qualitative of data, the class discussion, daily written reflections, and observation notes; focus group interview; and philosophical insight paper and final reflection paper, wrote up findings, further revised my thinking and refined the themes that had developed. The goal of this written report is to portray a complex problem in a way that is understandable to the reader and to lead the reader to apply the findings in his or her own real-life situation (Hamel, Dufour, & Fortin, 1993).

**Study Two: Quantitative Study**

Quantitative research brings the strengths of comparing the pre and post results, comparing the philosophical inquiry and traditional social studies groups’ survey results, tracing the trends from the beginning to the end of the fall 2014 semester, conceptualizing variables, analyzing relationships, and using representative samples to generalize findings (Punch, 2009). Hence, it not only generated information about unknown aspects of the phenomenon, but also aimed at testing theoretical propositions (Teddlie & Tashakkori, 2009). Researchers often use the
quantitative data to corroborate and support the qualitative data that can be useful for understanding the rationale or theory underlying relationships (Rowley, 2002).

**Participants**

The Philosophical Inquiry group consisted of six students in grades 10-12 who voluntarily chose the PI class in the fall 2014 semester (see Table 1 for demographic data). The traditional social studies group consisted of 33 students from grades 9 - 12 at the same school. Among them, 16 (48%) were female students, and 17 (52%) were male. Four (12%) were in 9th grade, seven (21%) were in 10th grade, 13 (39%) were in 11th grade, and nine (27%) were in 12th grade. Native Hawaiians accounted for 58% (19) of the ethnicity makeup. The other 42% (14) students were all mixed by different ethnic groups. Most of them were mixed by Filipino, Caucasian, Chinese, Portuguese, and Japanese. The traditional social studies group students did not take the PI course. However, all of them had some prior p4cHI experiences (i.e. knowing about Intellectual Safety, engaging in Plain Vanilla discussions) while studying in English, Social Studies, World Languages, and other classes.

**Descriptive Research Design**

Because the equivalence of the Philosophical Inquiry and traditional social studies group is not assured, this study applied a descriptive quantitative design, which provides a systematic and logical method for answering the research questions:

- How did students’ Philosophical Inquiry Questionnaire scores change over the course of the project? Is this different for students enrolled and not enrolled in the PI course?
- How did students’ Sense of Coherence scores change over the course of the project? Is this different for students enrolled and not enrolled in the PI course?
For the descriptive quantitative design, I did not begin with a hypothesis, but developed one after data collection.

The Sense of Coherence (SOC) (Antonovsky, 1987) and Philosophical Inquiry Questionnaire (PIQ) survey data were analyzed to determine if a difference appeared and a change or modification occurred in the PI group. These measured changes in student performance may be attributable to the influence of the PI course. Teacher competence or enthusiasm, students’ age, socioeconomic status, academic ability or prior experiences with p4cHI are extraneous variables that this research could not control. These extraneous variables may preclude valid conclusions about the relative effectiveness of the PI course (Best & Kahn, 1998). The analysis of quantitative data may provide some objectivity to Study One.

**Instrumentation: Survey Questionnaires**

The quantitative instruments for Study Two were a standardized survey, the Sense of Coherence Scale (SOC-13) (Antonovsky, 1987) (see Appendix G) and the Philosophical Inquiry Questionnaire (PIQ) that was developed by the Uehiro Academy members (see Appendix H). The survey provides “a quantitative or numeric description of trends, attitudes or opinions” of respondents (Creswell, 2009, p. 234).

**Rationale for using SOC.** While planning the philosophical inquiry research, I worked with the Philosophical Inquiry Longitudinal Project Principal Investigator to research some quantitative data instruments (i.e., California Critical Thinking Skills Test M25 (CCTST M25), California Critical Thinking Skills Test for Everyday Reasoning (TER), Model of the Developmental Process of Dialogical Critical Thinking, Scholastic Abilities Test for Adults) that former P4C researchers had employed. We realized that none of the tests captured what the project wanted to measure because those surveys only focused on measuring students’ thinking
skills and reasoning, or, in other words cognitive abilities. The project researcher wanted to find a quantitative instrument that could measure both students’ cognitive and social-emotional wellbeing. The SOC fit these needs to assess the full impact of p4cHI. Applying this scale from the health field to measure the impact of students’ school experiences demonstrates the potential relevance of this scale to the field of education.

Antonovsky’s Sense of Coherence scale (SOC) (1987) has received widespread recognition within the fields of health and psychology. However, few studies use SOC in education. Little is known about the role of the SOC in the normal adaptation of general adolescent populations. With the view that school adaptation has an essential impact on a wide range of social, psychological, and behavioral outcomes, empirical evidence on the role of SOC during adolescence may offer a particular scope for the development of prevention policies for students’ psychological stresses (Torsheim, Aaroe, & Wold, 2001). This research links sense of coherence to the educational field through common theoretical starting points – effective schools have demonstrated improvement in students’ psychological and emotional wellbeing (Nilsson, L., & Lindström, 1998).

**Sense of Coherence Scale-13.** The SOC-13 will be used to test the PI course’s impact on students’ senses of coherence (SOC). SOC is a global orientation that expresses the extent to which a person has a feeling of confidence that their environment is comprehensible, manageable and meaningful. The SOC-13 consists of three components and 13 items, which together constitute a person’s coherent understanding of the world: (a) comprehensibility, which is composed of five items, is the degree to which the environment is seen as structured, predictable, explicable, and understandable; (b) manageability, which is composed of four items, means the view that one has the ability and resources necessary to overcome obstacles; and (c)
meaningfulness, which is composed of four items, suggests the extent to which life’s struggles and demands are seen as worthwhile of investment and engagement (Antonovsky, 1987).

Each of the 13 items in the SOC-13 uses five rating scales, either ranging from never, seldom, sometimes, often, to very often, or from don’t like it at all, don’t like it, it’s OK, like it, to like it a lot. A review of previous studies suggested that SOC-13 possesses adequate internal consistency with Cronbach alpha values ranging from .80 to .85. The dimensions scored lower, with the alpha for meaningfulness at .53, manageability at .58, and comprehensibility at .64. Deleting one negatively correlated item, item two in the comprehensibility section, resulted in marginal improvement in the alpha value .71. This survey is a three-factor model with test and retest validity at .78 (Naaldenberg, Tobi, Esker, & Vanndrager, 2011; Torsheim & Wold, 1998).

The SOC scale is further conceptualized by three different dimensions: (a) comprehensibility, the cognitive component; (b) manageability, the instrumental component; and (c) meaningfulness, the emotional and motivational component (Antonovsky, 1993; Eriksson & Lindström, 2005). According to the SOC theory, these three aspects are highly interrelated. Consequently, those who score highly in all three dimensions of SOC are regarded as having a strong sense of coherence that is associated with effective coping, reduced stress, fewer health damaging behaviors, and ultimately, improved morality, greater health, well-being and social adjustment (Antonovsky, 1979, 1987, 1991). The SOC questionnaire has been translated into at least 33 languages and used in 32 countries (Eriksson & Lundin, 1996).

Philosophical Inquiry Questionnaire. In addition to survey items on students’ demographic information and students’ prior experiences with p4cHI, the PIQ includes six dimensions, namely: (a) Decision-making; (b) Being a Responsible Ethical Member of a Community; (c) Philosophical Reflection; (d) Empathy; (e) Transformative Experience; and (f)
Joyous Learning. Since this survey instrument is newly created, it needs further development, such as validating its psychometric properties. Each of the six components includes eight items. Once more data are collected, further psychometric testing can be done and any items that negatively affect survey reliability and validity will be excluded. In order to ascertain students’ perceptions of the PI course, two questions were added: 3.49 I would recommend a “Philosophical Inquiry” class to others; and 3.50 I feel more engaged in my learning in “Philosophical Inquiry” class. Each question applies a five-point rating scale, ranging from strongly disagree, which is coded as 1, to strongly agree (5). In total, there are 50 items in the PIQ. Adding SOC questions, the total number of combined survey items is 63. Students took approximately 12-20 minutes to finish both surveys. The participants did not find the questionnaires difficult to complete online in computer labs.

**Face validity check.** An evaluator from the Pacific Resources for Education and Learning (PREL) center and the scholars in the Uehiro Academy for Philosophy and Ethics in Education checked the face validity of the PIQ scale, and all of them found it acceptable. When checking the face validity, the evaluator suggested the researchers rearrange some sentence structures to make it shorter and clearer, and to use simpler language. The Uehiro members organized and aligned the 48 PIQ items with different components based on their understandings of the meaning of each component, which helped to increase the face validity of the instrument significantly.

**Survey Data Collection**

The data collection process in the Philosophical Inquiry class was described in Qualitative Data Collection part. Using the same procedure I collected the PI students’ data. I attended the seven traditional social studies classrooms and explained to the class that a study
was being conducted to evaluate the impact of a new social studies class at KHS called Philosophical Inquiry, and that student participation was voluntary. The students were also told that their decision whether to participate in the study would not impact their grade in the course, and if they did choose to participate they could leave the study at any time. In total 220 parent consent and student assent forms were sent out. After one week, 33 student assent and parent consent forms were collected. Prior to the collection of Philosophical Inquiry surveys in Kailua High School computer labs, I gave a brief introduction to participants on how to complete the survey.

The pretest for the Philosophical Inquiry group occurred at the beginning of the semester, and the posttest at the end. The quantitative study was originally envisioned to be quasi-experimental with a pre and posttest. However, I was only allowed to collect data once, changing the research design.

**Descriptive Data Analysis**

Once the data were collected, the mean scores between the pre and post tests in the PI group were compared to examine whether there was any improvement in participants’ SOC scores, or improvements in their perceptions of the PI course and learning experiences. The pre and post mean scores in three components of SOC and six components of PIQ were compared separately. Then aspects that contributed the most to students’ sense of coherence and philosophical inquiry experiences were determined. Since the traditional social studies group only took one test, which can be considered as a pretest, the pretest mean scores between the PI group and traditional social studies group were compared.

While analyzing the survey data, participants’ prior experiences with p4cHI, student characteristics (i.e., gender, age, grade level, ethnicity), teacher characteristics (i.e. years of
teaching, age, experiences with p4cHI), teachers’ role, instructional practices were taken into consideration. Because these are factors that affect quantitative research design and results. Another methodological issue considered throughout the research process was the influence of my presence as a researcher and camera on class interaction and behavior during the data gathering process. Despite my potential influence on students’ behaviors, I kept research integrity and maintained ethical data collection procedures.

**Timeline of Data Analysis**

The qualitative and survey data were analyzed concurrently. The data were collected between October 14 and December 19, 2014. While collecting data, survey data were coded into numbers 1-5. For example, “strongly disagree” was coded as “1.” Qualitative data were also reviewed and documented as they were received. The intensive data analysis occurred both during and immediately after the end of the semester in which it was collected.
CHAPTER 4. RESULTS

Informed by the literature review that summarizes, synthesizes, and criticizes the research that has been done in the field of p4cHI, this section presents findings that come directly from students’ own voices to address the gap in the p4cHI scholarship. Building on the research design in Chapter Three, this chapter presents six individual case studies showing students’ learning experiences in the PI course. More specifically it describes how these six participants engaged in their learning, and their perceptions of the p4cHI classroom. Further, this section depicts how the Philosophical Inquiry class shaped participants’ attitudes with regard to finding meaning in their lives and in school.

In the individual case study descriptions, each participant is given a brief introduction including demographics (i.e., grade level, ethnicity), predispositions (i.e., personality, life situation), and prior experiences with p4cHI at KHS. This information provides each participant with a unique background that may directly influence his or her philosophical inquiry experience. Then the following section presents thematic analysis findings with regard to participant’ academic engagement and meaning searching based on frequency count analyzed via NVivo software. In order to explore the reasons and evidence for students’ engagement in the PI course, it is also necessary to examine the challenges that students encountered while learning in the class. These data provide another perspective in viewing an engaging classroom. Following this, concept maps will be applied to give a coherent summary of each participant’s learning experiences in the PI class.

The cross-case analysis will present significant themes that appeared in participants’ data based on frequency count via NVivo using tables, graphs and narratives.

Lastly, the results of the quantitative surveys PIQ and SOC are given. This includes PI participants’ pre and posttest differences, and the relationship between the PIQ and SOC.
questionnaires. Although students from traditional social studies classes did not complete post surveys, their pre test results will be aggregated and reported.

In this study, the Deweyan and Vygotskian concepts constituted the lens through which the data were analyzed and interpreted. In the data analysis, the emergent themes were coded. Several themes were directly related to Dewey and Vygotsky’s theories. I identified emergent themes such as intellectually safe environment, connections with prior experiences, and the ZPD.

Study One: Multiple Case Study

This multiple case study consists of six individual case studies of students in the PI class. Each student has an individual perspective about an engaging philosophical inquiry classroom and their own understanding of a meaningful life that is anchored in his or her life context, but there were several common themes that will be discussed in the cross-case analysis. In these case descriptions, I identified themes in each student’s data.

Kalani

Kalani was a male student enrolled in the 12th grade at the time of the study. His ethnicity was mixed, including Hawaiian, Portuguese, Chinese, and Japanese. He had previous p4cHI experiences at Kailua High School in several classes from 9th to 12th grade. Themes that emerged from Kalani’s data include (a) academic engagement, such as intellectually safe environment, a strong community, student and teacher relationship, participation in discussion, multiple perspectives, think and question, attentive listening, positive affect in life, the community ball; (b) meaning of life, such as a balanced life, happiness and balance, to be yourself; and (c) challenges, such as confusion, difficulty in organizing thoughts.

**Academic engagement.** In the beginning of the semester, Kalani expressed how the PI course was different from other classes, and how much he liked the class. He wrote,
I hope I can be an example and show others how important this class is to build a better community and I hope schools will look at that class and take it into thought and seeing what this class does for us. (DR, 10/16)

The following section describes the reasons why Kalani was engaged in learning in the PI course from his comments and based on salient themes that appeared in his data.

**Intellectually safe environment.** Kalani appreciated how an intellectually safe environment promoted his learning experiences. He liked the PI class because he felt close to each participant. He defined intellectual safety as,

Not being scared or worried that others will judge you. You can express your thoughts or feelings with others who will support you and listen to you. It’s a feeling like being with someone you trust or like being with your family who listen to you and hold you up. I see this class as a family and I know I can express myself freely. (CD, 10/16)

Kalani shared in the classroom that it was his own responsibility to maintain an intellectual safe environment. He said that he wanted to set an example and teach other students how to maintain an intellectually safe environment. Kalani explained that in a safer environment, he felt equally respected and comfortable in expressing his thoughts and opinions even if he was not completely sure of his raw thoughts and/or unfinished ideas. He said that he would respect and not judge others even if he disagreed with them (DR, 10/20).

**A strong community.** Kalani suggested that a class should work together to create a stronger bond in order to achieve a class goal or reach certain standards. The class would become more knowledgeable if they worked as a group. He emphasized that, “If one of us don’t feel comfortable, it changes or has an effect on all of our attitudes and holds us from moving forward” (DR, 10/17). He stated that the most critical thing in a classroom is to build a strong community, which could
help the whole class in the future. In the second week of the PI course, Kalani inferred that he and his peers would cooperate with each other very well before the end of the semester (CD, 10/20). In class discussions, Kalani always took the whole community’s benefit into consideration. He advised that everybody needed to make his/her claim to support everyone’s thought process (DR, 11/10).

Kalani was willing to share his ideas and to recognize the accomplishments of his peers. He wrote, “Makani is good at getting deeper into thought and explaining his reasoning behind his opinions like in past discussions” (DR, 10/19). He praised, “Nahele is logic and is able to back up everything he says with some sort of source” (DR, 12/3). Peer supports increased all PI participants’ confidence and self-efficacy levels. Kalani’s comments indicated that community building helped students gain a sense of belonging in the PI course.

**Student and teacher relationship.** Building a relationship with his teacher also helped Kalani engage in his study. In the final PI class, Kalani expressed his gratitude to his teacher and described that, “I feel good [studying in this classroom]. I love her [the teacher]” (CD, 12/19). The statement implied that Kalani had opportunities to develop a trusting relationship with his teacher.

**Participation in discussion.** Kalani considered active participation in classroom discussions as a form of high engagement in the PI course. He wrote, “I thought last week Friday was a really good discussion and would rate it as a 10. We all participated and there were only a few quiet moments. I thought we got really deep in the discussion” (DR, 11/5). He also regarded peers’ full participation as an evidence of positive classroom environment. He reflected, “We all shared something about what we thought and gave others an opportunity to talk and not just have only one person” (PIP, 11/13). In the second Philosophical Inquiry Paper, he wrote, “I feel we need to work on participation more and just be able to say what we think” (12/16). The
comments indicated that he felt students’ active communications and constructive dialogues improved the PI classroom environment.

**Multiple perspectives.** The PI course helped Kalani step back and evaluate a situation from a perspective other than his own. Kalani shared that listening to multiple perspectives helped him make continuous progress in his thinking. He expressed that, “We had progress in our thinking because our perspective always changes or we begin to question things and then share it in our reflection” (CD, 11/16). He realized that his peers affected his thinking, “Our own opinion could not really be our own opinion. We are influenced by others to form an opinion but not necessarily our own opinion” (CD, 10/31). While learning about ethical egoism and altruism, Kalani had a big change in his thinking. He shared,

> Being selfish is not always being bad. It’s just one point of view, not full point of view. I gained a new perspective on being selfish and seeing selfish might not always be bad….We think we aren’t being selfish because we’ve only seen in it from one point of view. We’ve always seen it from a negative side and not the full picture. As a kid I always seen selfish as being greedy but now I don’t know if all the negative things I was thought were really negative. (CD, 10/23)

Another significant change for Kalani was that he did not only experience cognitive changes but also wanted to apply his new learning into practice and help the world. He explained, “My take away is that I gained a new perspective on how people do thing without benefiting themselves. I’ll try to do things to make this world good in some way” (CD, 10/20). Kalani’s remark implied that the PI course developed a sense of self-worth and competence in him.

**Think and question.** Kalani acknowledged that keeping open-minded and becoming a deeper thinker are strengths of a philosophical inquiry (CD, 11/6). He was proud of getting a deeper
insight on his claim and helping others think from different views. He encouraged his peers to raise more questions. He asked, “What are the reasons why being biased or being on one side is not always going to help you?” (CD, 10/31) “Having too much power or freedom leads us to becoming uncontrollable, but why are we like that? Is everyone like that?” (CD, 12/2) “Why are we so blind to what we are doing to the environment? When do we become blind to all the bad we are doing?” (DR, 12/18) Kalani thought that asking questions could give students a deeper understanding of the subjects. Formulating his own thoughts helped him draw connections between his learning and his life.

**Attentive listening.** Kalani rated himself as a good participant if he listened attentively, asked questions, shared his ideas, and wrote notes. He suggested to his peers to keep an open ear, “In order to be fully engaged in a discussion you need to share your ideas and listen to others and write not only yours but also everyone else’s thoughts” (CD, 10/31). His comment represented that listening promoted sharing and understanding. Kalani exhibited better concentration and on-task behaviors through active listening.

**Positive affect in life.** The PI course built confidence in Kalani, and inspired him to set a higher goal for his life. The class helped him to construct the meaning of his life,

I’m taking away at how much this class can affect me, my life, and the impact it has on me to question things. It helps me question traits about me and what I can do to better myself, or what do I need to work on, and find who I am in general. (CD, 11/16)

**The community ball.** Kalani shared that the significance of the community ball was to show cooperation among the people in a group or community. The community ball represented his classroom by getting everyone sharing using the ball. “For example, in every class I go to that has a community ball we all participate and respect everyone who is using it” (DR, 10/20). All of the PI
participants had a field trip in Waimanalo Intermediate School, and Kalani had an opportunity to facilitate a p4cHI discussion with new students who transferred from elementary to intermediate school. Kalani learned from that experience that,

> When I first went into the class these kids were loud. But then when we got all the question, and when they got community ball, and then all of a sudden the class became quiet, and they started respecting with each other. When they passed the ball around, it was all respectful and only one person talked with the ball. (CD, 10/27)

He saw the community ball as a tool that helped him as teacher/facilitator to manage the classroom and helped students engage in their inquiry.

**Meaning of life.** Kalani began to question how to live a meaningful life and if there is a better way to live his life. He asked, “How we should live in a community with others and how to interact with others?” He explored this question and answered, “Balance is beautiful” (DR, 11/24). In his adolescence, Kalani was redefining his role and his life. He learned to make decisions and identify consequences in his life. In light of Kalani’s PI discussions and daily reflections, he was better able to think in terms of the public good.

**A balanced life.** Kalani wrote, “Balance gives you power to be a better person and that your energy is good” (DR, 11/12). He assumed that, “As long as we strive for balance we will become successful. Success is balance” (CD, 11/7). In the next week’s inquiry, Kalani came back to his definition of success again. He wrote, “Balance can make you happy, and being happy and finding inner peace is my definition on being successful. If I am unbalanced in my life I become unhappy and things become more stressful” (DR, 11/12). He realized the importance of finding balance between his activities, “Doing too much one thing could not necessarily going to be a good thing. I
don’t know it makes sense, but it is always going to be a balance, and with balance there is harmony
and harmony is everything” (CD, 10/27).

**Happiness and balance.** Kalani explored the meaning of happiness. He thought, “In order to
find true happiness we need to find that balance between ourselves and others [between being
selfish and helping others]” (CD, 10/23). When he was confused about something, he also wanted
to “find a balance between discussions, I need to find what it means to me” (CD, 10/27). To Kalani,
“Happiness is finding balance between everything and having equilibrium” (CD, 10/28).

**To be yourself.** While learning if there is a greatest virtue, Kalani questioned, “Were finding
out who we are and what we agree with that will give us such happiness?” He stressed the
importance of living an honest life and doing what makes himself happy. In PI course’s supportive
environment Kalani developed a positive sense of self and resiliency to deal with problems. He
remarked, “I’m living a pono (pono is a Hawaiian word commonly rendered as righteousness)
life, because of how I define my own happiness” (CD, 10/28). When discussing about the right way
to live he explained,

> The right way to live is all based on your opinion and what you believe is right or wrong.
> Others may say you’re not doing well and you should change how you live but that’s their
> thoughts and none of if matters as long as you’re happy with who you are and how your life
> is. (DR, 12/1)

Kalani’s comments revealed that the PI course played an important role in helping him define
and select his future. He trusted himself and wanted to behave in accordance with his true self.

**Challenges.** In the PI course, visitors often came from outside the class to learn p4cHI
and the way that philosophical inquiry was taught. For example a Japanese visiting scholar
joined the PI course every Thursday. Philosopher in Residence Dr. Miller and PI curriculum
developer Dr. Makaiau occasionally came to the class to model p4cHI teaching, facilitating and learning. I observed that the whole class was more active without presence of the Philosopher in Residence, the PI curriculum developer, or the international guests in the classroom. There was more laughter and joking among students. Usually there were more side conversations, for example about their favorite color, what they did in the past days, or the weird person they saw on campus, alongside their classroom-based inquiry. Kalani’s comments explained their concerns when guests came to the class,

I can infer that we are more comfortable with each other as a class without guests. But when we do have guests we feel different and don’t talk as much. Since we don’t know them as much we don’t feel as comfortable with them around. (CD, 10/20)

But he said if he knew the guests more personally and became friends with them, he would be willing to share his thoughts in the classroom.

While discussing, writing daily reflections and homework, students needed to integrate information across a variety of settings, such as academic, social, home and community. One challenge for the PI participants was that they were struggled with organizing their thoughts and/or understanding their own or others’ questions and ideas. Kalani wrote, “[The reason I did not participate in discussion] is because mine was repetitive to whatever else’s saying, it was hard for me to get a deeper understanding of my question.” While doing homework, Kalani struggled with writing down his ideas and thinking of evidence to support his claim. He reported, “The process was slow” (DR, 12/12). Kalani was also sometimes confused with his own questions or other people’s questions or ideas. He remarked, “Feel confused, need to find a balance between discussions, I need to find what it means to me” (CD, 10/27).
Philosophical Insight Paper Data Analysis. In the Philosophical Insight Paper (PIP) after each unit, Nahele, Peleke, Kalani, and Liko evaluated the strengths and weaknesses of community of inquiry, reflected on their learning experiences after one month, and planned future actions in light of new learning.

The common themes that appeared in community strengths are listening, giving other opportunities to talk, and maintaining intellectual safety. Kalani reflected that “We did well with listening to each other and being intellectually safe. We gave others chances to talk and were taking down notes of the discussion” (12/16). Kalani also encouraged his peers to participate more in discussion and share their opinions. When he reflected on inquiry strengths, he acknowledged that “We did well on focusing and trying to stay on topic without drifting too much” (12/16). He appreciated that the whole class community could make progress in their thinking and question and reflect on topics deeply. He hoped the class could come up with better questions to stimulate inquiry and inspire deeper understanding. In his personal reflection and action part, he “[felt] that balance can make you happy and being happy and finding inner peace is my definition on being successful.” In the future, he will “find balance in things and try to experience different things and not lean on too much or depend on doing one thing” (11/13).

Final Reflection Paper data analysis. The purpose of the Final Reflection Paper (FRP) is to invite students to ruminate on their learning experiences in the PI course. Students had opportunities to reflect on whether they made personal changes after the class, and whether they gained new perspectives or transformed their views and beliefs.

Kalani appreciated that the class built up a safe community so “[he] begin[s] to understand why I am helping the community and how it helps me become a better person teaching me patience, being humble, and other aspects that shape me” (12/18). He reflected that
the PI class opened his eyes to world problems and expanded his thinking. He started to question who he is and what he can do to make a better world.

**Focus Group data analysis.** The focus group directly asked Liko, Peleke, Kalani, and Nahele’s learning experiences in the PI course (see Appendix F). Kalani explained that a smaller class helped the PI class build a strong community,

In other classes, there are always different groups. And there is always people who talk to their friends, and there is other people who just there to get their grade, there is no class. And some people affect others in the learning environment because they talk more, you cannot really hear what the teacher is talking, or disrupt teacher, so teacher call you out of things like you are doing well, and they are doing poor. (12/18)

He enjoyed the PI course because in other social studies classes, he had to just sit there and read a textbook. But in the PI he could engage in thinking and inquiry, and it is about what he thinks, not what the textbook says.

Kalani shared that the PI course prepared him for his future. “It gets me thinking like all the world problems happening and how I can become more imaginative and creative to what I can do to help fix the world” (12/18). The PI course exerted a powerful influence on his outlook. It shifted his life focus in a positive and optimistic direction. He also wanted to “come to school for class this way.” He explained that he did not really know the meaning of life, but the PI course inspired him to question about his purposes of life.

**Qualitative data triangulation.** Comparing the four types of qualitative data, classroom discussions and daily reflections, Philosophical Insight Papers, Final Reflection Paper, and focus group interview, themes that appeared from Kalani’s data are listed in table below.
Table 3

Triangulation of Kalani’s qualitative data

<table>
<thead>
<tr>
<th>Class Discussions and Daily Reflections</th>
<th>Philosophical Insight Papers</th>
<th>Final Take Home Reflection</th>
<th>Focus Group Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Engagement: Intellectually safe environment; a strong community; student and teacher relations; participation in discussion; multiple perspectives; think and question; attentive listening; positive affect in life; the community ball</td>
<td>Community Strength: Maintaining intellectually safe environment; giving others opportunity to share</td>
<td>Build a safe community; be a better person; opened his eyes; expanded his thinking</td>
<td>More engagement in learning in the PI course; prepared him to think about his future; inspired him to think about the meaning/purpose of life</td>
</tr>
<tr>
<td>Meaning of Life: A balanced life; happiness and balance; to be yourself</td>
<td>Community Weakness: Engage peers to participate in discussion more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenges: Confusion; difficulty in organizing thinking</td>
<td>Inquiry Strength: Progress in thinking;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inquiry Weakness: Need to think better questions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary. A positive classroom culture engaged Kalani in his learning. The biggest takeaway for Kalani was “just making a bond, and making a strong community” (FG, 12/18).

The following concept map summarizes salient themes that appeared in his qualitative data. This figure uses color-coding to categorize different themes and inform future cross-case analysis.

The primary reason for Kalani to engage in learning in the PI course is that the class created an intellectually safe environment. Empowered by the community ball, Kalani was active in participating in class discussions. He gained multiple perspectives, which in turn provoked his thinking. Although this created confusions and disorganized thinking, Kalani began to explore the meaning of his life and wanted to apply new learning into his life. Recognizing the impact of the self on others, Kalani was inspired to contribute to the positive welfare of his community and...
the world. He demonstrated concern and respect for the rights of others, and said that he would like to create, build, and sustain a better world by applying knowledge to help others.

Figure 1: Kalani’s Academic Engagement Concept Map

**Nahele**

Nahele, a male student, was enrolled in 12th grade during the study. He identified himself as a Caucasian Japanese. He had lived in South Korea for almost ten years when he was younger. Then his family moved to Hawai‘i and he transferred to KHS. He had p4cHI experiences in other 12th grade classes. Nahele’s mother was working on the mainland, and his father was always at work on the Oahu Island during the time of this study. So he had to take care of his house, manage money and bank account, and get up at six in the morning to walk the dogs by himself. He liked to use the community ball to invite his peers, especially Liko, to join the discussion. Themes that emerged from Nahele’s data include (a) academic engagement, such as connection with learning, a strong community, intellectually safe environment, attentive listening, think and question, multiple perspectives, student and teacher relations, the community ball; (b) meaning of life, such as
participation in discussion, positive affect in life, a balanced life, be yourself; and (c) challenges, such as struggling with organizing thoughts.

**Academic engagement.** Nahele defined an engaged participant as, “One who listens to others and is not only willing to speak, but to actually speak. They try to remain within rims of the discussion prompt and practice intellectual safety. In addition, they ask questions” (DR, 10/31). The reasons why he was more engaged in the PI course are elaborated on in the following sections.

**Connection with learning.** Nahele usually made personal connections with the subjects he learned or topics that were discussed. For example, he remarked that one of the philosophical inquiry strengths was that students were able to make connections to their original ideas, other people’s ideas, to the world, and to their own lives. He illustrated,

I guess I’m taking away a feeling of satisfaction. It’s encouraging to know that our discussions generate something greater and that people actually take it outside of the classroom, this is also pretty. Because I don’t think I’ve done that with any other class.

(CD, 11/6)

Nahele connected new learning to existing knowledge and used it in problem solving. When learning about altruism and ethical egoism, he shared, “I guess I can relate this to the world I live in because one is always surrounded by people making decisions 24/7, and I can use my new curiosity to try to understand people’s decisions better” (CD, 10/23).

Furthermore Nahele reported that he used philosophical inquiry in his life and in his other classes. The greatest take-away he gained from the Waimanalo Intermediate School p4cHI facilitation experience was that he got a better understanding of philosophy and developed a desire to use it in his life. He stated that, “I guess it connects to my life, because I have people
around me making decisions, it’s interesting to understand why other people are doing certain things, and why I am doing certain thing” (CD, 10/27). Sometimes reading the assigned PI material inspired him to write articles for other classes such as English 100. The class helped Nahele integrate his new knowledge with his other subjects.

_A strong community._ Like Kalani, Nahele appreciated that the class participants built up a strong community that encouraged the gifts and strengths of every participant and promoted a sense of belonging and purpose. Nahele believed that if a community is united, everyone could be able to move forward. He also believed that a successful and safe environment is created by each member of the community. “If some people disrupt the class or have their own agenda, it throws everyone off” (DR, 10/17). He noted that even the PI course already had a very strong community, and the participants were “pretty close to each other” (CD, 12/4). Nahele suggested that his peers “strengthen the community further…. we can keep it up. So it’s not boring” (CD, 10/21).

While creating a caring community by demonstrating each member’s loving acceptance of others’ backgrounds, experiences, and viewpoints, Nahele noticed that everyone began to share and were more open to each other. This sense of community fostered a high level of connections among the members. “Based on the level of connections we made this morning, it’s clear that we all listened to each other, and made some connections” (DR, 12/11). The learning community increased Nahele’s motivation for learning and enhanced his positive attitude about the PI course and school in general.

_Intellectually safe environment._ Nahele defined an intellectually safe environment as “feeling equally respected and comfortable in expressing your thoughts and opinions, where you are not judged or put down even if someone disagrees with you.” He explained that he always felt
intellectually safe in the PI class because of the way it built community throughout the year. But in other classes, Nahele felt less comfortable, as community building was never really implemented (CD, 10/16). The following quote describes Nahele’s feelings about the importance of intellectual safety when he facilitated p4cHI plain vanilla discussion at Waimanalo Intermediate School,

I realize how important it [intellectual safety] was. There are two or three kids were sleeping in the classroom. They were really rude when people were talking. You realized the discussion would die down because of that. Because it was really one-sided, because only few people were talking. It reinforces my understanding how significant it could be.

(CD, 10/27)

In an intellectually safe environment, “no one was afraid to share their original ideas or express their questions, or afraid to change their view of at the end of the class” (CD, 11/6). His comment indicated the significance of intellectual safety for creating an open and trusting climate in the classroom. “I can use my reinforced definition of intellectual safety in my life by taking it with me to other classes and practicing it in and out of other classes” (CD, 10/16). Nahele noted that students all practiced intellectual safety and did their work in order to make progress as people and students, but, “a lot of the time in x class, the teacher must stop and reprimand the students, preventing us from moving forward” (DR, 10/17).

**Attentive listening.** In the PI course, students need to take notes while listening. Being an active listener, Nahele used new information more productively. Active listening allowed him to make connections with new information. By activating his schema of learning, Nahele had a framework for understanding new content and whether or not the content was relevant. “People listen with intent to understand” (CD, 11/6). As a result of his participation in the PI class, Nahele could more readily integrate new ideas into his schemas. As an active listener, he
exhibited better concentration and memory. When rating participation in the PI course, he wrote, “I would rate myself a 8 or 9 out of 10, because I took a lot of notes and tried my best to listen actively when my peers were talking” (DR, 11/5). According to Nahele, active listening implies high academic engagement in the classroom.

**Think and question.** Nahele expressed that “[Thinking and questioning are] very important when we are trying to dig deep and make our discussion beneath the surface level.” His inquisitive nature was revived in the PI course and he loved to explore ideas. He explained, “It’s good to ask questions and strive to ask more, but even better if everyone make an attempt to answer them” (CD, 11/6). Although sometimes he was confused, he felt free to raise questions and was open to his peers’ comments. He enjoyed using Good Thinker’s Tool Kit to ask questions and used it beyond the classroom. He commented, “Within our community of inquiry, we get more by giving to expand on our discussion” (DR, 10/29). As a fortuitous byproduct of this newfound expanded perception, Nahele was more engaged in his thinking. He demonstrated new connections with his learning as he questioned: “Why does racism exist? Where did racism originate from?” (DR, 12/10) He showed insight into his own thinking when he said, “I’m taking away that maybe everything we do is subconsciously selfish, even if to the smallest degree. Is it purely for other people? Does altruism really exist?” (DR, 10/24) On another day he explored ideas around morality. “We teach children certain rules of morality growing up. At what point do they become irrelevant in our lives? What are the reasons we disregard them in life?” (DR, 12/18)

**Multiple perspectives.** As a result of posing questions and inquiring together within the community, Nahele “left with more concrete understandings” (CD, 12/12). Learning from his peers, he realized the importance of thinking using multiple perspectives. “This process can be
useful anywhere because I make claims or think about things alternatively” (DR, 11/10). His perspectives were expanded. He shared with one visiting scholar, “We just did the lenses of philosophy, and how you look at different lenses and try to solve different problems and looking things differently” (CD, 12/4). Before the PI course, he liked to debate, but soon he realized that, “I guess the most important is that you don’t debate in this class, we never debate, we are just discussing with each other” (CD, 11/6). He gained new perspectives and broadened his vision “by discussing rather than debating recycled ones” (CD, 10/6).

**Student and teacher relations.** In the PI course, Nahele established a positive relationship with his teacher. He was more emotionally and intellectually invested in the class because of the caring and supportive relationship with his teacher. Because of the intellectual safety and community building, Nahele learned more about other participants’ personal interests and backgrounds. Positive teacher-student relationships drew him into the process of learning and promoted his desire to learn in the classroom.

**The community ball.** According to Nahele, the uniqueness of the community ball was that students got to know each other while making it. “Because of this, not only does it represent our community, but it also represents the power to speak so that during inquiry, each person who receives the ball is allowed to express their opinion hopefully without interruption” (DR, 10/20). Nahele’s comment suggests that the community ball has the power to encourage students’ discussion, and that it has become a classroom management tool to keep a well-maintained classroom structure.

**Meaning of life.** Constructing meaning or purpose in life was a theme in Nahele’s PI discussions and assignments. He described,

Everyone everyday, is trying to reach something in their life, especially seniors, I
constant ly strive to balance hanging out, doing school work, packing my house up, applying to class and having ‘me’ time; and I imagine that the people around me are striving to get something as well. (DR, 11/12)

Nahele is striving toward a goal or goals that lead to his idea of a coherent and purposeful life. 

* A balanced life. Nahele thought, “humans are striving for balance, and never reaching it, we also strive for success, and never reach it.” He explained, 

My new perspective is on success, because even though I strive to do all these things I never had an end game or real final goal, and it’s satisfying knowing there is success in striving, and I am now more aware that maybe I need to set an end goal for something, and continue to reach for balance. (DR, 11/12)

Nahele’s reflection suggested that his own searching for meaning or purpose in life is considered a personally significant, overarching objective that he continually strives to fulfill. His statements reflected that the PI course became an effective learning instrument aligned with Nahele’s life commitment. The activities that he engaged in the classroom could help him to construct the meaning and purpose of his life.

* Be yourself. Nahele shared that he tried to restore inner peace and harmony in his life. He was willing to recognize and tolerate what life is, rather than fight it or judge it. He found a way to free himself from wanting something to be or not to be, and accepted reality in order to build a full and vibrant life. He shared that, 

It [discussing what is the right thing to do] reminds me a lot about Buddhism and being at peace with yourself, and living your life where you are balanced within….So things will come in their own way you don’t have to take it….just being able to with your life and being able to accept yourself and how you are living. (CD, 10/28)
He questioned ideas of right or wrong in respect to his actions in his life. He thought being himself was justified as part of his right to the pursuit of happiness and self-fulfillment.

What is right or what is wrong? What is righteousness? What is good? Does anyone have a definition of those things? I don’t have the definition of what is right, what is wrong, and what is in balance. So I said pono is something judged by yourself and others, it doesn’t seem correct for others to judge whether or not you are pono, or whether you act as pono. (CD, 10/28)

**Challenges.** Although Nahele usually was the one who shared the most in the class, he also had challenges in organizing his thoughts and making clear statements. He described,

Writing the PIP was really hard because having my ideas be concise and clean was hard because wow was I just thinking so much. Even though Part One took forever, it was the easiest because I had everything written out, it was 3 pages alone. (DR, 11/14)

**Philosophical Insight Paper data analysis.** In the Philosophical Insight Paper (PIP) Nahele evaluated the strengths and weaknesses of community of inquiry. Nahele appreciated that “One thing we did well as a community is actively listening to each other when we’re sharing. An example of that would be our inquiry memos” (12/16). He encouraged his peers to speak at least more than one time in each class, and explained “One thing we didn’t do well in the inquiry is how we were having those long pause where nobody said anything” (12/16). He acknowledged the strength of the inquiry is to relate new learning to real world problems. In the future, he wanted to make positive changes in his life and contribute to his community.

**Final Reflection Paper data analysis.** In the Final Reflection paper, Nahele experienced personal transformations and gained different perspectives. He felt grateful for being “pretty
close to each other. It’s not intense, everything is just good” (12/19). He commented that he began to solve different problems and looked at things differently.

**Focus Group data analysis.** Nahele shared in the focus group that he was more engaged in learning in the PI course. The most important reason is that the PI course was interesting, and he could be able to say how they feel about the subjects they learned. For instance, he expressed that:

I think we are more engaged [without doubt]. Because in other social studies classes, you are not allowed to say how you feel about certain things, you just learn it, you are supposed to read about it, and just accept what you read. While in this class…you get to make connections to your life, you get to listen to other people’s saying. (12/18)

He commented after the PI course, he still wondered about the topics discussed in the classroom. He was motivated to come back to the classroom to talk about it again. He reported that he built a better social relationship with his teacher, and described,

I guess I feel afraid my teachers in a social level. Because you just walk in the class, you tell them, they just tell you this this, and then you go home, you don’t talk them. Miss Shiroma is like, I don’t know, you kind of like on a social level, because we know how she thinks and feels about certain topics. And I think it really helps with the whole community building thing. (12/18)

Nahele appreciated that the class added more meaning to his life, because it opened him up to more important subjects, such as think about life’s meaning, address world problems, and be a better self.

**Qualitative Data Triangulation.** Comparing the four types of qualitative data, classroom discussions and daily reflections, Philosophical Insight Papers, Final Reflection Paper, and focus group interview, themes that appeared from Nahele’s data are listed in table below.
Table 4

*Triangulation of Nahele’s qualitative data*

<table>
<thead>
<tr>
<th>Class Discussions and Daily Reflections</th>
<th>Philosophical Insight Papers</th>
<th>Final Take Home Reflection</th>
<th>Focus Group Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Engagement: Connection with learning; a strong community; intellectually safe environment; attentive listening; think and question; multiple perspectives; student and teacher relations; the community ball</td>
<td>Community Strength: Active listening</td>
<td>Build a safe community; address world problems; look at things differently</td>
<td>More engagement in learning in the PI course; continue wondering about topics discussed in the classroom; better student and teacher relationship; open up to more important subjects</td>
</tr>
<tr>
<td>Meanings of Life: A balanced life; to be yourself</td>
<td>Community Weakness: Engage peers to participate in discussion more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenges: Struggled with organizing thinking</td>
<td>Inquiry Strength: Topics connect with world problems</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Inquiry Weakness: Need active sharing</td>
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</tbody>
</table>

**Summary.** Making personal, social, and cognitive connections helped Nahele engage in his learning. The biggest take-away for him was that he realized the value of discussing rather than debating with his peers. The following concept map demonstrates Nahele’s learning experience. Because his thinking style is more integrated and complicate, the shape of his map is in circles. He related the unknown to the known, and then applied what he had learned to solve practical problems and make decisions. In addition, the PI course promoted inquiry and curiosity so that although Nahele was confused with his thinking he still wanted to learn and explore more.
Peleke

Peleke, a male, was enrolled in 11th grade during the study. He considered himself to be multiracial, since his last name is Korean, and his mother and stepfather are Hawaiian. He had p4cHI experiences in 9th, 10th, and 11th grades. Peleke liked the idea of Yin and Yang, which encouraged him to lead a balanced and peaceful life. Themes that emerged from Peleke’s data include (a) academic engagement, such as participation in discussion, connection with learning, emotional connection with learning, intellectually safe environment, multiple perspectives, think and question, attentive listening, the community ball; (b) meaning of life, such as Yin and Yang; and (c) challenges, such as confusion, struggled with organizing thoughts.

**Academic engagement.** Peleke explained that an engaged practitioner in the PI course is someone who has “open mind, is willing to speak in public, and would participate in discussions in using intellectual questions and answers” (DR, 10/31). The following sections elaborate the reasons why Peleke was engaged in learning in the PI course.
*Participation in discussion*. In the beginning of the PI course, Peleke described that, “I am usually in an isolated area making me not used to talking to people in a group, in which I would feared to talk fast, stutter, or say words that would not be English” (DR, 10/17). The PI course encouraged dialogue among and between students. Gradually through active participation and peers’ invitation to discussion, Peleke developed more confidence in speaking. He became more able to share his thoughts in front of the community. When Peleke was asked to introduce the class to visiting scholars, when he was asked what the guests should know about the class, he always referred to discussion as one of the distinguished strengths of the PI course. He shared “Discuss is very common and yet kind of strong at the same time. Common means there is not that much goofing off. But in terms of that, we are actually doing our work” (CD, 11/6). He also said, “We do a lot discussion, and we decide to focus on it from now on” (CD, 12/4). Peleke’s case offers evidence that students’ motivation to learn could be positively impacted by participating in discussion-focused and inquiry-based classrooms.

*Connection with learning*. Peleke appreciated the practical use of the PI course. He could apply what he learned into daily practice and make connections to his past knowledge. He acknowledged that the strength of philosophical inquiry was that the whole community tried to connect new knowledge with their past knowledge and prior experiences (DR, 12/12). He stated that the idea of intellectual safety, “can connect to my life and the world by in my life it would seem to be a way to help people” (CD, 10/16). While learning altruism and ethical egoism, Peleke described that,

What I learned today can affect me. For me I guess this can relate to me since when I was a little kid I just wanted this or that and yet later I started to think more and care more for others. (CD, 10/27)
This direct quote indicates that the PI course had a positive effect on Peleke’s life. He explained, “This [course] connects to the world, because there will always be people that have different ideas, some radical, some not” (CD, 12/2). In the final class, Peleke expressed his genuine fear for the world, but also walked away with some hope. He wished that, “They [human beings] would love to be in seeing the beauty of nature and friendship since the world is pretty much being destroyed piece by piece from war, aggression, pollution, and environmental changes” (DR, 12/18). This statement not only demonstrated an ability to integrate and apply ideas and themes across the learning content, but also developed a sense of compassion and empathy for others and for the world.

Emotional connection with learning. Peleke enjoyed his learning experiences in the PI course. He acknowledged that spending his time in class was worthwhile. He was interested in learning the new content. He mentioned, “Finding that new quote that we had reflected on was very interesting and had a good message in it” (CD, 10/23). “It’s kind of interesting to know [the conscious and unconscious world in the dream]” (CD, 11/24). When the material held personal meaning and connected to Peleke’s interests, authentic learning took place.

Intellectually safe environment. Peleke’s understanding of intellectual safety was “usually cooperation among a person or a group of people in which you and the people would treat each other in a safe, helpful, and a respectful manner and environment” (CD, 10/16). He appreciated that the PI course provided him with a physically, emotionally, and intellectually safe learning environment that assured frequent, consistent and positive teacher-student and peer interaction. One reason he liked the PI course was “because we are all close and talkative and all feel intellectually safe” (DR, 11/5).
Peleke shared that the small group in the PI course built a better community than in other social studies classes that have “more dimensions.” He explained, “In my freshman year we discussed about philosophy and touched about intellectual safety, but most of time the class didn’t actually show intellectual safety” (CD, 10/16). The intellectual safety set a foundation for a supportive and collaborative learning environment. He explained that in the PI course, “No one was really putted down or felt unsafe, everyone gets along while in the discussion” (CD, 11/6). Peleke realized that even though he had a disagreement or argument against an idea or one person, he could still examine its benefits. He learned to be open-minded and think critically. He was able to take intellectual risks. In the classroom everyone respected each other, which created an active-learning environment, keeping Peleke and his peers on task in their thinking, speaking and writing.

**Multiple perspectives.** Peleke expressed that he benefited the most in the PI course by seeing different perspectives and different viewpoints. In the beginning of the course he began to realize that, “Everyone sees everything in different ways or different perspectives on how they view, and how they view it or messages they can actually take home with it” (CD, 10/17). He emphasized the importance of gaining multiple perspectives, “If you fall on one information, you just become still pretty much, you need to focus on other.” By seeing multiple perspectives and different points of views, Peleke thought he actually was rewarded with more knowledge and more strength. He positively commented that, “From that it actually helps yourself and other people, you are not being one sided, relying that one information” (CD, 10/30).

Learning from students, teachers, and guests whose backgrounds and experiences differ from Peleke’s own sharpened his self-knowledge and self-insight by allowing him to compare
and contrast his thoughts with others. Peleke increased his knowledge base and formed a more thorough understanding of the subjects.

**Think and question.** Peleke experienced perspective shift or a transformation in his thinking. He asked, “What are the reasons why being biased or one sided is not always going to help you” (CD, 10/30)? Peleke used to think that balance, like Yin and Yang, was the greatest virtue, but after collaborative learning and discussion on is there a greatest virtue, he questioned, “Can I infer that there is no one way to finding happiness and that how is higher from the other, we will always vary in our own meaning of happiness” (DR, 10/31)? Peleke had opportunities to ask questions that he genuinely wondered about. When learning about politics and race, he asked, “What are the reason why if you live in a country that fully suggests democracy and freedom, but the people in charge, government, doesn’t actually want to give it to those they deem unworthy” (DR, 12/10)?

**Attentive listening.** Another strength of the PI course was listening according to Peleke. In order to be fully engaged in a discussion, Peleke suggested, “You need to share your ideas and listen to others and write not only yours but also everyone else’s thoughts” (DR, 10/30).

**The community ball.** In Peleke’s eyes, the community worked together to create the community ball to complete a task. For him, the role of the community ball represented, All of our ideas and everyone contributing to create a ball that allows us to share our ideas. We use the ball to let everyone discuss and share their own ideas to help us look at things from a new perspective. (CD, 10/20)

The community ball created a culture of sharing in the classroom. Peleke felt a sense of responsibility in contributing to the community by exchanging his questions and thoughts with others.
Meaning of life. Being in balance was a central theme of Peleke’s life. He thought, “In order to find true happiness we need to find that balance between ourselves and others” (DR, 10/27/14). He tried to find balance that helped him settle things down (CD, 10/23).

Yin and Yang. Peleke was interested in the idea of Yin and Yang. He believed that, “There are both pos. and neg. for everything, and yet they might be opposite they also supplement each other. When there is an unbalance both pos. and neg. energy/force would try to have an equal flow or balance” (DR, 10/29). He argued that the greatest virtue is being balanced, but he explained, “I have not been balanced in my life due to me being dragged into conflicts” (DR, 10/28). Because of the Yin and Yang syndrome, Peleke had a different understanding of success compared with Kalani and Nahele, who thought balance led to success. He explained, “You can’t have success if you’re balanced, if so you also fall on failure. Yin and Yang or balance means 50/50 there for you. State would generally be neutral.” Peleke described that in order for him to obtain balance, he would have to be in a state of neutrality. “In my life I am close to balance so I stay in my position with that there are times when bad there for more good to even it out and vice versa. (DR, 11/12)

Challenges. The PI course provided students opportunities to be challenged and to experience cognitive conflict or dissonance while listening to different perspectives. When they used the Good Thinker’s Tool Kit to examine their deeply held beliefs, they were sometimes confused. Peleke questioned his belief, and asked, “What is right or what is wrong, everyone has an opinion, for one’s belief there is struggle” (DR, 11/6). On the same day, he explained the reason why he did not participate actively in the discussion. “Since some people, including I in some cases, did not participate a lot on Friday, for me my reasoning was that I was thinking and confused” (CD, 11/6). Peleke hoped his peers could understand his perspective, he described,
Work on: process of understanding or they to understand that topic. I ex. which included me, one was that I didn’t understand a bit about the discussion, [I was] confused, and . . . people couldn’t try and understand [that] I was trying to apply nature into a virtue. (DR, 11/6)

Peleke wanted more time to think, and stated, “I should just think more in order for others and me to truly know what I am saying” (DR, 11/10). “I tried to figure out something” (CD, 12/12).

Another challenge that Peleke experienced was that he felt that it was difficult to explain his ideas. He shared,

I am walking away with that I need to try to understand more terms. I need to make people understand what I am saying. I just want to have clarification, examples, probably I have to look up some new words to understand and to figure out. (CD, 11/6)

**Philosophical Insight Paper data analysis.** In the Philosophical Insight Paper (PIP) Peleke evaluated the strengths and weaknesses of community of inquiry. Peleke summarized the community strength as, “listening and intellectual safety. Listening since everyone had recorded on the discussion we had and following up what our topic is about. Intellectual safety since everyone in the classroom respects each other” (11/13). As far as the community challenges concerned, he suggested that they needed to work on their participation, making sure everyone speaks in the circle. “We need to work on our participation. The reason why I say this is that during discussions not everyone is participating”.

When he reflected on inquiry strengths, he acknowledged that they focused on main topics, and they were interested in inquiring about those topics. However, he experienced challenges in understanding his own thoughts and others’. He shared “For our challenges it
would be the process to understand…myself would be confused or would not be able to understand what someone is trying to say or what the directions are stating” (11/13).

**Final Reflection Paper data analysis.** Peleke realized the importance of building a community, because in a safe community they socialized better and felt comfortable in sharing. For example, he wrote,

I am starting a personal change from taking this course due to the interaction and participation in what p4c feels on a daily basis and also I have become less anxious due to me participating within in the community and sharing my opinions and ideas on the work we are given and at times on my own personal life. (12/18)

He acknowledged the class helped him see multiple different perspectives. He felt the ten lenses of philosophical inquiry were interesting, which could relate everything in the world. He also transferred his new learning in other classes.

**Focus Group data analysis.** Peleke acknowledge that the PI community maintained an intellectually safe environment. Because of this, he felt he was more engaged in learning in the PI course. He explained, “Some people affect others in the learning environment because they talk more, you cannot really ear what the teacher is talking, or disrupt teacher, so teacher call you out of things like you are doing well, and they are doing poor” (12/18). His comment suggested that smaller class size improved their classroom atmosphere. “Having like a small class, this is good for discussions, there is not much people, there is not going to be much like time consuming.” He appreciated the class gave his more freedom to think about and discuss questions and topics he was interested in light of course materials. In the class, he formed multiple perspectives and different viewpoints.
Qualitative data triangulation. Comparing the four types of qualitative data, classroom discussions and daily reflections, Philosophical Insight Papers, Final Reflection Paper, and focus group interview, themes that appeared from Peleke’s data are listed in table below.

Table 5

Triangulation of Peleke’s qualitative data

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</thead>
<tbody>
<tr>
<td>Academic Engagement: participation in discussion; connection with learning; emotional connection with learning; intellectually safe environment; multiple perspectives; think and question; attentive listening; the community ball</td>
<td>Community Strength: Active listening; maintaining intellectual safety</td>
<td>Build a safe community; feel comfortable in sharing; gain multiple perspectives; topics were interesting</td>
<td>More engagement in learning in the PI course; smaller class size; freedom in thinking; form different viewpoints</td>
</tr>
<tr>
<td>Meaning of Life: Yin and Yang</td>
<td>Community Weakness: Engage peers to participate in discussion more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenges: Confusion; struggled with articulating thoughts</td>
<td>Inquiry Strength: Focused on main topics; were interested in inquiry topics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inquiry Weakness: Challenges in understanding his own and others’ thoughts</td>
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</table>

Summary. Classroom social interactions and communications supported Peleke’s learning. Peleke described that, “I think we did well on our communication, participation, discussion, talking and taking notes/following along” (DR, 12/12/14). In light of Peleke’s reflection, he believed that communications made learning engaging. The following concept map shows how Peleke connected social-affective, cognitive, and personal communications with learning. Since he liked the idea of Yin and Yang, the following figure is drawn using circles. He found that communications fostered dialogue between students and teacher, and encouraged
them to articulate and reflect on their thinking. The improved communication skills helped Peleke build up better interpersonal relationships with his peers. The biggest takeaway for Peleke was that he gained a more complete view of himself through juxtaposing various perspectives.

Figure 3: Peleke’s Academic Engagement Concept Map

Liko

Liko, a female student, was enrolled in the 11th grade during the time of study. She is ethnically Japanese. She had 4cHI experiences in 9th, 10th, and 11th grade classes. Liko is the person who experienced the most significant changes in the PI course. Themes that emerged from Liko’s data include (a) academic engagement, such as parent involvement, a strong community, build up confidence, relevance to life, intellectually safe environment, participation in discussion, multiple perspectives, attentive listening, think and question, student and teacher relations; (b) meaning of life; and (c) challenges, such as low self-efficacy, confusion, difficulty in explaining ideas, difficulty in organizing thoughts.
**Academic engagement.** One of the reasons why Liko enjoyed the PI class more than other social studies classes was that she did not have to memorize all the facts. “History really bores me.” She explained,

History classes also tend to have the same kind of direction, same kind of learning process, same kind of memorization. History is repetitive in its learning process and memorizing the dates and events that happened in history gets really boring. (DR, 10/21)

In the PI course, Liko could reflect and talk about her feelings. She thought she was more motivated to learn in the PI course “I think this class motivates me by like I am never challenged to think outside my own thinking, so yeah [I like this class].” Throughout the first week of the class, Liko realized that “I’m going to enjoy this class as oppose to another class I have” (CD, 10/21). She continued to think about the questions posed in class when she went back home and looked forward to coming back to this class again (DR, 10/31). In the following section, evidences will be provided explaining why Liko was engaged and motivated in learning in the PI course.

**Parent involvement.** Family education played a central role in Liko’s learning and development. In classroom discussions, she often referred to her parents’ teaching and educational philosophy. When having questions or when she was confused, she talked about asking her parents for answers and further clarifications. Besides discussion with her classmates, she often reported that she asked her parents, cousins, or aunties’ about their ideas (CD, 10/23). She sometimes shared her father’s or mother’s stories to support her claims and viewpoint. For example, while learning about the topic, “What is the greatest virtue,” she explained, “First I thought knowledge is the greatest virtue. That was all taught by my parents” (CD, 10/28). “I might ask my mom and my dad if they think there is a ‘greatest’ virtue” (DR, 10/31). Whenever
she felt confused, she spontaneously discussed questions with her parents. Liko once asked, “What makes you have good or bad intentions?” She described, “When I think about this question, I cannot exactly answer it. As I thought about it, I actually talked with my dad” (CD, 11/8). Thus family involvement in Liko’s education improved her school readiness and performance in the PI course. In the final PI class, Liko brought her mother’s homemade cakes to share, which showed her care for the community.

**A strong community.** Liko acknowledged that the PI course really helped her be a lot more open than she would be in another class. In this class she was able to create friendships with her classmates. When Liko felt comfortable in a class she was more likely to talk about her ideas and opinions, to admit her confusion and ask for help, and to use peers as resources. She reflected that in order to overcome problems and roadblocks in life the class needed to be able to unite and work together as one. She once introduced the PI class to a guest visitor, saying, “We do have a strong community here. Because when I first came here to begin the quarter, I instantly felt like I was part of this community” (CD, 11/6). This strong sense of belongingness encouraged Liko’s positive interactions and cooperative learning with each participant. Liko praised Makali, saying that “his thinking is deeper than mine” (DR, 10/29), and commended Kalani, saying, that “I like how I didn’t know who you are till now” (DR, 11/5). Liko found that the PI classroom created an environment that supported mutual respect, and fostered cooperation and acceptance among students.

**Relevance to life.** Liko evaluated that, “One thing we did well in the inquiry is that we were able to relate this topic to other real world problems.” She used an example to explain her comment, “For example, the biggest example shared was from Nahele who related our topic to ebola and how the U.S. didn’t even care about the outbreak of ebola until it got to the U.S.” (CD,
The inquiry connected to Liko’s life and the world she lived in. When talking about race and politics, she demonstrated strong empathy for her friends at school. She explained,

Racism is a big problem in this world and it may not be a problem for me but it’s definitely a problem for other people in this world…. Some of my friends even have trouble now with just being judged in school, how are they going to be able to deal with the real world? (DR, 12/16)

**Intellectually safe environment.** Liko defined that intellectual safety makes students feel safe with sharing their own thoughts and ideas with others. There would be “no side conversations, no swearing, put downs anywhere or anything that would make a person feel as if they weren’t important.” The whole community should be responsible for maintaining an intellectual safe environment and be respectful to each other. Everybody “can disagree and not judge” (CD, 10/16). She used an example to explain how an intellectually safe environment supported her learning,

Comparing to my Japanese class, Ms. X’s class is kind of wild, because sometimes she doesn’t say anything, so [Liko laughed] sometimes intellectual safety there is not exactly good at all. But in Sensei’s class she most of the time has everything together and has everybody share and try to make it safe for everybody. (CD, 10/16)

She further illustrated, “I basically learned that, I definitely learned that I feel a lot safer in this class compared to my lots of other classes.” She felt that in the PI course, every student took each other into account. She also liked what her peers felt and shared in the class. Liko’s comments indicate that in a positive classroom culture she found an encouraging attitude and established meaningful relationships with others, which increased the likelihood that she would feel comfortable sharing her concerns, inner feelings, and raw thoughts with others.
Participation in discussion. Actively participating in discussion is one standard that Liko used to evaluate her participation in the community of inquiry. She believed that each student should share at least two times in each PI course. She hoped she shared more often voluntarily instead of frequently being invited by others (CD, 12/16). Nahele is the person who often encouraged and invited Liko to share. During the discussion, Liko expected the class to have no silent times. “One thing we didn’t do well in the inquiry is how we were having those long pause where nobody said anything…. I could have prevented these pauses because I had a lot of questions but I didn’t ask them” (CD, 11/16).

In the beginning of the semester, Liko did not want to share, but later she realized that “I thought myself as a dude kicking everybody off, because if I don’t share, it’s like doing the same thing” (CD, 10/30). Liko felt a moral need to commit to class discussions. When a visitor came to the class, she shared “I guess something I’m walking away with is that I need to learn to participate more and more to speak up for myself now” (CD, 11/6).

Multiple perspectives. Liko mentioned that she tended to take a single, monological perspective and view reality through a narrow lens; she could not think outside of the box. She described, “How I learned in this class, mostly our knowledge is gained from other peoples’ perspectives during our discussions. That basically helps me” (CD, 12/4). She appreciated that she could be able to expand her views,

I think my own perspective just expanded…. I got to see a new perspective of whether or not humans control nature and one of my peers said yes because of our ability to be able to clone plants and animals. So yes I have seen a new perspective, and I’m glad I did. (FRP, 12/19)
**Attentive listening.** Liko illustrated that an engaged participant is the one who “Listens; No talking, when others are; Respect” (DR, 10/31). She thought she was an engaged participant because when her teacher was facilitating, she always listened attentively. In addition Liko acknowledged that one thing the community did well was that they used inquiry memos to record their peers’ viewpoints to keep track of the ideas in the inquiry (CD, 11/13). Listening attentively helped Liko recall her and her peers’ thinking and the entire sequence of ideas presented.

**Think and question.** Liko expressed that one thing they did well in the inquiry was that they were able to “branch out without branching out to a completely different subject.” For example, when discussing if there is a greatest virtue, “They were able to branch out to what virtue could possibly be the greatest” (CD, 11/13). The PI course integrated thinking into the curriculum, which fostered students’ individual creativity, helping them think critically about how and where they get their best ideas. Liko could dive deeper into her thinking and inquire together with her peers and teacher about the topics and questions that she cared about the most. Their questions included considering real-world problems and conceiving their interests.

Liko asked the following questions. When learning ethical egoism and altruism, she asked, “What I realized is that talking about benefiting ourselves. We talked about having good or bad intentions. I thought, what makes you have these good or bad intentions, and why you act upon them?” (CD, 10/17) Liko began to question human nature and her self-knowledge, she asked, “When I heard everyone, I have more values. What I think is right? What makes me happier? What would I think human nature is?” (CD, 10/28) She also thought about “What is morally right and wrong?” (DR, 12/5) She related her learning to the world problems, and questioned, “Is there really a way to get rid of racism? WATRs [What are the reasons] why we
can’t get rid of racism?” (DR, 12/10) She showed her care to the environment, and asked “WATRs [What are the reasons] people are so cruel to the environment?” (DR, 12/16)

Meaning of life. For Liko, the purpose of her life is to live a healthy life, strive for a better job, and try to do as much as she can to prepare herself for her next voyage in life (DR, 12/1). She tried to create a balance in her life,

I try to balance out my chores, school and my free time but it never works because it changes everyday. I thought that everything had to be balanced out in order for me to be able to progress in anything but the truth is you really don’t need everything to be balanced. Especially since a lot of things tend to just work themselves out. (DR, 11/13)

Although Liko wanted to live a balanced life, she felt that stepping back and allowing things to happen would allow things to take care of themselves naturally. Her needs will also be satisfied in the end.

Challenges. Liko shared that when she did not participate in discussions, she was always thinking. She explained why she could not join the discussion, “I am thinking” (CD, 12/11). “My mind cannot follow. It is slow” (CD, 12/18). “I still don’t understand the concept of my example” (DR, 10/29). This struggle was one that Kalani and Nahele shared.

Liko expressed she was often confused. She remarked, “I’m still kind of confused on the meaning of ethical egoism” (CD, 10/27). “I need more clarification. I was kind of confused. That’s why I couldn’t say anything. Sitting there. I don’t know why I didn’t say anything” (CD, 12/12).

The following quote showed that Liko tried to examine her prior knowledge structure. “I learned that life is confusing. Now thinking – Is my knowledge even true? (DR, 12/2) She also shared that, “For half of the discussion I was so lost that I had no idea where the discussion went, and I was just on a basic state of confusion” (DR, 12/16).
Liko shared a challenge with Peleke; she felt that she struggled in explaining her ideas. She stated, “When I think about this question, I cannot exactly answer it” (CD, 12/8).

“Struggle with explaining the logic I had behind my textual evidence and the claim. Easy time with everything else. [A big question mark was added after this sentence]” (DR, 11/14).

Liko demonstrated low self-efficacy in her thinking. When she did not share, she would say, “It doesn’t make sense” (CD, 12/10). Although she was invited by Nahele, Makali, or Peleke, she sometimes reacted, “Don’t pass it to me.” “Wait, Wait…[half a minute pause] Don’t know whether it makes any sense. So I have no clue the passage is saying, but I have an idea about just didn’t write it down” (CD, 12/16). But at the same time, Liko realized that she needed to make a change, and reflected, “While we were sharing the assumptions we made, I didn’t feel like mine was right so I didn’t want to share it. Need to have more confidence, speak up” (DR, 11/10).

**Philosophical Insight Paper data analysis.** In the Philosophical Insight Paper (PIP) Liko appreciated that everyone in the community listened actively to what others had to say. “Everyone kept a record of what other people shared” (11/13). She criticized that “One thing we didn't do well as a class was to make sure everyone in the discussion participated.” She would like everyone could be able to share out their opinions. She also acknowledged their focus on main ideas, and she commented, “we were able to branch out without branching out to a completely different subject.” Liko sometimes experienced challenges in understanding topics that they inquired. She hope that “everyone is on the same page.” Because “For half of the discussion I was so lost that I had no idea where the discussion went, and I was just on a basic state of confusion.”

**Final Reflection Paper data analysis.** Liko appreciated that the PI course helped her become more open about herself than she would be with another class, because she was “able to
create some sort of friendship with [her] classmate” (12/19). She concluded that if she socialized more in a class, she felt more comfortable and fun than in other classes. She shared that her perspective was expanded. She was excited for her “huge improvement”, because in the beginning of the class, she did not think her opinion was good enough, but the PI course made her “feel like I matter”. She began to experience “things that I reflect on, often make sense.” She also learned to try and build up her confidence in her answers and her speaking abilities in the class (12/19).

**Focus Group data analysis.** Liko was more engaged in learning in the PI course, and she reported that in other classes, half of the students did not even care about what she was doing. Also, it was difficult to get the class started. She felt that History was boring, but in the PI course, she could “get to reflect how we feel about it [subjects]” (12/18). Liko appreciated the class challenged her to think outside box, and she looked forward to coming to this class in the semester. In the PI course, she formed better relationships with her teacher than in other classes.

**Qualitative data triangulation.** Comparing the four types of qualitative data, classroom discussions and daily reflections, Philosophical Insight Papers, Final Reflection Paper, and focus group interview, themes that appeared from Liko’s data are listed in table below.

Table 6

*Triangulation of Liko’s qualitative data*

<table>
<thead>
<tr>
<th>Class Discussions and Daily Reflections</th>
<th>Philosophical Insight Papers</th>
<th>Final Take Home Reflection</th>
<th>Focus Group Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Engagement: Parent involvement; a strong community; build up confidence; relevance to life; intellectually safe environment; participation in discussion; multiple perspectives; attentive listening; think and question; student and teacher</td>
<td>Community Strength: Active listening Community Weakness: Engage peers to participate in discussion more</td>
<td>Increased self-efficacy; better socialization; expanded her thinking</td>
<td>More engagement in learning in the PI course; think outside the box; form better relationships</td>
</tr>
</tbody>
</table>
Summary. Parent involvement was an integral component of Liko’s education. It improved her academic readiness and achievement, and at the same time, improved the parent and child relationship. She often connected her learning with family education, which increased her understanding of new concepts. The biggest takeaway for Liko was that she could trust her ability to think and to speak up. Liko had experiences of being insulted while doing p4cHI in other classes, which made her feel afraid to share in the beginning of the PI class. But as time went by, she believed in her capacity to think and considered that her thinking was validated and valued by her teacher and peers. This in turn empowered her sense of responsibility and efficacy as a learner. She was determined to apply what she had learned in the classroom to make positive changes in her life by following what she believed was right and treating others the way they wanted to be treated. She sometimes examined the way she treated the world and decided to leave a better world for the next generation (DR, 12/17). Liko wanted to lead a balanced life, but she realized that it would be better to allow things to happen naturally instead of making things happen. Figure demonstrates significant themes that occurred in Liko’s data. Since Liko’s thinking is simple, the picture was drawn using rectangular.
Figure 4: Liko’s Academic Engagement Concept Map

Makali

Makali, a male student, was enrolled in the 10th grade during the study. His ethnicity was mixed, and included Caucasian, Japanese, and German. He had p4cHI experiences in classes in both 9th and 10th grade. Makali transferred to a private high school partway through the study, on Nov. 17/14. Themes that emerged from Makali’s data include (a) academic engagement, such as a strong community, participation in discussion, multiple perspectives, think and question, relevance to life, intellectually safe environment; and (b) meaning of life.

Academic engagement. Although Makali transferred to another school, he wanted to learn about p4cHI. He reported that he introduced p4cHI to his new English teacher, showing his strong interest and high-level engagement in the PI course. Before he transferred to the new school, he shared his feelings with his classmates and teacher,

I actually really sad now because I have to leave. Because I finally realized that I actually think differently…. I realized that you know you can actually question stuff, it’s cool. We
have a great community, there is always a way to grow. I really sad that I have to leave. (CD, 11/6/14)

He wrote in his daily reflections that,

We have a great community but as always there is much to improve and I’m sorry I won’t be here to see it. We have amazing discussions in this class that always leave me wanting more. I wish everyone has that feeling. (DR, 11/6/14)

All those remarks demonstrated how Makali enjoyed the PI course. The following section explains the reasons why he was engaged in studying while in the PI course.

**A strong community.** Makali realized that building up a community fostered a welcoming environment. “It [community building] does have an affect on what people are willing to share” (CD, 10/16/14). In the beginning, Makali imagined that he would just sit in the class because all the other students were seniors, but it turned out that he could communicate with other PI participants. He changed his original thought, and said “in this class I am going to get along very well” (CD, 10/21/14). When the class began to build community, they learned more about each other. Makali liked the PI course, “because there are actual community” (DR, 10/30/14). He used a counter-example to describe a class he disliked, “In ethnic studies, last year I didn’t know anyone and I hated that class” (DR, 10/20/14). Makali described that, “In a bigger community, there are always somebody who doesn’t like somebody else, like in more than ten people” (CD, 11/6/14). So a smaller class reduced distractions and gave Makali and his classmates a greater opportunity for individual interaction.

**Participation in discussion.** Makali introduced a community of inquiry strength to a visitor,
There were very little falters [in this class]. Even though we did falter, we did back-on check really quickly, which is it doesn’t really happen that this class stops for five minutes to figure out who goes next. Also everyone shared. (CD, 11/6/14)

He explained that his role in the class was “to be an active participant and try to keep the discussion on track. And to try to be good so Ms. Shiroma [his teacher] doesn’t get fired.” When he enthusiastically participated in discussions, he would give himself a high rating [for his participation in the community of inquiry], such as seven based on ten Likert scale (DR, 10/31/14). Furthermore, another reason that Makali stated he liked the PI course was “we have interesting discussions” (DR, 10/30/14). Thus discussions made the PI class more enjoyable, which encouraged Makali to take a more active role in his learning.

**Multiple perspectives.** Makali learned to express his own ideas and listened to his classmates’ ideas, which enriched his learning experiences through this exchange. He acknowledged gaining new perspectives from other participants, such as “I gained a new understanding” (DR, 11/6/14). He described how a changed perspective benefited his learning process,

Another perspective I got was that debating does not really solve anything, it just creates a whole new matter of problems and then just tried to explain your views to other people to prove you are better and prove they are wrong. (CD, 10/16/14)

The open discussion gave Makali opportunities to approach the subject from different perspectives rather than one view taught by the teacher or textbook. This made the PI course more relevant and enjoyable for him.

**Think and question.** Makali appreciated that in the PI course he was able to branch out topics and “apply to everything.” He suggested that one of the biggest tasks that students needed to
work on was to “gain into a deeper part of a question” (CD, 11/6/14). He also remarked “That’s very important when we are trying to dig deep and make our discussion beneath the surface level” (DR, 11/6/14). It can be inferred from Makali’s comments that the community of philosophical inquiry created a setting that inspired deeper learning, which in turn fostered Makali’s ability to think and to pursue further knowledge.

The PI course gave Makali permission to investigate open-ended and suggestive questions. The discussion and inquiry aroused curiosity, stimulated interest, and motivated him to seek new information. He began to explore more questions, “Is it really possible to consider each and every one of these for every decision you could make?” (CD, 10/28/14) “Is it expected for us to live our lives in only one way?” (CD, 10/29/14) “Can a philosopher get paid just for sitting there and thinking?” (DR, 10/17/14).

Relevance to life. Because Makali received positive educational experiences in the PI course, he was involved in p4cHI activities outside of the classroom.

I would say that this was the fun of this class in order to be able to take this outside…. my friend…started to really use all the terms, like what are the reasons, can I assume…. We ended up having this kind of discussions after lunch after school. It’s really interesting….That makes me think deeply about anything. (CD, 11/6/14)

For Makali, learning in the PI course did not just take place in an academic vacuum, rather it was shared with the outside world. He and his peers looked beyond the teacher and the classroom for answers. Makali appreciated the practical use of the PI course. He said, “I can use this in my life because it gives me the ability to think things through” (DR, 11/12/14)

Intellectually safe environment. Makali considered intellectual safety as when “everyone feels safe sharing ANY feelings or ideas they might have without fear of negative actions or
impressions from fellow classmates.” He remarked that everyone in the community should be responsible for maintaining the intellectual safety “by coming in with an open mind and taking everyone’s ideas into account” (DR, 10/16/14). In the intellectually safe environment, Makali felt comfortable with sharing about the death of his uncle and how it affected him during the first week of the class. He acknowledged, “I am glad that we have intellectual safety to share ideas” (CD, 10/16/14). This shows that the PI classroom created a positive environment where Makali felt comfortable sharing ideas and opinions without fear of judgment. He believed that his vulnerability would be protected because of the intellectually and psychologically safe classroom culture.

Meaning of life. Being happy is Makali’s central theme of life. He pondered about ways to search for happiness, and described that, “self-interest is one of the only ways to happiness…. worrying about other is no way to live your life, especially if it’s at your own expense. And it is definitely no way to be happy” (DR, 10/27/14). He thought, “the greatest virtue is the knowledge of the situation you’re in” (DR, 10/31/14). He conceived that in general he had to make choices about how he is going to live, “The point is that we are going to choose something sometime and it will affect how we treat others, and as well as ourselves” (CD, 10/28/14). “You gonna to decide what you want and be happy, right?” (CD, 11/7/14)

Summary. There is strong indication that the community building in the PI classroom had an enormous impact on Makali in the context of the learning process. Figure 5 presents Makali’s academic engagement map. Since Makali participated in the PI course for half a semester, his concept map is not very complicated. Although Makali transferred to a private school after only one month in the study, he developed emotional and psychological connections with his peers and teacher. A good classroom environment encouraged him to develop loyalties and sentiments
that went beyond the classroom. He even introduced p4cHI to his new English teacher, which showed his high level engagement in the PI course. Makali did not have a chance to share his understanding of the meaning of life in the end of semester focus group interview, but, based on his daily reflection and classroom discussion data, he was interested in the concept of happiness. He considered self-interest as the only way to happiness.

![Makali’s Academic Engagement Concept Map](image)

**Figure 5: Makali’s Academic Engagement Concept Map**

**Kanani**

Kanani, a female student, was enrolled in 12th grade during the study. Her ethnicity was mixed Hawaiian and Chinese. She had p4cHI experiences in classes from 9th to 12th grade. Kanani dropped out of the PI course after Nov. 7, 2014. Themes that emerged from Kanani’s data include (a) academic engagement, such as peer acknowledgement, participation in discussion; (b) meaning of life; and (c) challenges.

**Academic engagement.** For Kanani, it was very important for her peers to acknowledge her contribution and understand her ideas. The benefit of taking the PI course for Kanani was to think outside of the box.

**Peer acknowledgement.** Kanani appreciated peer support and explained that,
Today I am walking away with that what my peers want from me in my class. They would want me to be open-minded, and for myself what I would work with is to push myself to understand more about our discussions. (CD, 11/6/14)

Kanani changed her behavior to match her peers’ expectation. She adopted the values and interests of the group to maintain her identity in the class. She also showed her concern about her classmate. When Liko could not get ready to share, Kanali comforted her, “If you don’t feel intellectually safe, I can. I will go farther than it is now” (CD, 10/21/14).

**Participation in discussion.** Kanani grew to share the opinion of her peers that as a community, they should work together in order to accomplish goals. She felt it was her responsibility to participate in class discussions and contribute her viewpoints. She described, “Going back to the beginning of the class, when I didn’t want to share, I didn’t want to help my class, which could help us move forward, just kind of like breaking away from the community” (CD, 10/30/14).

**Meaning of life.** Kanani neither joined the end of semester focus group interview, nor shared her understanding of the purpose or meaning of the life in class discussions. However she respected a person who could be his or her self and recognized that being oneself is a right way to live. She explained,

Selfishness is that people want to show who they are. That’s how they want to be. We cannot say selfishness is bad, they judge people, because they are comfortable with being themselves, they keep to be themselves instead of sharing with everybody else. (CD, 10/23/14)

**Challenges.** Kanani had difficulty in articulating her ideas. She could not find appropriate words to express her thoughts, which decreased her discussion participation. She
needed more time to organize her thinking. The following quotes described these challenges:

“Um, when we did reflections, we should be more open. Because oh I wrote that in a wrong area, ok, um, can I come back? Ok” (CD, 11/6/14). “It made them think outside of the box, that’s even better. I cannot find other words for it” (CD, 10/27/14)

Like Liko, Kanani also exhibited low self-efficacy in her thinking. “I wrote it, but…because I…I wrote it, I don’t think it’s a good reflection. I don’t understand” (CD, 10/16/14).

She felt it was a risk to share her ideas in the classroom. She explained,

“I said we need to take certain risk in order for us to move forward. When I didn’t wanna share, I think this is the first day in our class, I didn’t wanna share, but then I also feel I have to take the risk in sharing in order for our task to move on. (CD, 11/17/14)

Kanani had a unique challenge that other participants did not share in the PI course, which was that she had to work almost 10 hours each day instead of focusing on study. This maybe the reason why she dropped out of the PI course after three weeks of the study. One day, she shared with the community,

I was so tired and drain. Um, what is that word? I didn’t know it was going to be that stressful and tiring. It made me change my mind in working double now. From opening to closing. We open at 9am, but the work you have to start at 8am. We close the store by 10pm. (CD, 11/5/14)

**Summary.** Kanani’s data indicates that peer acknowledgement and support had a strong positive impact on her academic engagement. She appreciated that the PI course inspired to her to think outside of the box. Yet she also experienced many challenges she could not handle, such as articulating her ideas and thinking deeply. Because Kanani had to work over 10 hours per day, she had limited time and energy to focus on study. All these challenges may result in Kanani’s absence
from school. The following figure color-coded her concept map in a simple manner due to her absence after the middle of the semester.

![Concept Map](image)

Figure 6: Kanani’s Academic Engagement Concept Map

**Cross Case Analysis**

In essence, each individual participant had different reasons to take the PI course and different ways of engaging in learning at the class. Although participants’ data were analyzed separately, similar themes emerged from four types of qualitative data, classroom discussions and daily reflections, Philosophical Insight Papers, Final Reflection Paper, and focus group interview. The following sections will consolidate, integrate, and compare the findings from the six individual case studies.

**Academic engagement**

In order to present a synthesis of findings intuitively, Table 2 outlines shared reasons why the six participants felt engaged in learning in the PI course based on the frequency count in the NVivo software. Explicitly, they are a) the PI class created an intellectually safe environment that fostered students’ learning and development; b) participants inquired together into the topics and questions that they are really interested; and c) participating in communities of philosophical inquiries broadened their understandings of themselves and others. Besides that, listening
attentively and carefully to their peers and teacher’s ideas benefited both themselves and others. Building up a strong community helped them engage in their learning as well. The particularly interesting finding is that the participants needed to maintain intellectual safety in their community of inquiry. Intellectual safety cultivated a classroom culture and created a safe space for students to connect to each other and share personal challenges.

Table 7

<table>
<thead>
<tr>
<th>Emergent Themes</th>
<th>Count of Shared Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating an intellectually safe environment</td>
<td>5</td>
</tr>
<tr>
<td>Thinking deeply and asking questions</td>
<td>5</td>
</tr>
<tr>
<td>Actively participating in philosophical inquiry</td>
<td>5</td>
</tr>
<tr>
<td>Building up a strong community</td>
<td>4</td>
</tr>
<tr>
<td>Listening attentively</td>
<td>4</td>
</tr>
<tr>
<td>Building up relationship with his/her teacher</td>
<td>3</td>
</tr>
<tr>
<td>Changing perspectives or gaining new perspectives</td>
<td>3</td>
</tr>
<tr>
<td>Using community ball</td>
<td>3</td>
</tr>
<tr>
<td>Gaining multiple perspectives</td>
<td>2</td>
</tr>
<tr>
<td>Making connections with learning</td>
<td>2</td>
</tr>
</tbody>
</table>

**p4cHI facilitation experience.** The most significant event in students’ PI experiences that helped them make transitional changes in their learning was their Waimanalo Intermediate School p4cHI facilitation experience. In this project they needed to facilitate a p4cHI session with 6th, 7th, and 8th graders and helped them build up community within their new classroom. In the debrief session, Nahele acknowledged how p4cHI could impact students, and realized the importance of practicing community building and intellectual safety in the classroom. Liko built up more confidence in communicating her ideas with others. Peleke realized that it was necessary to develop relationships with his students before real teaching in the philosophical inquiry. Kalani recognized that what he and the community did could change the future using p4cHI as an instrument. It took a year for Makali to know how to do philosophy, but after his
experience applying p4cHI with younger students, he understood philosophy and philosophical inquiry much better.

In sum, the Waimanalo school experience not only empowered the participants to be p4cHI facilitators but also helped them to become better PI participants. Furthermore, because of this event, more Kailua High School students were interested in registering for the PI course in the following semester.

**Seating format matters.** In the PI course students would usually sit in a circle. If the circle was smaller, students were more connected and engaged in their discussion. Therefore, seating arrangements influenced the classroom atmosphere and students’ learning process. This smaller circular arrangement facilitated the flow of ideas, thoughts and expressions. It helped foster group dynamics. It was observed from the traditional social studies classes that seating arrangements played an effective role in student academic engagement. In some classes, if students were seated in a row and column format, there were more disruptive and inattentive behaviors. Thus seating was an effective classroom management tactic.

**Meaning of life**

Table 8 summarizes the shared understanding of the meaning of life among the six participants. The results indicate that adolescence can be a time of both discovery and self-understanding. The students all expressed interest in searching for a coherent meaning in life. The transitional period in adolescence brought up issues of self-identity and happiness. The participants acknowledged that the PI course provided them with opportunities and tools to build a sense of meaning and purpose. They recognized that the meaning of life would be a continuously evolving concept over their lifetime. The findings suggest that the participants focused more on self and emphasized personal dignity in their current lives. They developed the
ability to make and follow through on their own decisions and to formulate their own principles about what a “right life” meant to them.

Table 8

*Frequency count of six participants' themes in meaning of life*

<table>
<thead>
<tr>
<th>Emergent Themes</th>
<th>Count of Shared Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be yourself is the right way to live</td>
<td>3</td>
</tr>
<tr>
<td>Striving for a balanced life</td>
<td>2</td>
</tr>
<tr>
<td>Happy life is a balanced life</td>
<td>1</td>
</tr>
<tr>
<td>Staying in a state of neutrality</td>
<td>1</td>
</tr>
<tr>
<td>Self-interest is the only way to happiness</td>
<td>1</td>
</tr>
</tbody>
</table>

**Challenges**

On the whole, the commonly shared themes regarding participants’ challenges are presented in Table 9. As has been noted, in the PI course, although students developed the ability to gather and assess information and evidence in a balanced and reflective way, they still had challenges in organizing their thoughts and justifying their ideas based on available evidence and resources. The PI curriculum exposed students to challenging questions and materials. It involved participants in identifying related experiences or prior knowledge and connecting them into a meaningful whole. Students also needed to anticipate hidden complications and think deeply. If they felt that the new learning did not relate to them, they had a high probability of getting confused. At times, each student had difficulty articulating their thoughts in words or thinking clearly about the ideas. Intellectual disequilibrium was the primary challenge they encountered within the learning process.

Table 9

*Frequency count of six participants' shared themes in challenges*

<table>
<thead>
<tr>
<th>Emergent Themes</th>
<th>Count of Shared Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Struggling with organizing his/her thinking</td>
<td>3</td>
</tr>
<tr>
<td>Feeling confused</td>
<td>3</td>
</tr>
</tbody>
</table>
Struggling with articulating ideas 3
Demonstrating low self-efficacy 2
Feeling disconnected with visitors 1
Working for part-time job 1
Not wanting to share her thoughts 1

Summary: The Philosophical Inquiry Student Academic Engagement Framework

A conceptual framework of student perceptions of academic engagement in the PI class is presented in Figure 7. This was created based on each student’s color-coded concept maps. In general, the six participants’ perceptions of an engaging philosophical inquiry classroom can be categorized into three main themes, which correspond to the three parts of this conceptual framework of a house.
Social cultural context of learning. Maintaining a safe and positive classroom environment is a fundamental condition for learning. In the conceptual framework, this part is colored in green, representing that a positive classroom culture creates a nurturing foundation for learning. The intellectually safe environment developed a constructive, creative, and methodological culture of thinking and communication.

In the PI course, students and teacher co-created a social-cultural learning context that ensured a deep philosophical inquiry could occur. Prior to the PI class, students and teacher co-constructed a definition of intellectual safety and made a community ball to facilitate their turn taking. While making the community ball, they began to know each other personally. While engaging in a number of reflective activities and readings that reiterated the importance of intellectual safety and community building, the students began to build up a strong community and a good relationship with their teacher. Living the concept of intellectual safety, students transformed their learning into an art of democracy. They respected each other’s ideas, interests, and needs. They listened attentively to what others had to say, and shared their thoughts genuinely. They were continuously working on cultivating and nurturing a sense of belongingness and connectedness in the class and beyond. This social context of learning sets a psychological foundation for students’ further learning in the philosophical inquiry.

Learning process in philosophical inquiry. The learning process in the concept model is colored in yellow, representing the “aha” and mind “sparkling” moments that students experienced. Because the community ball is a symbol of empowerment, it is painted an orange color. The challenges take the shape of a cloud, which means that although the students experienced confusion and struggles, these could nurture new realizations. These activities are in
the living area of the house model, representing the daily work of learning and realizing.

The Philosophical Inquiry class worked to create a learning environment that maximized each learner’s ability to interact with each other. Students were seated in a circle and engaged in philosophical inquiry through social interaction and communication. The class put a premium on students’ interests and needs, so students were able to raise questions that they genuinely wondered about. Although there was not always a definitive answer to each question, students were eager to explore the solutions and think alongside each other, appreciating peers who were more able to articulate ideas and explain thoughts. Using the community ball to issue the invitation, students were empowered to share their personal stories, challenges, raw thoughts, and not clearly formulated ideas. Students enjoyed the academic freedom to explore meaningful and controversial issues that arose from their interests. The PI community of inquiry also created the space and the opportunity for students to make fundamental connections within themselves and with other people. They connected with their prior experiences, thoughts, feelings and ideas, and learned through these experiences in the classroom. Because of this encouraging and safe community of learners, Liko was able to get over her experiences of insults in other classes.

The Philosophical Inquiry participants were sometimes confused by their own questions and by those of others during their discussions. They experienced challenges in organizing their thoughts and articulating their ideas. Some students initially lacked confidence in sharing their thoughts. Yet in the end, students all learned certain reasoning skills (i.e., to make assumptions, to use evidence, to apply the Good Thinker’s Tool Kit), as well as to make decisions and solve problems. Students expressed that they appreciated the multiple perspectives gained from their peers, teachers and guests, because they developed an understanding of ideas from a range of
areas and obtained the skills, knowledge, and attitude to interpret these ideas and to live their lives better.

**Application of learning.** When engaging in discussions, participants were exposed to multiple perspectives, which inspired them to reflect on their thinking, examine their beliefs, and then make changes in their lives. The class awaked students’ inner selves and helped them realize their own unique potentials. They began to think about the purpose and meaning of their lives. Each student actively chose his or her own way to construct the meaning of his or her particular life. They created a living philosophy and applied new learning in how they made decisions and lived their lives. For example, they engaged in philosophical inquiry with friends, and brought the concept of intellectual safety to their family and community. In class, they interrogated the social, political, economical and moral imperatives of society. They discovered the hidden voices of women, children, minorities, nature, and of those who are marginalized.

The Philosophical Inquiry participants not only took into account their own inclinations and options for a meaningful life, but also took into consideration the need for a more humane and democratic society. They started to build a more holistic and integral understanding of themselves and the society. They learned to put their engaging and dynamic reflections into practice. They were interested in personal happiness and wanted to lead balanced and peaceful lives. They were inspired to strive for ideals of social justice, democracy, and multiculturalism, and to contribute to the public good. These characteristics are placed just under the roof of the house, the highest place. The roof is shaped like a triangle, similar to Maslow’s hierarchy of needs. These skills and purposes will hopefully help students to develop increased self-esteem and self-actualization. This is also one goal of education, making students use the new knowledge and resources around them, and helped them transcend their thinking and living. The
color is purple, commemorating royalty, or the best in each of us.

**Study Two: Survey Findings**

This section will report findings from the Philosophical Inquiry Questionnaire (PIQ) and the Sense of Coherence Scale (SOC). It will compare pre and post test scores of the four participants who completed the entire study, and present their means and standard deviation. Then it explores the components in each survey that improved the most and the least. Since the traditional social studies group (33 participants) only completed the pretest, their pretest average score will be compared with that of the PI group.

**Philosophical Inquiry Questionnaire Findings**

**Survey reliability.** Although this research only collected 39 participants’ data, it is still necessary to examine the instrument’s reliability based on 48 items’ internal consistency, since a measurement that lacks reliability will often lack validity (Fink, 1995; Fink & Litwin, 1995). The Philosophical Inquiry Questionnaire included 48 questions designed to examine participants’ perceptions of their learning experiences in the Philosophical Inquiry course. This survey consists of six components, namely Making Decisions, Being an Ethical and Responsible Community Member, Philosophical Reflection, Empathy, Transformative Learning, and Joyous Learning. After examining Cronbach’s alpha, which is based on the mean inter-item correlation, the survey items showed high consistency in measuring the same underlying construct – students’ learning experiences in the PI course, because the alpha value is 0.94. This indicates that each survey question means almost the same thing to every participant. Yet, the high value for alpha does not imply this survey as unidimensional.

The Cronbach’s alpha of Making Decision is 0.67, Being an Ethical and Responsible Community Member is 0.80, Philosophical Reflection is 0.76, Empathy is 0.82, Transformative
Learning is 0.90, and Joyous Learning is 0.85, which suggests acceptable or satisfactory level of correlation among each of the eight items under these six dimensions. It also means each set of eight items measures a single characteristic of student learning experienced in the PI course (Hinkin, 1998). While examining the inter-item correlation matrix in the Making Decision dimension, a negative correlated item 5 (I made good judgment) was noticed. This implies item 5 maybe measured a concept that is different from other seven items. When I deleted item 5, the Making Decision’s component’s internal consistency increased from 0.67 to 0.78, and the whole survey’s reliability coefficient increased from 0.94 to 0.97.

Since eliminating item 5 strongly increases PIQ’s reliability, the survey results were analyzed and reported using the remaining 47 items in the following sections, Philosophical Inquiry Questionnaire Results and Sense of Coherence Survey Results.

**Philosophical Inquiry Questionnaire results.** Table 10 shows the result from item 3.50 (I feel more engaged in my learning in Philosophical Inquiry class), which indicates students’ levels of engagement in the PI course. In the beginning of the semester, their level of average engagement was 4.00 based on a five point Likert scale. At the end of the semester there is a 0.75 increase, which indicates that students became more engaged in the PI course over the course of the semester. This positive increase was reflected in participants’ comments in focus group interview. Liko, Kalani, Peleke, and Nahele all acknowledged that the PI course motivated them to come to school, encouraged them to think outside box, and helped them make social connections with each other.

Table 10

<table>
<thead>
<tr>
<th>Changes in PI students’ academic engagement scores</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4.00</td>
<td>1.33</td>
</tr>
</tbody>
</table>
Table 11 demonstrates the result from item 49 (I would recommend the Philosophical Inquiry class to others). At the end of the semester, every participant wanted to recommend the PI course to others. This reveals students’ positive feelings about the class. There is a 0.50 increase between the average pre and posttest results.

Table 11

<table>
<thead>
<tr>
<th>Name</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>4</td>
<td>4.50</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Table 12 explains the change in Philosophical Inquiry participants’ average pretest and posttest scores as a whole. At the beginning of the semester, students’ average score was 3.91, and at the end it was 4.19. The results suggest that students perceived that global learning outcomes such as their abilities to engage in philosophical reflection, make decisions, to be a responsible and ethical member of the community, and to show empathy to others was improved after the PI experience. They also had transformative learning and joyous learning experiences in the class. The six participants shared in their class that the PI course challenged their thinking, so they began to think differently and holistically. Since they learned the Good Thinker’s Tool Kit and utilized it in their class discussions and home lives, they gradually learned how to make a good/better decision. They especially appreciated learning about 10 philosophical lenses, which helped them view the world from different perspectives. Informed by cross-case study results, participants appreciated that they were able to build a caring and safe community building on the concept of intellectual safety. They realized the importance of respecting, helping, and uniting with others.
Table 12

<table>
<thead>
<tr>
<th>Name</th>
<th>Pretest</th>
<th>SD</th>
<th>Posttest</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Mean</td>
<td></td>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3.91</td>
<td>0.52</td>
<td>4.19</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Table 13 presents in details about each participant’s pre and post test scores. Among the four participants, Nahele’s score improved the most (0.46), and Liko the least (0.02). Kalani and Peleke improved 0.40 and 0.27 respectively. The reason why Nahele improved the most may due to his active participation in the community of inquiry. He was often the first one to share in the beginning of the semester. Although Liko responded in her final paper and focus group that she gained confidence in sharing her ideas, she still had the lowest participation rate in the inquiry.

Table 13

<table>
<thead>
<tr>
<th>Name</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalani</td>
<td>4.20</td>
<td>0.47</td>
<td>4.60</td>
<td>0.31</td>
</tr>
<tr>
<td>Nahele</td>
<td>3.84</td>
<td>0.27</td>
<td>4.30</td>
<td>0.38</td>
</tr>
<tr>
<td>Peleke</td>
<td>3.79</td>
<td>0.26</td>
<td>4.06</td>
<td>0.35</td>
</tr>
<tr>
<td>Liko</td>
<td>3.79</td>
<td>0.39</td>
<td>3.81</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Table 14 displays four participants’ total increases in the ten items that had substantial improvement between the pre and post-test. On these items, at least 50% of the participants increased at least one level of their ratings. The increase in one level of rating increases one score equivalently in the data. Taking item 3.18 as an example, the total of six score increase means all participants raised their ratings. If there is a total of three score increase, it means three out of four participants improved their ratings. Students reported learning the most about the following areas in the PI class: (a) Students formed a habit to wonder and question when they learn; (b) The PI course inspired them to think about their own thinking; and (c) They would refer back to
their prior experiences and used what they learned to make good decisions. In another words, the PI course greatly developed students’ cognitive abilities.

Table 14

<table>
<thead>
<tr>
<th>Components</th>
<th>Items</th>
<th>Increase b/t pre &amp; post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophical Reflection</td>
<td>3.18 I wonder when I learn.</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3.19 I think about my own thinking.</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3.17 I ask philosophical questions.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3.21 I live the examined life.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3.24 I have a questioning attitude.</td>
<td>3</td>
</tr>
<tr>
<td>Decision Making</td>
<td>3.3 I use what I learn in school to make difficult decisions about my future.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3.8 I refer back to prior experiences to make good decisions.</td>
<td>3</td>
</tr>
<tr>
<td>Joyous Learning</td>
<td>3.43 I can't stop thinking about what I learn in school.</td>
<td>3</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.28 Learning the perspectives of others helps me understand myself better.</td>
<td>3</td>
</tr>
<tr>
<td>Being a Responsible Ethical Member of a Community</td>
<td>3.9 I am responsible for the learning of my peers.</td>
<td>3</td>
</tr>
</tbody>
</table>

As Table 15 indicates, among the six components of the PIQ, the four participants improved the most in Philosophical Reflection. This is their abilities to reflect, think, and question. The average increase was 0.60. The average increase for Decision Making was 0.41, which suggests that students felt that they were better able to connect to their prior experiences and use what they learned to make informed decisions. Although the other four components, joyous learning, empathy, being a responsible ethical member of the community, and transformative experience did not improve substantially, they all increased slightly, implying that the PI participants had positive learning experiences in the classroom.
Table 15

**Rank of improvement in the six components in PIQ**

<table>
<thead>
<tr>
<th>Components</th>
<th>Rank</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophical Reflection</td>
<td>1</td>
<td>0.60</td>
</tr>
<tr>
<td>Decision Making</td>
<td>2</td>
<td>0.41</td>
</tr>
<tr>
<td>Joyous Learning</td>
<td>3</td>
<td>0.19</td>
</tr>
<tr>
<td>Empathy</td>
<td>4</td>
<td>0.16</td>
</tr>
<tr>
<td>Being a Responsible Ethical Member of a Community</td>
<td>5</td>
<td>0.15</td>
</tr>
<tr>
<td>Transformative Experience</td>
<td>6</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Although students made the most significant improvement between the pre and posttest in Philosophical Reflection and Decision Making, they had higher average ratings on Transformative Experience and Joyous Learning in both the pre and post tests as is presented in Table 16. Those scores are accordingly 4.28 and 4.38, 4.00 and 4.19. This means that although students reported high initial scores in these areas, the PI class helped the participants reshape their understanding of learning, themselves and the world, and that participants really engaged in their learning.

Table 16

**Average scores on pre and post test in PIQ**

<table>
<thead>
<tr>
<th>Components</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Transformative Experience</td>
<td>4.28</td>
<td>0.25</td>
</tr>
<tr>
<td>Joyous Learning</td>
<td>4.00</td>
<td>0.57</td>
</tr>
<tr>
<td>Decision Making</td>
<td>3.93</td>
<td>0.32</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.88</td>
<td>0.44</td>
</tr>
<tr>
<td>Being a Responsible Ethical Member of a Community</td>
<td>3.72</td>
<td>0.43</td>
</tr>
<tr>
<td>Philosophical Reflection</td>
<td>3.57</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Comparison between PI and traditional social studies groups. The average pretest scores in the PI group and the traditional social studies group were respectively 3.73 and 3.85 as is indicated in Table 17, which may imply that the PI group had a little bit lower self-efficacy level.
in regard to the aforementioned abilities in the pretest.

Table 1

<table>
<thead>
<tr>
<th>Components</th>
<th>PI Pretest</th>
<th>Traditional Pretest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joyous Learning</td>
<td>3.65</td>
<td>3.61</td>
</tr>
<tr>
<td>Decision Making</td>
<td>3.82</td>
<td>3.86</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.73</td>
<td>3.97</td>
</tr>
<tr>
<td>Being a Responsible Ethical Member of A Community</td>
<td>3.92</td>
<td>3.85</td>
</tr>
<tr>
<td>Philosophical Reflection</td>
<td>3.79</td>
<td>3.98</td>
</tr>
</tbody>
</table>

However, since the PI group had a higher Joyous Learning score, it may indicate that the PI group had a slightly higher expectation to enjoy their learning experience in the PI class (see Table 18). In addition, the score on the “Responsible Ethical Member of A Community” section in the PI group was higher than that of the traditional social studies group, suggesting that the PI group believed that they were slightly more ready to contribute to and build a better community.

Table 18

<table>
<thead>
<tr>
<th>Components</th>
<th>PI Pretest</th>
<th>Traditional Pretest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformative Experience</td>
<td>3.77</td>
<td>3.86</td>
</tr>
<tr>
<td>Joyous Learning</td>
<td>3.65</td>
<td>3.61</td>
</tr>
<tr>
<td>Decision Making</td>
<td>3.82</td>
<td>3.86</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.73</td>
<td>3.97</td>
</tr>
<tr>
<td>Being a Responsible Ethical Member of a Community</td>
<td>3.92</td>
<td>3.85</td>
</tr>
<tr>
<td>Philosophical Reflection</td>
<td>3.79</td>
<td>3.98</td>
</tr>
</tbody>
</table>

**Sense of Coherence Scale Findings**

As shown in Table 19, on average PI participants’ sense of coherence score improved 0.25 points based on a five point Likert scale. The pretest average score was 3.17 and the posttest was 3.42. These results suggest that the PI group’s global sense of coherence improved after the philosophical inquiry class. Participants believed they could make more sense of world and things that happened in their daily lives, and they felt they were more able to manage resources to solve
problems and make decisions. The qualitative data explained this trend. Participants expressed that the PI course gave them opportunities to think about the world problems, their prior experiences, and the meaning of life. Since the class taught them how to think using the Good Thinker’s Tool Kit and the 10 lenses of philosophical inquiry, they learned to analyze situations and make better judgments while considering different perspectives.

Table 19

<table>
<thead>
<tr>
<th>Name</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>4</td>
<td>3.17</td>
<td>0.38</td>
</tr>
</tbody>
</table>

From Table 20, we can see that among the four participants, Peleke improved the most (0.62), and then Liko (0.31). Nahele improved 0.07, and Kalani did not show any change. Students’ improvements on the survey echoed their qualitative findings. In the beginning of the class, Liko and Peleke participated less in discussions compared with Nahele and Kalani. Both Liko and Peleke remarked that they did not want to share, although they were required to do so in their daily reflections at the beginning of the class. With peers and teacher’s encouragement, they began to appreciate their own ideas and gained more confidence in sharing as the semester progressed.

Table 20

<table>
<thead>
<tr>
<th>Name</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Kalani</td>
<td>3.23</td>
<td>0.93</td>
</tr>
<tr>
<td>Nahele</td>
<td>3.62</td>
<td>0.51</td>
</tr>
<tr>
<td>Peleke</td>
<td>2.69</td>
<td>0.95</td>
</tr>
<tr>
<td>Liko</td>
<td>3.15</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Tables 21, 22, and 23 present scores relating to meaningfulness, comprehensibility, and manageability, and compare results between pre and post tests for each participant. Table 21 shows
students’ pre and posttest means and difference in the Meaningfulness component in the SOC scale. The reason why Kalani’s score decreased 0.25 may be found in his response to the open-ended question “Do you find meaning in your life?” He remarked,

Right now I am a little scared about my future and making that transition from being taken care of to being independent. But I know I can be successful and hopefully one day give back to my community and prepare the future generations for upcoming events.

(PIQ, 12/16/14)

The stress and adjustments needed during the transition from adolescence to adulthood decreased Kalani’s sense of belief in his capacity to accomplish his perceived life goals. In light of this quote, Kalani’s meaning or purpose of life was to devote himself to community development and to contribute to human welfare.

The other three participants did not improve their meaningfulness score, indicating that there was almost no difference in Nahele, Peleke, and Liko’s understandings about their future lives, and whether their life challenges are worthy of commitment. The reasons why there is no improvement in this component may be caused by findings that are presented in Study One. The scores may not have changed because the participants were still in the process of figuring out their identities, the purposes of their lives, and where they would fit in the world.

Table 21

<table>
<thead>
<tr>
<th>Name</th>
<th>Pretest Mean</th>
<th>Pretest SD</th>
<th>Posttest Mean</th>
<th>Posttest SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalani</td>
<td>4.00</td>
<td>0.00</td>
<td>3.75</td>
<td>0.50</td>
</tr>
<tr>
<td>Nahele</td>
<td>3.50</td>
<td>0.58</td>
<td>3.50</td>
<td>0.58</td>
</tr>
<tr>
<td>Peleke</td>
<td>3.33</td>
<td>0.71</td>
<td>3.33</td>
<td>0.71</td>
</tr>
<tr>
<td>Liko</td>
<td>3.75</td>
<td>0.50</td>
<td>3.75</td>
<td>0.58</td>
</tr>
</tbody>
</table>
Table 22 shows the average comprehensibility score in the pre and post test among the four participants. There is a significance increase (0.53) between PI students’ pre and post scores, on average. The result suggests that through learning in the PI course, students perceived the world as making more logical sense, and their perception of the environment was more structured, predictable, and understandable. At the beginning of the class, Peleke’s score was the lowest, 2.00, but at the end of the semester, it improved 1.40. Liko’s score was 2.80, and in the end it became 3.33. The results were consistent with Peleke and Liko’s classroom performances. Although they struggled the most, they were the ones who improved the most in their thinking ability. The strong evidence is that they could think and articulate their ideas faster and took the initiative more to use the community ball. They both built up more confidence in trusting their own ideas and spoke up more in the community as time went by.

Table 22

<table>
<thead>
<tr>
<th>Name</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Kalani</td>
<td>2.80</td>
<td>1.14</td>
</tr>
<tr>
<td>Nahele</td>
<td>3.60</td>
<td>1.00</td>
</tr>
<tr>
<td>Peleke</td>
<td>2.00</td>
<td>0.55</td>
</tr>
<tr>
<td>Liko</td>
<td>2.80</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Table 23 displays each participant’s pre and posttest manageability score. As can be seen, the PI participants had a slight improvement 0.13 overall after taking the PI course. This means that to some extent the PI course improved their decision-making ability and helped them cope with challenging situations. They had better ability and more resources available to overcome obstacles. However, Kalani’s posttest score decreased 0.25. The reason why his score dropped off could be explained by his SOC survey ratings. He indicated that sometimes he had feelings that he is not sure he can keep under control (item 4.13). This response serves as evidence that
adolescence is a time of big social and emotional development. Kalani may have experienced emotional up and downs during the pre and posttest.

Table 23

Manageability average score comparison

<table>
<thead>
<tr>
<th>Name</th>
<th>Pretest Mean</th>
<th>SD</th>
<th>Posttest Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalani</td>
<td>3.25</td>
<td>0.50</td>
<td>3.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Nahele</td>
<td>3.75</td>
<td>0.82</td>
<td>3.75</td>
<td>0.50</td>
</tr>
<tr>
<td>Peleke</td>
<td>3.00</td>
<td>0.50</td>
<td>3.25</td>
<td>0.50</td>
</tr>
<tr>
<td>Liko</td>
<td>3.00</td>
<td>0.82</td>
<td>3.50</td>
<td>0.58</td>
</tr>
</tbody>
</table>

Items on which the PI participants improved the most are listed in Table 24. At least two students increased one rating on each of the following items in the pretest. The most substantial improvement occurred in the Comprehensibility component, indicating that participants understood themselves, others, and the world better after their experiences in the PI class. The increase in Manageability suggests that the PI course enhanced their ability to manage and balance their emotions and behaviors, and deal with complicated situations.

Table 24

Rank of improvement in specific items in SOC

<table>
<thead>
<tr>
<th>Components</th>
<th>Items</th>
<th>Total Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensibility</td>
<td>4.8 How often does it happen that you don’t quite understand your own feelings and ideas?</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4.9 How often does it happen that you have feelings inside that you would rather not feel?</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4.11 How often does it happen that you have the feeling that you don’t know exactly what’s about to happen?</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4.2 How often has it happened in the past that you were surprised by the behavior of people who you thought you knew well?</td>
<td>2</td>
</tr>
<tr>
<td>Manageability</td>
<td>4.3 How often has it happened that people whom you counted on disappointed you?</td>
<td>2</td>
</tr>
</tbody>
</table>
Many people—even those with a strong characteristics feel like losers in certain situations. How often have you felt this way in the past?

Table 25 presents a comparison of the PI group and traditional social studies group pretest average scores. The pretest average score between these groups were respectively 3.08 and 2.85, which indicates that overall the PI group had a better sense of coherence than the traditional social studies students on the pretest.

Table 25

<table>
<thead>
<tr>
<th>PI group and traditional group average pretest scores</th>
<th>6 PI Pretest</th>
<th>33 Traditional Pretest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>3.08</td>
<td>0.61</td>
<td>2.85</td>
</tr>
</tbody>
</table>

The PI students may have had more resilience in dealing with difficult situations and a stronger belief that life’s struggles and demands were seen as worthwhile of investment and engagement (see Table 26). However, the traditional social studies group had a slight higher score in comprehensibility than the PI group on the pretest, which implies that the traditional social studies group may have had a stronger belief that the environment was structured, predictable, explicable, and understandable than the PI group. This may suggest that because the PI group could not make good sense of the world, they were motivated to take the PI course. Of the six areas on the SOC, the PI group improved their comprehensibility score the most, with a 0.58 increase in the post test. This could mean that the class was particularly helpful for them in this area.

Table 26

<table>
<thead>
<tr>
<th>PI group and traditional social studies group pretest scores in each component</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td>PI Pretest</td>
<td>Traditional Pretest</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>----------------------</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>3.47</td>
<td>0.36</td>
</tr>
<tr>
<td>Manageability</td>
<td>3.08</td>
<td>0.49</td>
</tr>
<tr>
<td>Comprehensibility</td>
<td>2.70</td>
<td>0.53</td>
</tr>
</tbody>
</table>

Summary

To conclude, the PI students felt very engaged in learning in the “Philosophical Inquiry” class. Their post test rating of this item was 4.75 based on a five point Likert scale, 0.75 increase compared with the pretest. At the end of the class, the PI students wanted to recommend the class to others, and they provided the highest possible score (5.00) on this item. In addition, there was 0.5 increase compared with the pretest. Participants also shared in their end of semester focus group that the PI course was very different from other social studies classes, because it stimulated their interest, challenged their thinking, and encouraged them to build a better community. They were motivated to come to this class, because they felt they matter and had opportunities to express their feelings and comments not just memorizing facts and listening to what teachers had to say.

The PI group’s average posttest rating in PIQ was 4.19, which increased 0.28 compared with the average pretest score of 3.91. The rating indicates that PI participants’ perceptions of their global learning outcomes such as their abilities to engage in philosophical reflection, to make decisions, to be a responsible and ethical member of the community, and to show empathy to others was improved after the PI experience. They also indicated improvement in transformative learning and joyous learning experiences through the class, since the posttest rating for these two components were 4.38 and 4.19 respectively.

Among the six components, students reported improvement in their ability to think and reflect the most, because there was a 0.60 increase between the pre and posttest scores on these items. The reasons why they improved their philosophical reflection score maybe because they
formed a habit of thinking and reflection in the PI course. In the beginning of the class, students would reflect on a quote, a poem, or a video that connects with the day’s topic. And at the end of the class, they reflected on their community of inquiry and how they applied new learning in their life. The second ranked improvement occurred in students’ perceptions of their abilities to make decisions since the average increase was 0.41 between the pre and posttest scores. This result indicates that students were more able to evaluate situations, solve problems, and make judgments. In the PI course, students were encouraged to pose questions that they genuinely wondered about. Then in the philosophical inquiry, students engaged in thinking with each other to address these questions and concerns. In other words, they learned a systematic way of solving problems. They also learned to listen, to share, and to understand themselves and others. They began to trust their own thinking and appreciate different points of view as well. All these factors contributed to their thinking abilities, so they had a stronger belief in making better decisions.

In contrast with the traditional social studies group’s pretest average on the PIQ 3.85. Since the average pretest score for the PI group was 3.73, it was slightly lower than the social studies students at the beginning of the class. But after the PI intervention, PI group’s score increased to 4.19.

The PI group’s average posttest rating on the SOC was 3.42, which increased 0.25 comparing with the pretest 3.17. The result implies that the PI group’s global sense of coherence improved after the philosophical inquiry class. Participants could make more sense of world and things that happened in their daily lives, and they were more able to manage resources to solve problems and make decisions. The most significant improvement happened in the Comprehensibility component. The increase was 0.58 from the pretest 2.80 to posttest 3.38. This
result is consistent with PIQ’s findings, which shows that participants’ ability in philosophical reflection and making decision improved.

The most interesting finding in the SOC was that the PI participants did not improve their Meaningfulness score, which suggests that these teenagers were still in the process figuring out their identities and what their future life directions. The average SOC pretest scores in the PI and traditional social studies group were correspondingly 3.08 and 2.85, which indicates that overall the PI group had a better sense of coherence than the traditional social studies on the pretest. However, their comprehensibility score was -0.10 lower than the traditional group, which may suggest that because the PI participants want to understand themselves, others, and the world better, so they were motivated to select the Philosophical Inquiry course.
CHAPTER 5. DISCUSSION AND CONCLUSION

This dissertation used mixed methods to examine the impact of a Philosophical Inquiry course on student academic engagement and student perceptions of personally meaningful life. Applying both qualitative and quantitative methods, this study developed a deeper understanding of what classroom contexts, conditions, discourses, tools and practices promote adolescent learning experience. Through six individual case studies and cross case analysis, Study One summarized qualitative reasons why the PI participants engaged in learning and their perceptions of a meaningful life. Study Two included two surveys with the same six PI participants and 33 traditional social studies participants. Results suggested that PI students’ global sense of coherence was improved after the PI experience, and their abilities to engage in philosophical thinking and make informed decisions were improved as well.

Based on emergent themes that appeared in students’ data, a conceptual framework of philosophical inquiry student academic engagement was constructed. This section will discuss the applicability of this theoretical framework. It will discuss the findings that are particularly important to educators and that are unique and interesting for readers to know.

The Philosophical Inquiry Student Academic Engagement Framework

Referring to the Philosophical Inquiry Student Academic Engagement Framework, this part first addresses conditions that promote students’ learning, including creating an intellectually safe community of inquiry context, building up relationships among the community, and encouraging every student to share. Then it discusses students’ learning processes in the philosophical inquiry. During the community of inquiry, students used the community ball to encourage thoughts and discussions, and to reinforce the quality of social interactions. Students’ cognitive processes involved raising questions, connecting to their former
knowledge and prior experiences, organizing thoughts, analyzing information, and articulating ideas. Although students experienced challenges, such as feeling confused, struggling with expressing ideas, they learned from appreciating multiple perspectives, engaging in active learning, and reconstructing their meaning of life and experiences in the classroom. At the end of this section, I discuss how students applied their new learning in their lives and the world.

**A Socio-cultural Context of Learning**

In the student qualitative data, the most important reason for students to engage in learning, or the most salient theme that appeared was that the PI class created an intellectually safe environment that fostered students’ learning and development. Echoing Vygotsky’s theory,
the context of a social-historical environment can significantly influence students’ learning (Vygotsky, 1994). Frankl (1969) stated that “the human being is completely and unavoidably influenced by his surroundings” (p. 99). Maintaining a positive classroom environment is a fundamental condition for students to thrive in learning. Each individual is a socially grounded self, and is “in the ongoing process of living in a social environment” (Campbell, 1995, p. 40). It is necessary for students and teachers to create an intellectually safe environment in the classroom. “Creativity and innovation can occur once the more basic needs have been satisfied” (Dreyfus, 1972, p. 3).

In the Philosophical Inquiry classroom, participants desire acceptance by their peers and teachers. They fear being judged because it may threaten their social standing. To some students, it is more important not to be bullied, ignored, or alienated, than it is to be an active participant in classroom activities (Miller, 2013). Participants indicated that the circular seating format and smaller class size helped establish an environment that could free them from some social and emotional stresses. The intellectually safe community provided them with ongoing opportunities to build up connections and relationships among each other. The removal of judgment and fear created a space where, despite their different ethnic backgrounds, beliefs and worldviews, they could openly share their personal experiences and explore controversial issues with their peers (Makaiau, 2010; Miller, 2013).

In an intellectually safe environment, the PI participants felt comfortable and were able to safely share, explore, and question ideas. In this “perfect context” students improved their communication skills without feeling unwelcome pressure (Lukey, 2012, p. 36). Their statements were treated with respect and care. Neither the speaker nor the audience could simply dismiss ideas that they disagreed with. Rather than judging, ignoring, or belittling someone, the
participants were willing to listen to each other attentively with a beginner’s mind (Jackson, 2013; Suzuki, 2010). They were willing to accept and appreciate ideas that were different from their own in order to have a wider perspective possible on a question or issue. They were comfortable with engaging different formats of knowledge, the known, the strange, and the unknown (Foss & Foss, 2011). This intellectually and emotionally safe classroom culture helped the participants build a strong community (Lukey, 2012), and gain greater self-understanding by viewing themselves from different perspectives (Banks, 2013).

**Enhancing learning by building relations.** Research showed that “persons with significant difficulties relating to others interpersonally often have related academic struggles in the classroom particularly as they get older” (Winner, 2011, p. 4). Freire (1970) wrote, “Education must begin with the solution of the teacher-student contradiction, by reconciling the poles of the contradiction so that both are simultaneously teachers and students” (p. 72). Deliberate and reciprocal student-teacher interactions in the PI classroom environment had an effect on both groups (Grant, 1979). The teacher added an important dimension to students’ social relationships. Teachers were often the more capable peers (Vygotsky, 1978) in the classroom, especially in the beginning that pushed students to think deeper and broader. Teachers are not only facilitators through asking questions such as, “What do you mean by…” or “Could you use a specific example to explain…,” but also participants by contributing their own thinking and ideas to the inquiry. As co-participant, teachers become “real” with their students, so an atmosphere of trust is built (Purkey & Novak, 1996, p. 50). As the community matures, the role between teachers and students began to blur, as students’ opinions increasingly influenced their teacher or changed their teacher’s thinking. Through social interaction, participants, teachers and students actively created, interpreted, reorganized, and reconstructed knowledge in
individual and meaningful ways. The fundamental norms and culture of a classroom were transformed, because the PI classroom was achieved a new pattern of teacher and student relationship and interaction, making students and teacher more connected.

Encouraging students to share. The inquiry is unable to thrive if there is no community. The sense of community is a precondition for participating actively in a democratic society (Sharp, 1993). If the teacher or student is not caring and conscientious enough to attend to each student’s voice, it is very easy for a class to neglect some silent students whose thoughts are never heard. “Commitment to an intellectually safe classroom is a commitment to inclusivity in which all participants are valued” (Lukey, 2012, p. 34). In the PI classroom, Nahele and Makali often raised their voices and frequently volunteered to contribute. Kalani and Peleke were more reflective learners who typically developed ideas and questions in their minds before speaking. Liko was a shy student who felt uncomfortable speaking in front of groups, at least initially in the first week of the class. Kanani was not confident in sharing her ideas. These differences may be due to learning preferences as well as personalities. However, a strong community enabled Liko and Kanani and other students with different learning styles and personalities to contribute. Active participants such as Nahele and Makali were able to use the community ball to invite Liko and Kanani to share.

In this socio-cultural learning environment, every student began to “think for themselves, to form independent judgments, to be proud of his [or her] personal insights, to be proud of having a point of view he [or she] can call his [or her] own” (Lipman, 1993). It helped students who lacked confidence realize their value (Lukey, 2012). The classroom fulfilled students’ psychological needs, such as autonomy, relatedness, and competence, which are the conditions that nurture intrinsic motivation (Deci & Ryan, 2008).
The Philosophical Inquiry Learning Process

Described in the foundation part of the house model, when students’ basic psychological needs of safety, belongingness, and esteem are satisfied in the classroom, they developed better socially and cognitively in the PI class (Maslow, 1968, 1987). In the p4cHI philosophical inquiry process, participants thought and inquired alongside their peers and their teacher into the topics and questions that they genuinely wondered about. They “grow in their own natural self-actualizing ways” rather than getting trained by imposed knowledge and skills (Schiro, 2008, p. 98). Participants criticized other social studies classes, like history, where they had to memorize facts and events. Knowing students’ concerns and motives, the PI course was designed to include, but not limit, and to integrate students’ experiences and prior knowledge, consider their interests and needs, support active participation and discussion, deepen their thinking and inquiry, and encourage multiple perspectives. The class created opportunities for students to wonder, discover, explore and imagine and allowed students to experience what that feels like. These purposes resonated with Sharp’s (1993) purpose of education:

The purpose of education is not only to transmit a body of knowledge but also to equip children with the skills and dispositions they need to create new knowledge and make better practical judgment, then the traditional classroom of “telling” is not appropriate. (p. 341).

The PI participants had enthusiastic desires to come to the class, engage in communities of inquiries, and share questions with their friends and parents. They simply found their chosen topics and learning interesting. Referring to their comments and survey responses, they performed their tasks better, achieved a greater sense of wellbeing, and had better personal and social integration and growth in the class.
**The community ball makes connections.** The PI participants appreciated that the community ball empowered them to share and to trust their own thoughts. While making the ball in the first one or two classes, students introduced themselves and shared their personal interests or stories that helped to build the intellectually safe classroom community (Jackson, 1998). Referring back to Table 9, participants improved their scores in item 3.9 (I am responsible for the learning of my peers). Maybe it is because the power of the community ball making students becomes a more responsible and ethical community member than they first enrolled into the class. The physical creation of this ball of yarn has been an instrument for group interaction (Lukey, 2012). As the learning progresses, the community ball becomes “a tool of instruction that is used to facilitate philosophical inquiry” (Makaiau & Miller, 2012). Mediated by the community ball, each student contributed to the community of inquiry (Kim, 2012). There is positive growth in students since they had become more confident in their responses.

The community ball is also “a means of assigning the power to speak” (Lukey, 2012, p. 32). It became a classroom management tool that made the whole class more regulated and more engaged. “Students were becoming better at waiting patiently for the community ball instead of interrupting, and some of the reluctant speakers began to raising their hands to share” (Kim, 2012, p. 26). Students learned to take turns and give other people an opportunity to share. Gradually students felt comfortable and responsible enough to use the ball to invite others to speak up and take their ownership in the inquiry. The ball “gives each student a sense of place and purpose that supports further classroom inquiry where the learning and discovery expands far beyond the content of the text” (Makaiau & Miller, 2012, p. 15). During the PI class, participants developed a sense of attachment to the ball. Peleke one day picked up a cord of the yarn outside of the class and brought it back to the classroom. Since Nahele will transfer to a
mainland school at the end of the PI course, he made a bracelet using yarn from the community ball. He even took a picture with all the community balls together in the PI classroom.

**Social interaction promotes learning.** Students’ cognitive development occurs with social, emotional, motivational investment during activities (Vygotsky, 1978). Kalani expressed that building up a community helped his learning. Nahele enjoyed making connections with his teacher and peers. Peleke shared with the visiting scholar that the community of inquiry made him engage in learning. Liko reflected in class that she learned from appreciating different perspectives. So the social interaction plays a fundamental and inseparable role in the process of participants’ intellectual development (Oakes & Lipton, 1999). In the beginning of the semester, Liko and Kalani did not want to share their ideas, especially Liko was not confident enough in trusting her own thinking, yet with the support and encouragement from their more confident peers and teachers, they were able to actively participate in discussions. “When working in cooperation with others to address problems with which they are familiar, even those individuals who are not so intellectually gifted can attain high levels of success” (Campbell, 1995, p. 233). Student academic achievement is positively influenced by the amount of active and collaborative participation in the learning process (Coates, 2007). The level of engagement and collaboration, the excitement among the PI participants while engaging in Plain Vanilla activities reshaped their learning into an aesthetic experience because it was full of life and its own form of beauty and spontaneity. Participants started to articulate their “inner language” in the class (Lukey, 2012, p. 34). They transformed from passive participants to active agents of thought and change in their class and life.

**Questioning reinforces deep learning.** The spirit of p4cHI is in fostering wonder, questioning and inquiry. Research has shown that learning how to format good questions in
relation to what students want to explore developed meaningful understanding of content (Graig, Sullins, Witherspoon, & Gholson, 2006). The PI participants criticized that in the other social studies classes, they lacked opportunity to ask questions and explore what they were interested in. But in the PI course, they were able to go deeper into an issue and develop a meaningful learning. In the PIQ survey, their scores in item 3.24 (I have a questioning attitude) improved; they asked more philosophical, insightful, authentic questions. They turned their learning into a journey of discovery (Azer, Guerrero, & Walsh, 2013).

Since the design of the PI course provides students with opportunities to think, ask questions, research issues, make decisions, and construct new meanings, students’ began to engage in deep learning (Azer, 2008, 2009). When seeking, asking or making inquiries into information and knowledge, students restructure their thoughts, integrate and apply knowledge, elaborate ideas using critical appraisal, and analyze reasoning behind what is said, and consider. These questions opened up possibilities of meaning and reinforced deep understanding of learning (Gadamer, 1980, 1994; Heijne-Penninga, Kuks, Hoffman, & Cohen-Schotanus, 2010).

Confusion facilitates learning. In the shared life and shared experience of the PI class, students experienced some cognitive challenges. They had challenges in summarizing, clarifying, and paraphrasing their thoughts and opinions, as well as others. Although they experienced confusion, their Philosophical Reflection and Decision Making scores in the PIQ, and Comprehensibility and Manageability scores in the SOC improved substantially comparing with the pretest. This implies the “intellectual order [comes] out of the confusion of beliefs” (Campbell, 1995, p. 91). Learning to respond to confusion helps students understand themselves, others, and the world better. In their intellectually safe community, generally participants reported they learned to understand their own feelings and ideas better (see Table 19, item 4.8).
They understood their life situation better since they knew better what was going to happen in their life (item 4.11).

These findings indicate that confusion is a necessary process for learning. When a person experiences a new event, disequilibrium comes in until he/she is able to assimilate and accommodate new information and then attain equilibrium. The equilibration involves the person striking a balance between him/herself and the environment, and gets through the process of assimilation, disequilibrium, and accommodation (Dasen, 1984; Lavatelli, 1973). Although sometimes participants felt puzzled, confused, unable to act, and uncertain about what is intended or meant, it is actually an initial and basic stage to reach accurate or real understanding of something. In their intellectually safe community, not knowing the solution to resolve a problem inspired participants to explore a variety of potential explanations, which gave them a deeper and broader sense to understand the issue. They reported that they thought about their own thinking more than that in the beginning of the semester (see Table 9, item 3.19).

**Multiple perspectives benefit learning.** In the context of global movement and pluralism, the scope of education must be broadened to include diverse cultures and multiple perspectives. Based on the premise that we live in an increasingly diverse society, multicultural scholars advocated the notion that “multiculturalism is simply a fact-a condition of culture” (Oakes & Lipton, 1999, p. 3). Banks (2013) encouraged students to view concepts, issues, themes, and problems from diverse backgrounds and different perspectives.

Nowadays we interact with a greater diversity of people and views than ever before. We confront different values, skills, knowledge, and attitudes every day. We compare ourselves to different standards more than ever before because we have opportunity to engage more in educational exchange among countries and international education than ever before. Thus we
need to have awareness and develop the ability to accept and truly celebrate human diversity, which is a trend of our emerging global society. If we lack education and experiences regarding this reality, will students be able to obtain the skills, knowledge, and attitude to survive in this fast growing diversified world? It is now a responsibility for teachers and educators to help students and themselves transcend thinking beyond their accustomed narrow and partial perspectives.

The Philosophical Inquiry class addressed this issue by exposing students to multiple perspectives. Appreciation of learning from multiple perspectives permeated the students’ qualitative data, including class inquiries, daily reflections, Philosophical Insight Papers, and the Final Take-Home Reflection. Different perspectives made the class community of inquiry more interesting (Ikeda, 2012). Participants considered the emotions, thoughts, beliefs, prior knowledge, motives and intentions of others as well as themselves. They agreed that learning the perspectives of others helped them understand themselves better (see Table 9, item 3.28). So the self-corrective nature of philosophical inquiry helped participants revise and improve their thinking (Matsuoka, 2012). They “see the beauty of dialogue; it is both a testing and challenging of our perspectives as well as a playful and joyful pursuit for truth” (Lukey, 2012, p. 31).

Listening helps learning. Krishnamurti (1970) said that listening is one of the highest and one of the greatest arts in life. When people communicate, they should listen with understanding, with various depths of their being, not with memory, a preconception, a frozen thought, or a particular form or view. Listening is not simple; there will always be intervening scenes of our own thoughts, biases, prejudices, and conclusions. Students need to learn to listen so that they can better listen to learn (Vandergrift, 2004). Yet nowadays, “We are losing our
listening. We spend roughly 60 percent of our communication time listening, but we’re not very good at it. We retain just 25 percent of what we hear” (Treasure, 2011).

The PI class emphasized listening. The teacher asked the students to listen attentively with empathy and care. Students also expressed that they listened with understanding and attention. When they exhibited good listening in the class, they would rate themselves a good philosophical inquiry participant in the Philosophical Insight Paper. In other words, the participants considered listening as an important quality for classroom engagement. They acknowledged that listening helped them build community and make connections (Toyoda, 2012; Miller, 2013). Because of listening, students felt they were respected and mattered in the class. Listening to their peers’ ideas, concerns, struggles, and successes helped them become more empathic human beings.

**Sense of coherence improves learning.** According to Antonovsky (1987, 1991), sense of coherence is strengthened by life experiences with three specific features: predictability, underload or overload balance, and participation in socially valued decision-making. Identity refers to more than just how adolescents see themselves right now; it also includes what has been termed the “possible self”—what individuals might become and who they would like to become (Markus & Nurius, 1986). Establishing a sense of identity has traditionally been thought of as the central task of adolescence (Erikson, 1968), although it is now commonly accepted that identity formation neither begins nor ends during adolescence. Adolescents who are allowed the space and time to explore various possibilities are able to establish a clear sense of identity and self-awareness. The PI participants established a realistic and coherent sense of identity by relating to others and understanding themselves in an intellectually safe context. In the class, they developed their thinking ability, which is evidenced in the PIQ and SOC surveys, to consciously
sort through who they are and what they can be. They wanted to be themselves, were interested in gaining happiness and achieving success, and determined to live a balanced and self-actualizing life. They wanted to unite with others to create a better community and a better world. The clearer understanding of their future and the world strengthened their comprehensibility. PI participants gained confidence and felt a sense of continuity and security in the class as well (Modin, Ostberg, Toivanen, & Sundell, 2011).

Adolescent cognitive enhancements lay the groundwork for moral reasoning (Eisenberg, Carlo, Murphy, & Van Court, 1995). The PI participants developed a moral sense of helping and caring for others, and values of ethical behaviors. The process of philosophical enquiry leads to moral action and positive social conduct in the form of respecting others, taking differences, and behaving ethically and responsibly (Makaiau, 2010). In the class, participants felt an optimal balance of class demands, an availability of resources for accomplishing a task, an ability to use their skills and knowledge to question and inquire, and a sense of autonomy to direct inquiries, their manageability is enhanced (Modin, Ostberg, Toivanen, & Sundell, 2011). They found a balance in learning at the PI course.

The PI participants were concerned about building and maintaining relationships with their classmates and teachers through sharing, trust, respect, and support. They learned to take other people’s perspectives and intentions into account when posing questions, engaging in communities of inquiries. Kohlberg (1969, 1981), Reimer, Paolitto, and Hersh (1983), and Snarey’s (1995) research also supported these findings. When participants found studying and interacting with their peers an important source of meaningfulness, their motivation and engagement in learning were increased (Modin, Ostberg, Toivanen, & Sundell, 2011).
Meaning of life in adolescence. Adolescents become “increasingly aware of their concern with values, identity, religion, morality, politics, marriage, family, education, careers, and interpersonal relations” (Dreyfus, 1972, p. 1). “They can no longer pin their hopes and dreams on their parents and the promise offered” (p. 4). In the PI course, each participant searched for meaning in his/her own way. Liko wanted to follow nature’s way, Makali considered that an accurate evaluation of his life situation and good decision-making would lead him to a better life; Peleke thought life’s pattern was like Yin and Yang, and he should always stay in a state of neutrality; Nahele and Kalani were interested searching for balanced and happy lives. The research findings suggested that these six adolescents were searching, choosing and committing themselves to goals and meanings and expected a better future ahead but also anxiety about moving to an independent life and reconstructing their own life on the other.

Maughn (2011) described that in Philosophy for Children, students usually practice “political and ethical interdependence”, aim to gain practical wisdom, and contemplate better ways to live (p. 206). They “continually seek out the true, the beautiful and the good as categories of existential meaning – the kind of meaning that can be lived”. The “hidden curriculum” of P4C has to do with the ethical, the aesthetic, and the political aspects of human experience (p. 207). Students are willing to correct their beliefs and values, and rediscover the meaning in their own ways. The PI participants seemed to search for meaning through “interpersonal and intrapersonal harmony” and peace (p. 2). They wanted meaning through intimacy with their peers, their teacher, and themselves. They were concerned with building up social and emotional relationships and connections within the class and beyond. Each of them developed a firmer and more cohesive sense of personal identity and wanted to be themselves.
They wanted to define and construct their own meaning of life. The future task for them “is to explore what in himself [and herself] gives meaning to the world” (Dreyfus, 1972, p. 5).

The participants were concerned with social injustice, ethical problems, increased technology and pollution, racism, and world politics in their cooperative inquiry. It seemed that all the serious questions raised in the class grew out of their “different conceptions, expressed or implicit, of what society [and human being] is and should be” (Campbell, 1995, p. 243). They developed awareness of “the unity of humanity,” the oneness of mankind (Frankl, 1969, p. 98), since they questioned whether the white man has color and why people could only see their own ethnic group arise. In the process of discovery they encountered apparent chaos, confusion, and anxiety. This is possibly the reason why their meaningfulness score did not improve. Dewey described,

the joy of constant discovery and of constant growing…is possible even in the midst of trouble and defeat, whenever life-experiences are treated as potential disclosures of meanings and values that are to be used as means to a fuller and more significant future experience. (Campbell, 1995, p. 64).

Their life goals and life meanings were reconstructed or reexamined during the philosophical inquiry course because of their social constructive learning experiences. Their personal task and personal commitment provided them with a basis for a new meaning of life with which to inform their future living.

**Application of Learning**

After reading about the philosophical inquiry learning process, it may be of your interest to know what behaviors the PI participants exhibited, what dispositions they manifested, or what social, ethical or political consequences they had. The communities of inquiries supported an
engaging and dynamic reflection into practice. It has been conducive to a paradigmatic shift in their consciousness. Their ability to consolidate and use the information they learned from other classes was strengthened during the process of sharing their thoughts and ideas, listening to others, and formulating responses. When they learned from multiple perspectives, they also demonstrated willingness to re-think and revise their own ideas and viewpoints, and put this into practice. They used the GTTK questions in their PI course and beyond. They kept wondering about the questions they discussed in the classroom, and even shared them with their parents and friends.

Their posttest average transformative learning score (4.38) strongly suggest that their existence became more authentic. As Frankl explained, “Self-transcendence is the essence of [human] existence. Being human is directed to something other than itself” (p. 50). They were able to mold for themselves a more meaningful and significant life experience, because they not only realized their freedom, but they were also fully aware of their responsibility. There is plenty of meaning waiting for their responses, such as the polluted environment, underprivileged people, or with respect to social justice. Their growth resonates with Dewey’s theory that “Education is the fundamental method of social progress and reform” (Campbell, 1995, p. 214).

In this interdisciplinary course, students and teachers worked together to improve their thinking and community, and constructed their meaning and purpose. In the community of inquiry, students connected to their self, to the world, and built up relationships with the self and the world. They did not have to memorize dates, facts and events, but participated in democracy and making changes in the world. They approached the subjects matter with deeper thinking, and used the new mind to direct their future decisions and lives. The teacher-facilitated, inquiry-
based curriculum encouraged “the continuity of plasticity and the growth of a reflective mind” (Schertz, 2007, p. 196).

**Learning by doing.** Having the PI students teach others what they have learned benefited them immensely. The Waimanalo Intermediate school experience not only challenged them to be a real p4cHI facilitator but also helped them to become better PI participants. The experience helped them realize “the ties that bind them to all the other members of the community, recognizing the responsibility they have to contribute to the upbuilding of the life of the community” (Campbell, 1995, p. 218). For example, I had chance to observe Makali’s facilitation in a classroom. In his inquiry with students, he used a term discussed in the PI course, “ethical egoist,” to question: what will happen if no one makes sacrifice, and everyone just wants to be happy?” This showed that he transferred his new learning to his life and his teaching. In the debrief session back at KHS, he shared that: “It took a year for me to know how to do philosophy. But just after one operation, I understand it much better. I would prefer schools start doing philosophy earlier from 6th grade.”

Learning by doing helped the PI participants understand the concept and pedagogy of p4cHI better. They strengthened their sense of self-worth and competence when they received recognition, approval, appreciation, and respect from their students. This experience created an interest in all students in “furthering the general good, so that they will find their own happiness realized in what they can do to improve the conditions of others” (Campbell, 1995, p. 217). Students learned to think as an ethical member of the community. They are responsible for themselves and the people around them.

**Coming Back to Dewey and Vygotsky**

The research questions presented in this study – high school students’ academic
engagement and understanding of their life meaning, requires a theoretical perspective that accounts for both aspects. In the 1930s, Dewey (1938) proposed the radical transformation of schools that contributed to the creation of career and technical education courses in order to promote student engagement (Fletcher, 2014). According to Dewey, first, academic achievement is positively influenced by the amount of active and collaborative participation in the learning process (Coates, 2007). Second, authentic interest can be best achieved when teachers are able to find the students preferences, needs, and skills in the subject matter. The planning and teaching, the studies and topics included in the course of study should enrich students’ lives and consider their direct interest. Third, one way to reinvigorate schooling is to make more use of students’ out-of-school experiences, as they are more likely to encourage reflection. Engagement occurs when students engage in activities related to their interests and competence (Marcum, 2014).

In the context of the Kailua High School Philosophical Inquiry social studies curriculum, students actively engage in their community of inquiry and take the major responsibility for their learning. Learning by doing (Comenius, 1896), or the incorporation of activity and experience in the classrooms is at the heart of Philosophical Inquiry class. Philosophical Inquiry students “grow[ed] in their own natural self-actualizing ways” rather than getting trained by imposed knowledge and skills (Schiro, 2008, p. 98). The Philosophical Inquiry class integrated students’ prior experiences and knowledge structures, considered their interests and needs, encouraged their active participation, deepened and broadened their thinking and inquiry, and inspired multiple perspectives, their academic engagement improved substantially at the end of the semester, which is both supported by student quantitative and qualitative data. Students had a experience (Dewey, 1938) in the PI course, because they started from building a community and asking questions, and eventually they learned to cope with emotions, trust their own thinking,
and better solve problems. Their learning experiences culminated in their application of new learning and transformation of living philosophies.

According to Vygotsky’s sociocultural theory, first, academic engagement requires intellectual and affective involvement. Students’ cognitive development occurs with social, emotional, motivational investment during activities. Second, a social constructivist classroom is highly literate place where students and teachers can exchange ideas effectively. Third, the activities designed in the classrooms no matter it is reading or writing, are shared socially (Palinscar, 1998). When students participate in challenging activities, the more capable peers and teachers will guide and support the learners’ learning and thinking. Social interaction thus plays a fundamental and inseparable role in the process of cognitive development (Oakes & Lipton, 1999). Fourth, since environmental factors affect students learning experiences it’s necessary to create a safe and supportive environment in the classroom.

The main Vygotskian theories at work in the Philosophical Inquiry classroom is the idea that a student’s cultural development appears in two levels. First, they raised their own questions on an individual level. Then they voted and discussed questions on a social level in their Plain Vanilla inquiries. They internalized new knowledge and reconstructed their understandings from an interpsychological to an intrapsychological level (Vygotsky, 1978). The PI participants “come to think for themselves through the internalization of social practices” (Cam, 2006, p. 45). As Philip Cam writes, “it would be a natural extension of Vygotskian psychology to suggest that children come to think for themselves through the internalization of social practices” (p. 45).

In PI students’ learning process, collaboration, cooperation, and assisted performance were commonplace (Makaiau, 2010). Social interaction played an important role in the development of students’ cognitive improvement. According to Vygotsky (1978), much
important learning by the person occurs through social interaction with a skillful tutor. The tutor may model behaviors and/or provide semiotic mediations as they interact with each other (Tharp & Gallimore, 1991). Through the cooperative or collaborative dialogue (Vygotsky, 1978), social interaction and the process of cooperative activity, the higher cognitive processes arise from the actions and speech of others (Tharp & Gallimore, 1991). Students’ improvement in philosophical reflection, academic engagement, sense of coherence, and transformative experience in the surveys provided strong evidence that students’ learning outcomes could be maximized when they work cooperatively in a community of inquiry and engage in intellectual work collaboratively (Lipman, 1988; Miller, 2012).

The development of PI participants’ learning is integrally related to the second important principle of Vygotsky (1978), the Zone of Proximal Development. This is an important concept that relates to the difference between what an individual can achieve independently and what an individual can achieve with guidance and collaboration from capable peers and teachers (Tharp & Gallimore, 1991). In each Plain Vanilla discussion, students would raise questions they wondered about. At the beginning, they always wanted to explore more possible answers within the community of inquiry. After collaborative inquiry, they could transcend the Zone of Proximal Development by assimilating different perspectives and internalizing new/changed ideas. They consolidated their understanding of questions and issues in and beyond the classroom. Participants reported that their transformative learning experience improved in the PIQ survey. The transformations in their knowledge structures and functions occurred after the class.
Educational Significance and Implications

Building on Makaiau’s study (2010), this research investigated student academic engagement and meaning construction across disciplines that included philosophy, education, and psychology. This collaboration extends her study in the area of curriculum-based identity interventions. Furthermore, no published studies were found examining student’s psychological wellbeing - their sense of coherence (Antonovsky, 1987) in the field of Philosophy for Children. Most previous studies were designed to better understand students’ cognitive development. Attention to students’ psychological and emotional development tended to be limited to consideration of such factors as empathy, being a responsible ethical community member, and the joyous learning and transformative learning experiences. The author developed a Philosophical Inquiry Questionnaire to investigate student cognitive and socio-affective development and perceptions of their learning experiences in a philosophical inquiry class. Although it is a pilot study, it will inform future survey design and a longitudinal study on the community of philosophical inquiry.

“It is the job of the educational system to help foster freedom by helping individuals to think better, to observe more clearly and to judge more adequately.” This freedom in Dewey’s sense is “not the right of each individual to do as he pleases,” but freedom of intelligence that “enable[s] an individual to make his own special contribution to the interests of society.” A genuine freedom rests in “the trained power of thought, in ability to ‘turn things over’” (Campbell, 1995, p. 170-171). If educators give students opportunities to “think for themselves,” (Lipman, Sharp, & Oscanyam, 1980, p. 13) and think in “responsible, respectful ways” (Jackson, 2012, p. 5), authentic thinking and inquiry will take place (Makaiau & Miller, 2012; Jones, 2012; Lukey, 2012).
The sense of wonder is “the mark of the philosopher. Philosophy indeed has no other origin” (Plato, 1961, p. 155). Inquiries grow out of students’ genuine wondering and questioning (Jackson, 2001). “This natural disposition to wonder is the first step in a process of making sense of our world,” and the heart of philosophical inquiry. However, because of the high stakes testing, students and their teachers often only have time to get through materials in order to pass the test. Their genuine sense of wonder, awe, and appreciation of learning is ignored. Teachers consequently cannot fulfill their convictions about good education (Makaiau & Miller, 2012, p. 10; Jason, 2001). In the p4cHI environment, students awakened their spirit to wonder, to question, to explore, and to experiment. Imagining a world, wouldn’t it be nice if educators could make classroom environments grounded in our human curiosity for exploration, own enthusiastic desire to construct our own self-defined meaning?

One current crisis in education is that students lack real interpersonal connections. Although contemporary formal education helps students gain tremendous external knowledge, accumulate skills and wealth to become good citizens and become members of the working force, emphasis on the basics of human life and existence such as health, happiness, and human values are too often overlooked or entirely missing throughout the worldwide educational systems (Ozmon & Craver, 2007). While education and schooling increasingly strives to integrates technology into teaching and learning, the high-speed Internet and social communication tools seem not to strengthen the internal and physical connections among students and communities (Xu, 2013). Younger generations experience this lack of intimacy to a much greater extent. Many adolescents are out of touch with themselves, with others, with nature, with the environment, and with the time they live (Roberts, Henriksen, & Foehr, 2009).
“Man, by temperament a social being, cannot easily tolerate such isolation; he wants and strives for companionship, intimacy, and relatedness – with himself and others – and today [he] feels thwarted and frustrated in these attempts” (Dreyfus, 1972, p. 31). So it is necessary for human beings to build a more caring, connected and compassionate world through education that is based on patience, tolerance and forgiveness (Dalai Lama, 2014). p4cHI practitioners are concerned with how to live responsibly, creatively, and cooperatively as human beings. The p4cHI community of inquiry creates the space and the opportunity for students to make fundamental connections within their individual selves and with other people. It assists students in making connections in their own thinking, between their emotions and their thinking, and other aspects of their self. It fosters better student and teacher connections as they participate in cooperative learning. Students get a sense of belonging, sharing, and being together in the class.

Education now cannot fully satisfy students’ psychological and social needs. That’s one reason that students do not feel engaged in their schooling, or even cannot construct meaning that guides and motivates their future development. Human beings have strong needs for identity, either identify the meaning of our life or have a sense of purpose (Frankl, 1969). We also have a fundamental need to explore the world and pursue personal growth (Dewey, 1997). Deci and Ryan’s (1991, 2008) research summarized that autonomy, competence, and relatedness are the conditions that nurture intrinsic motivation. When students experience autonomy, competence and relatedness in areas of their lives, they are more likely to perform their tasks better, achieve a greater sense of well being, and have better personal and social integration and growth instead of higher levels of coercion, frustration, and alienation. Authentic interest for learning is achieved by giving students autonomy to direct their own learning.
To learn, adolescents need to feel safe and supported. Without these conditions, the mind reverts to a focus on tension, stress, or anxiety. Starting on the first day of class, the p4cHI circle uses the community ball to encourage each participant to define an intellectually safe and unsafe environment. Then a comfortable and healthy classroom dynamic is established. “Explicitly creating safe and caring communities of inquiry is primary and essential” educational practice (Makaiau & Miller, 2012). It is the very heart of p4cHI inquiry (Ikeda, 2012). The research findings presented here provide evidence that an intellectually safe environment promoted innovation, inquiry, and risk taking.

One goal of education is to cultivate citizens with empathy and compassion with others and the world (Damon, 1988; Noddings, 2002; Nussbaum, 1995; Verducci, 2000a, 2000b). In the context of multiculturalism, empathy is “promoted as a bridge between differences, the affective reason for engaging in democratic dialogue with the other” (Boler, 1999, p. 156). However empathy’s educability and acquisition within the classroom remains an area that needs further exploration (Verducci, 2000b). The community of inquiry, the inquiry-based pedagogy used in the Philosophy for Children approach to education provided students with means to engage in interactions that support the sharing of affective states, which had shown to promote further development of empathy (Schertz, 2007). The Philosophical Inquiry course supported a “fundamental communicative process that allows for the intersubjective sharing of feeling states and subjectivities” and fostered “personal and societal growth and transformation” (p. 187). In the PI course, students learned to appreciate and accept multiple subjectivities, and engage with beliefs that may hold completely different opinions. In the PIQ survey, results showed that perspective taking, listening, and caring others improved students’ empathy. Nahele and Kalani were active participants in the community of inquiry, but they knew that they should give Liko
and Kalani opportunities to share. Role taking is human’s most advanced empathic ability, because it needs deliberate effort and practice (Hoffman, 2000; Ickes, 1997). Ultimately the Philosophical Inquiry classroom became a place “of collective transition…, a nurturing environment for interwoven body consciousness” (Schertz, 2007, p. 198).

Public schools are represented as “the promise of a democratic future and offered pedagogical opportunities to provide the knowledge and skills for students to become critically engaged citizens” (Giroux, 2008, p. 8). However, students currently are often being treated as consumers and test takers. The Philosophical Inquiry course constructed pedagogical approaches that connect to students’ needs, interests, and contexts. It is a curriculum not only designed by educational researchers, teachers, but more importantly by students in the State of Hawai‘i (Makaiau et al., 2014). They transformed the traditional education that used prescribed curriculum and established protocols into a deliberate democratic education that affirmed and enriched the “meaning, language, and knowledge forms that students actually use to negotiate and inform their lives” (p. 17). Students became agents in their learning process and social change (Aronowitz, 1994; Said, 2004). The Philosophical Inquiry course made education “not only about issues of work and economics, but also about questions of justice, social freedom, and the capacity for democratic agency, action, and change as well as the related issues of power, exclusion, and citizenship” (Giroux, 2008, p. 15). If the school is to remain a site of public good, critical thinking, and humanistic collaboration, educators will have to redefine the knowledge, skills, attitudes, and practices currently being favored in high school’s social studies class in order to bridge the gap between secondary education and the broader society.
Limitations of the Study

It is important to note the quantitative methodological limitations involved in this study. As previously discussed, an important limitation in this research is a limited sample size. The six PI participants and thirty-three traditional social studies participants limited the ability to utilize sophisticated statistical methodologies to conduct a quasi-experimental study (Shadish, Cook, & Campbell, 2002). Thus Study Two could not examine the complex relationships between the constructs, such as examine whether there were significant differences between the two the PI and traditional social studies groups after the PI experience, or check correlation between the PIQ and SOC, or variables in these surveys to examine whether the psychological factors served as mediators for student academic engagement. Future research would benefit from the use of a larger sample of both groups. Then the study could draw statistical inferences and make broader generalizations from data analysis results.

Another important limitation of Study Two is that the PIQ is a newly created questionnaire for which psychometric properties have not yet been fully examined. Although the survey’s reliability coefficient 0.97 is satisfactory, it used only 39 students’ data. Thus future study may consider the development of this survey and reliable measures for examining such constructs based on at least 300 students’ response in order to draw rigorous statistical conclusions regarding survey validation.

The third limitation of Study Two is the attrition of two participants due to absenteeism (Makali and Kanani), which is a threat to the internal validity. The attrition may lead to alternative explanations of data that account for the observed differences. Although students improved their comprehensibility of SOC, decision-making and philosophical reflection substantially after the PI intervention, these changes may be attributed to the compounding
effects of their maturation and cognitive development. Furthermore, the discrepancy between the PI and traditional social studies group may due to the age differences (Brewer, 2000).

The first limitation for Study One may be due to the researcher’s position. She was a member of the PI class community, so she built up social relationships with the participants. In class discussions, she had opportunities to share her understandings of a meaningful life and the right way to live, which may have introduced some bias during data collection.

Secondly, the findings from the six participants may not be generalizable to the larger population because each participant brought into the PI course a unique background. Kalani loved playing soccer, so he often emphasized community building. Peleke was interested in Taoism, and he always stressed neutrality. Nahele lived in Korean for almost 10 years, and his thought was influenced by Buddhism. Liko always connected her family education into the learning. Because Makali had to transfer to another school, during the middle semester he built up more emotional connections with the class. Kanani needed to work for at least 10 hours per day, so she could not focus on study or come to the class. Due to these differences among the participants, it is appropriate to use multiple case studies to study each participant in depth. But when PI classes recruit more participants, future studies may apply grounded theory or phenomenological approach.

Lastly, it has been implied throughout this study that adolescents were interested in searching for a balanced life and the concepts of success and happiness. These ideas might be influenced by the teacher’s self-imposed moralistic demand or values. Although the teacher is a co-participant with the PI students, she spent longer time in expressing her ideas and facilitating the discussion. She chose the quote: “balance leads to success” to the class, and shared that balance is an important goal in her life. So students might be influenced by her opinions.
Recommendations for Future Research

Although the results of the present study are robust due to its rigourous empirical research design, there remain many questions about the role of philosophical inquiry in promoting students’ academic engagement and meaning construction that will need to be considered in future research efforts. The Kailua High School is a suburban public high school at Honolulu, it will fill research gap if researchers consider conducting research in high performing public schools, private schools, and urban schools in Hawai‘i and beyond among all grade levels. Makaiau, Leng and Fukui (2015)’s research showed that p4cHI approach to education could help educators and researchers from different ethnic background reduce prejudice, facilitate intercultural communication, and strengthen international collaboration, it will be important in future research efforts to consider whether p4cHI exerts a similar effect upon K-12 or university students from different cultures. Millett and Tapper’s (2011) meta-analysis of the benefits of collaborative philosophical inquiry in schools also recommended that future research could best adds to the scholarship of Philosophical for Children if it studies ethnically and geographically diverse population of students. Incorporating non-Western philosophical traditions to broaden Philosophical for Children research is also recommended by Maughn (2011).

Youth violence is a world concern worthy of deeper understanding and community intervention and support. The Asian/Pacific Islander Youth Violence Prevention Center investigated various forms of interpersonal youth violence with communities in Hawai‘i. They found that p4cHI was instrumental in reducing and preventing interpersonal youth violence problems. The p4cHI curriculum used in the Ethnic Studies course promoted cultural tolerance and resilience through critical thinking, conflict resolution, and understanding diversity (Adler,
Nishinakada Elementary School in Japan incorporated p4cHI in their classroom discussions, researchers found that p4cHI helped students recover from the psychological trauma that was created by the 2011 Tsunami. Students who lost their parents began to share their inner emotions and experienced emotional catharsis. p4cHI revealed many problems that orphans suffer and had become a tool for psychological counseling (UN World Conference on Disaster Risk Reduction, 2015). Further research is needed to design and evaluate p4cHI approach that promotes emotional and psychological well being regarding resilience and mental health in culturally appropriate ways.

In April, 2012, the Dalai Lama visited the Kailua High School when he learned that the unique p4cHI instructional method, which is a departure from the traditional top-down model and prescribed curriculum, created a community of engaged student thinkers. The principal remarked that there had been violent incidents and related suspensions, but because of the positive influence of p4cHI, students gradually became peace contributors to the world (Eagle, 2012). Future research could focus on examining p4cHI’s impact on peace education using rigorous research design.

The Philosophical Inquiry naturally drew students and teachers’ attention to significant aspects of classroom interaction, highlighted critical episodes of educational interaction: the meaning of intellectual safety, the necessity to question, freedom of thought and expression, the cultivation of caring and responsibility human beings, difficulty and controversy and the conditions that enable thinking and inquiry to flourish. In the philosophical community of inquiry, students and teachers made important connections to much wider debates in society about democracy, equality, human rights, education, power, nature, and pollution: debates that
impinge on their identity and role, and future development. It provided an exceptional forum to explore the risks and responsibilities that are entailed as a student and a citizen and the courage and determination required to bring about a cultural and societal change (Haynes & Murris, 2012). Moments of disequilibrium in the collaborative community of philosophical inquiry were to be expected and were educative in each participant (Murris, 2008). Critical episodes experienced in the context of incorporating philosophical inquiry into the compulsory school curricula and classroom are particularly valuable ‘resources’ for both students and teachers’ professional development. “Teacher education needs to provide a much stronger foundation in philosophical methods that can inform professional practical judgments, by embedding them in the ongoing investigation of classroom practice and the lives of teachers and students in educational communities” (Haynes & Murris, 2011, p. 299).

Most of the teachers who have engaged with Philosophy for Children and used it with students over a period of time felt that they had gained skills as facilitators (Darrens, 2013). They realized that their teaching style had been more collaborative. They ability to prompt students’ thinking and questioning improved as well. Teachers were more aware skills that students were developing, and students who were not participating. This highlighted students that may need extra support or encouragement. The mostly commonly reported changes were adopting a less teacher-lead approach, focusing more on the students, not providing answers or filling knowledge but allowing students to express their feelings and thoughts, and giving students opportunities to wonder and reflect. Daniel and Auriac (2009) reported that experienced teachers who experienced the community of philosophical inquiry widened and deepened their teaching knowledge, developed their thinking skills and a personal and critical re-appropriation of their teaching experience, and their self-esteem. Thus it would be valuable if future research could
investigate the Philosophical Inquiry classroom teacher’s professional development and teaching and learning experiences.

China is undergoing an educational reform that calls for a change from a rigid, fixed curriculum and didactic pedagogy to a more flexible, student-centered curriculum and inquiry-based pedagogy. The rigid text-based curriculum mandated from top down and the didactic nature of teaching that deeply rooted in Chinese educational system are seen as at odds with the main goals of educational reform and holistic student development (Lan, 2010). Wang (2010) argued that in order to shift emphasis from exams to student abilities, there is a need to rebuild the school culture that motivates administrators, teachers, and students in an entirely different direction, a culture that values a set of student qualities beyond basic knowledge and skills. Many people in China now advocate for democratic citizenship and the critical and creative thinking ability. Hence, p4cHI fits into the big picture of Chinese educational reform. Therefore research that studies the implications of Philosophical Inquiry class to Chinese education is favorable in Chinese educational context.

Conclusion

To the extent that I have offered a perspective to those who want to engage in philosophical inquiry, who wants to learn p4cHI more, or who are trying to understand youth and their concerns, I have achieved my goal. I intended to portray a picture of six adolescents, their perceptions and their philosophies in an engaging philosophical inquiry classroom, and their search for meaning, as I have grown to understand from them through my role as a student, researcher, and friend.

In determining an appropriate and holistic approach to investigating students’ learning experiences, this study involves multiple forms of data collection, specifically survey
questionnaires, student work, focus group interview, classroom discussions, and reflective notes. These data collection methods make sure the quantity, quality and sufficiency of the data gathered captured, interpreted, and explained students’ complex learning experiences. Applying both qualitative and quantitative methods, this study developed a deeper understanding of what classroom contexts, conditions, discourses, tools and practices promote adolescent learning experiences.

Through six real-life case studies and a cross case analysis, Study One summarized reasons why the PI participants engaged in learning and their perceptions of a meaningful life. It developed a conceptual framework of student academic engagement in the Philosophical Inquiry class based on salient themes that appeared in student data. In brief, the six participants’ perceptions of an engaging philosophical inquiry classroom can be categorized into three main themes: First, maintaining a safe and positive classroom environment is a fundamental condition for learning. Second, asking questions, sharing ideas, listening attentively, thinking deeply, and making connections are the manifestations of an engaging classroom in the philosophical inquiry process. Third, students transcend their learning experiences by living a new philosophy.

Study Two conducted two surveys with these six Philosophical Inquiry participants and thirty-three traditional social studies participants. The Philosophical Inquiry Questionnaire findings indicated that PI participants’ global learning outcomes that include students’ ability to engage in philosophical reflection, to make decisions, to be a responsible and ethical member of the community, and to show empathy to others were improved after the PI experience. The Sense of Coherence Scale results suggested that PI students’ global sense of coherence was improved after the PI experience as well. Participants could make more sense of the world and the events that happened in their daily lives. They were more able to manage resources to solve problems and make
informed decisions. The most interesting finding in the Sense of Coherence Scale was that participants did not improve their Meaningfulness score, which suggests that these teenagers were still in the process figuring out their identity and what their future life will be.

**Personal Reflection**

Every time I went into the philosophical inquiry classroom, hearing the birds singing, watching students writing their reflections and inquiring deeply into the questions they genuinely wondered about with each other, I felt that I dived into a peaceful sea of consciousness. This research was a healing and unique experience for me. Because of researching and learning in the class, I was mindful of my thinking, my heart, and my life. I felt I was living in the present moment and developing a sense of cohesiveness. The Philosophical Inquiry course resonated with my philosophy of life, which is a life of enjoyment, a life of learning, and a life of reflection. The class fulfilled the three dimensions of my life and helped me integrate my intuition, emotions, thoughts, past, present, and future together. It made me realize deeply that education would cultivate a better self if we provide students with a time and space to reflect and reconnect within themselves, with others and the world.

Conducting this research was also my identity exploration process. From June 17, 2013, I started my self-study journaling project with two of my colleagues in order to figure out my research questions and design. In the beginning, I did not know what I should write in this dissertation but just knew that I want to contribute to the development of Chinese education and pursue my interests in education and psychology. I thought if I understood whom I am, where I come from, and where I want to go, I could be able to find a dissertation topic I want to engage with. Then I started to question what kind of human being I want to be and what kind of students I want to nurture. As time went by and as I kept the journal with my colleagues, I decided to
narrow down my research focus on students’ academic engagement and meaning searching. Based on the research questions, I began to design the research and form a dissertation committee.

I used the journal as a tool to reflect on my dissertation writing and data collection and analysis process. I felt that I was communicating with my true self, a self that was not affected by the worldly phenomenon but realized by my true heart. On June 25, 2013, I recorded that “I feel I am a chicken with head cutting off. I keep running around, but forget where to head for.” On October 19, 2013, I wrote, “I just feel more power and momentum to do PI and p4cHI research…. I hope one day you two…go with me to China to spread the PI and p4cHI seeds and watch it growing into a prosperous forest.” The journal I wrote one and a half years ago reminded me why I came to the U.S. to study, what resonated with my deep heart, and where I wanted to go in the future.

In the Philosophical Inquiry class, there was a revolution in teacher and student relationships and educational structures. According to research findings, the philosophical inquiry could motivate students because their own opinions, ideas, needs, and contributions could shape the evolution of the dialogue and curriculum. The class freed students from being forced to accept teacher-derived preconceptions of moral truth. They could be themselves and free thinkers. Education became a site of cultural reproduction. The Philosophical Inquiry transforms the fundamental norms and traditional culture of a classroom into a community of inquiry. The teacher facilitator believed that learners could be able to actively create, interpret, reorganize, and reconstruct knowledge in individual and meaningful ways. This nature of teaching made me reflect on what kind of educator I want to be in the future. I want to be an
educator who helps students keep their sense of wonderment, and who fires students’ passion in pursuing their dreams and interests.

I am a product of Chinese traditional education that advocates knowledge transmission and diligent learning without much questioning. I was exposed to teacher-centered instruction, one correct answer-based subject matter, and never-ending test drills and practice. My personal education history furnished me with a mental model of teaching unconsciously. Influenced by Confucius style teaching, I tend to teach students how to think and behave, but not on what they should think. Sometimes it is more comfortable to use this model to imagine course objectives, develop student activities and plan for assessments. This makes me feel I do the right and proper thing in a Chinese classroom. But in p4cHI, I need to break those chains and learn to ask myself: “Is my role to transmit knowledge or nurture independent and critical thinkers? Can I really show respect to every student’s ideas? Am I here to learn from my students? Am I flexible enough to allow students to guide their own learning process? Am I sensible enough to respond to students’ needs and interests?”

I feel a p4cHI facilitator should make the learning space as comfortable and intellectually safe as possible. My role is to cove the community of inquiry forward, but within a broad range of parameters that stresses critical thinking, reflection, clarity, open-mindedness, and good judgment. The facilitator keeps philosophical inquiry on track, respects the natural flow of inquiry, enriches the discussion, and gently direct the discussion, but without imposing his or her ideas and agenda. Learning from p4cHI, I am forming a new teaching philosophy, which is to connect to students’ prior knowledge and experience and relate to their interests. Based on a strong psychological foundation, I can be able to transmit all the big ideas to students, make sure students master the knowledge, and gain the skills in an exploratory way. Further, in my future
teaching, I always need to assess and examine my teaching practice, and also give students opportunities to assess their learning and development together, especially areas for improvement.

The contradicted cultural values in Chinese and U.S. education made me think what is culturally valuable enough in thought, feeling, and action as to deserve transmission to the next generation. Besides thinking of my teaching styles, I also consider the purpose of education. Probably the goal of education is to aid every individual to achieve their unique potential that they may make their unique contribution to society. The result is an aristocracy of everyone.
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APPENDIX A: Philosophical Inquiry Course Outline

I. Creating a Community of Inquiry and Daily Practices
   a. Introduction to the course & grading policies
   b. Introduction to “Ethical Self-Assessment Rubric”
   c. Introduction to “Daily Reflection” (POD & Reflection)
   d. Introduce Intellectual Safety (concept map activity)
   e. Make a Community Ball using “Making a Community” questions
   f. Introduction to the Good Thinker’s Tool Kit (handbook)
   g. Introduction to text annotations using “Philosophical Inquiry Text Annotations” and P4Teens, “Is Knowledge the Greatest Virtue?”
   h. Introduction to the Plain Vanilla discussion-based inquiry process & “Inquiry Memos” using “Ethical Community Member?/Is Knowledge the Greatest Virtue?”
   i. Introduction the “Philosophic Insight Paper” #1 and “Insight Paper Graphic Organizer” (w/ out lenses)

II. The Ten Lenses of Philosophical Inquiry
   a. Ten lenses glossary project using “10 Lenses of PI Glossary”
      i. Term
      ii. Define
      iii. Essential Question
      iv. Apply to a philosopher (list provided)
      v. Create Poster
      vi. Present
      vii. Create Glossary in Journal
   b. Text Annotations Philosophy for Teens, “How Should I Live?”
   c. “How Should I Live?”/Ten Lenses Plain Vanilla
   d. “How Should I Live?”/Ten Lenses “Philosophic Insight Paper” #2 (include the ten lenses section)

III. Philosophical Inquiry: Racial Politics
   a. Robert Kennedy to Dr. King Audio Recording
   b. Dr. Martin Luther King, “Letter From a Birmingham Jail”
   c. Robert Nesta Marley, “War No More Trouble”
   d. Race Statistics from Jonathan Okamura, “Race & Ethnicity in Hawaii”
   e. Philosophy for Teens, “What if There Were No Governments?”
   f. Racial Politics Plain Vanilla
   g. Racial Politics “Philosophic Insight Paper” #3

IV. Philosophical Inquiry: Class & The Environment
   a. Rachel Carson, “Silent Spring”
   b. Karl Marx, “..” & Globalization
   d. “The 1%” statistics
   e. Philosophy for Teens, “Who Will Take Care of the Environment?”
<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>f.</td>
<td>Class &amp; The Environment Plain Vanilla</td>
</tr>
<tr>
<td>g.</td>
<td>Class &amp; The Environment “Philosophic Insight Paper” #4</td>
</tr>
<tr>
<td>V.</td>
<td>Philosophical Inquiry: Gender &amp; Society</td>
</tr>
<tr>
<td>a.</td>
<td>bell hooks, “Feminism is For Everyone”</td>
</tr>
<tr>
<td>b.</td>
<td>Lupe Fiasco, “Bitch Bad”</td>
</tr>
<tr>
<td>c.</td>
<td>Sheryl Sandberg, “Lean In” statistics</td>
</tr>
<tr>
<td>d.</td>
<td>Philosophy for Teens, “What is it like to be somebody else?”</td>
</tr>
<tr>
<td>e.</td>
<td>Gender &amp; Society Plain Vanilla</td>
</tr>
<tr>
<td>f.</td>
<td>Gender &amp; Society “Philosophic Insight Paper” #5</td>
</tr>
<tr>
<td>VI.</td>
<td>Reflection, Assessment, and Future Action</td>
</tr>
<tr>
<td>a.</td>
<td>Philosophy for Teens, “What is the meaning of life?”</td>
</tr>
<tr>
<td>i.</td>
<td>In-class assessment practice</td>
</tr>
<tr>
<td>b.</td>
<td>Take Home Reflection Final</td>
</tr>
<tr>
<td>i.</td>
<td>Gandhi, “Vol. 13” Be The Change</td>
</tr>
<tr>
<td>ii.</td>
<td>Philosophy for Teens, “Am I the Same Person that I used to Be?”</td>
</tr>
<tr>
<td>c.</td>
<td>In-Class Lens Analysis/Constructed Response Final</td>
</tr>
</tbody>
</table>
APPENDIX B: Philosophical Inquiry Daily Reflection

<table>
<thead>
<tr>
<th>Prompt of the Day (POD)</th>
<th>Exceeds the Standard</th>
<th>Meets the Standard²</th>
<th>Attempts to Meet the Standard</th>
<th>Does Not Meet the Standard</th>
</tr>
</thead>
</table>
| My response to the POD demonstrated that I thought about my own thinking and communicated my findings by:  
  ● Using textual evidence AND self-knowledge/experiences to support my response | My response to the POD demonstrated that I thought about my own thinking and communicated my findings by:  
  ● Using textual evidence OR self-knowledge/experiences to support my response | My response to the POD demonstrated that I thought about my own thinking and communicated my findings by:  
  ● Using textual evidence OR self-knowledge/experiences to support my response | I did not complete a written reflection. |

Name_______________________________________________________________
Date:______________

1. Reflect on the prompt of the day (POD) in writing. Use textual evidence and/or self-knowledge/experiences to support your response.

² SSPI.4.1 Reflection, Oral and Written Philosophical Inquiry Reflection; SSPI.4.2 Reflection - Personal Reflection; SSPI.4.4 Reflection - Meta-Cognition; SSPI.4.5 Reflection – Multiple Perspectives
<table>
<thead>
<tr>
<th>Reflection</th>
<th>Exceeds the Standard</th>
<th>Meets the Standard³</th>
<th>Attempts to Meet the Standard</th>
<th>Does Not Meet the Standard</th>
</tr>
</thead>
</table>
|            | *In my written reflection I thought about my own thinking and communicated my findings by:*  
  ● Connecting what I learned to my life or the world I live in.  
  ● Describing more than one new perspective or point of view.  
  ● Using textual evidence *AND* ideas/quotes from classmates/teacher to support my response. | *In my written reflection I thought about my own thinking and communicated my findings by:*  
  ● Connecting what I learned to my life or the world I live in.  
  ● Describing a new perspective of point of view.  
  ● Using textual evidence *OR* ideas/quotes from classmates/teacher to support my response. | *In my written reflections I thought about my own thinking during and communicated my findings by:*  
  ● Connecting what I learned to my life or the world I live in.  
  ● Describing a new perspective or point of view. | *I did not complete a written reflection.* |

2. How does what you learned today connect to your life and the world you live in? Do you see a different perspective or point of view? Use textual evidence *AND* ideas/quotes from classmates/teacher to support your response.

---

³ SSPI.4.1 Reflection, Oral and Written Philosophical Inquiry Reflection; SSPI.4.2 Reflection - Personal Reflection; SSPI.4.4 Reflection - Meta-Cognition; SSPI.4.5 Reflection – Multiple Perspectives
APPENDIX C: Philosophical Insight Paper

This assignment will follow a unit of study, which consists of several readings, and philosophical dialogues (Plain Vanilla).

After each unit, you will be asked to reflect on your experience in writing. The purpose of this PIP is to continue our thinking about the topic we philosophized about. Please type your PIP and organize it into the five sections described below. ATTACH ALL OF YOUR ANNOTATED READINGS AND YOUR INQUIRY MEMOS FROM THE UNIT TO THE BACK OF YOUR PIP.

PART ONE

Evaluation of the Community of Inquiry – Take some time to think about how we are doing in our community of inquiry. Focus your evaluation on the community as a whole. When you evaluate COMMUNITY think about: listening, intellectual safety and participation. When you evaluate INQUIRY think about: our focus, whether the inquiry was interesting or not, use of the Good Thinker’s Tool Kit to scratch beneath the surface of the topic, and whether or not we challenged our thinking. Use the following questions to guide your response:

a. COMMUNITY STRENGTHS - What do we do well as a community?
b. COMMUNITY CHALLENGES - What do we need to improve on as a community?
c. INQUIRY STRENGTHS - What was a strength of our inquiry?
d. INQUIRY CHALLENGES - What was a challenge in our inquiry?

Make sure to apply the notes that you took in your inquiry memos to support your evaluation. This means USE SPECIFIC EXAMPLES.

PART TWO

Lenses of Philosophical Inquiry - Identify at least two lenses of philosophical inquiry that relate to the text(s). Use examples and reasons to explain how and why each lens is connected to the text(s).

a. LENS – Identify lens.
b. TEXTUAL EVIDENCE – Site direct textual evidence that relates to the lens.
c. LOGIC – Use reasons to explain how the textual evidence relates to the lens.

PART THREE

Constructed Response – Pick one idea or concept and write a constructed response.

a. CLAIM- Use concise language to write a one-sentence claim.
b. ASSUMPTION(S) - Next, acknowledge the assumptions embedded in your claim.
c. SUPPORTING EVIDENCE - Then, support your claim with textual evidence (e.g. direct quotes from the readings or our inquires) and reasons that explain why the evidence...
supports your claim. Be sure to use multiple texts (three to exceed) to support your claim.

d. COUNTER-EXAMPLES - Finally, acknowledge any counter-examples to your claim.

PART FOUR

Personal Reflection and Action – Use the following questions to guide your response:

   a. How did this inquiry connect to you and the world that you live in?
   b. Do you now see a different perspective or point of view?
   c. How will you apply what you learned to make positive change in your life or the world around you?

PART FIVE

References – Use APA format to cite in-text references and to generate a reference list at the end of your response. (See the Purdue Online Writing Lab for assistance with APA format - http://owl.english.purdue.edu/owl/resource/560/01/).

PIP Rubric

<table>
<thead>
<tr>
<th>PART I</th>
<th>Exceeds the Standard</th>
<th>Meets the Standard</th>
<th>Attempts to Meet the Standard</th>
<th>Does Not Meet the Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of the Community of Inquiry</td>
<td>I used more than one specific example (from my inquiry memos or memory) to support my written evaluation of each of the following areas: a. Community strengths b. Community challenges c. Inquiry strengths d. Inquiry challenges</td>
<td>I used at least one specific example (from my inquiry memos or memory) to support my written evaluation of each of the following areas: a. Community strengths b. Community challenges c. Inquiry strengths d. Inquiry challenges</td>
<td>I did use specific examples to support my written evaluation of some of the following areas: a. Community strengths b. Community challenges c. Inquiry strengths d. Inquiry challenges</td>
<td>I did not write an evaluation of each of the following areas: a. Community strengths b. Community challenges c. Inquiry strengths d. Inquiry challenges</td>
</tr>
<tr>
<td>PART II Lenses of Philosophical Inquiry</td>
<td>I identified more than two lenses of philosophical inquiry that related</td>
<td>I identified at least two lenses of philosophical inquiry that related</td>
<td>I identified at least two lenses of philosophical inquiry that related</td>
<td>I did not identify at least two lenses of philosophical inquiry that related</td>
</tr>
<tr>
<td>PART III Constructed Response</td>
<td>I brought together multiple questions, ideas, or concepts discussed in our philosophical dialogue to develop a clear one-sentence claim (argument).</td>
<td>In response to a question, idea, or concept discussed in our philosophical dialogue I developed a clear one-sentence claim (argument).</td>
<td>In response to a question, idea, or concept discussed in our philosophical dialogue I developed a one-sentence claim (argument).</td>
<td>I did not develop a claim in response to a question, idea, or concept discussed in our philosophical dialogue.</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Using sound reasoning I correctly identified more than one assumption embedded in my claim.</td>
<td>Using sound reasoning I correctly identified an assumption embedded in my claim.</td>
<td>I tried to identify an assumption embedded in my claim but it is unclear and illogical.</td>
<td>I did not identify an assumption embedded in my claim.</td>
<td></td>
</tr>
<tr>
<td>I supported my claim with logical reasons and evidence (concrete details, quotations, and in-text citations). My evidence came from three or more different texts (in-class readings, an</td>
<td>I supported my claim with logical reasons and evidence (concrete details and quotations). My evidence came from two or more different texts (in-class readings, an</td>
<td>I supported my claim with reasons and evidence. My evidence came from one of the texts (in-class readings, an additional scholarly source, inquiry memos).</td>
<td>I did not support my claim with reasons and evidence.</td>
<td></td>
</tr>
</tbody>
</table>

I may or may not have used direct textual evidence to support each lens I identified. I attempted to use examples and reasons to explain how and why each lens is connected to the text(s). Inquiry that related to the text(s).
### PART IV  
**Personal Reflection**

In my written reflection I thought about my own thinking and communicated my findings by:

- Connecting the inquiry to my life or the world I live in.
- Describing more than one new perspective or point of view.
- Detailing how I will apply what I learned to making a positive change in my life or the world around me.

I identified and explained more than one counter-example related to my claim.

I did not identify a counter-example related to my claim.

### PART V  
**References**

I accurately apply the APA style guide to document sources in-text and in my reference list.

I made errors when applying the APA style guide to document sources my reference list.

I did not document sources.
| ANNOTATED RESOURCES | I attached all of my annotated readings and inquiry memos to my PIP. | I did not attach all of my annotated readings and inquiry memos to my PIP. |  |  |
APPENDIX D: Inquiry Memos

Date of Philosophical Dialogue: ________________
Topic of Philosophical Dialogue: ______________________________

Your Question (include your name):
___________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Selected Question (include author):
______________________________________________________________________________
______________________________________________________________________________

Initial Response to the Question:

During our philosophical dialogue write memos (notes). Record your thoughts and questions, as well as those of your peers. Make sure to cite specific spoken evidence that you find interesting or important. You will use your memos (notes) to write Part One of your PIP.

<table>
<thead>
<tr>
<th>Key Points &amp; Questions</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Include: specific spoken evidence, and examples of from your own thinking.</strong></td>
<td></td>
</tr>
</tbody>
</table>

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5. SS.PI.2.4 Philosophical Dialogue- Philosophical Dialogue Annotations and Memos
In your DR, refer back to your initial response to the selected question. What progress was made: *What new ideas emerged? Were new connections made? Did you get more confused or see the complexity of the topic? Did a possible answer emerge? What new questions do you have?*
APPENDIX E: Philosophical Inquiry Final Take-Home Reflection

In 1913 Mahatma K. Gandhi wrote,

_We but mirror the world. All the tendencies present in the outer world are to be found in the world of our body. If we could change ourselves, the tendencies in the world would also change. As a man changes his own nature, so does the attitude of the world change towards him. This is the divine mystery supreme. A wonderful thing it is and the source of our happiness. We need not wait to see what others do._

Reflect on your experience in Philosophical Inquiry this semester. Answer each of the following questions.

- Is there truth to Gandhi’s philosophy that social transformation begins with personal transformation? Use evidence from your own experiences in this course, self-knowledge, assigned text from this course (including p4teens, “Am I the Same Person that I Used to Be?”), and an additional outside (scholarly) source to support your thinking.

- What personal transformation have you experienced (or are you beginning to experience) from your participation in this course?

- How does what you experienced in this course give you a new perspective or help you to see a different perspective from your own?

- How will you use what you learned from your experience in this course in your future?

<table>
<thead>
<tr>
<th>Response</th>
<th>Exceeds</th>
<th>Meets</th>
<th>Attempts</th>
<th>Does Not Meet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>In my written reflection I thought about my own thinking and communicated my findings by:</em> Clearly addressing each question in the prompt</td>
<td><em>In my written reflection I thought about my own thinking and communicated my findings by:</em> Clearly addressing each question in the prompt</td>
<td><em>In my written reflection I thought about my own thinking and communicated my findings by:</em> Addressing each question in the prompt</td>
<td><em>In my written reflection I did not think about my own thinking and communicate my findings.</em></td>
</tr>
</tbody>
</table>

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6 VOL 13, Ch 153, General Knowledge About Health; Page 241, Printed in the Indian Opinion on 8/9/1913 From The Collected Works of M.K.Gandhi; published by The Publications Division, New Delhi, India.
| Using evidence from my own experience, self-knowledge, assigned text from this course, and an additional outside (scholarly) source to support my thinking | Using evidence from my own experience, self-knowledge, and assigned text from this course to support my thinking | prompt |
| Using evidence from my own experience, self-knowledge, and assigned text from this course to support my thinking | Using evidence from my own experience, and self-knowledge to support my thinking |
APPENDIX F: Focus Group Questions

**Location/Setting.** All focus group meetings will be held on campus at Kailua High School. They will be held in a private room where doors can be closed to ensure participant privacy.

**Time.** Each focus group meeting will last approximately one hour.

**When will we meet?** At the end of the Fall 2014 semester

**Facilitator.** The Key Research Personnel for this study will lead and facilitate focus group sessions.

**What will be the procedures followed during the focus group?** Recruitment for all focus group participants will take place at the beginning of the first semester of the 2014 – 2015 school year. During recruitment, and throughout the focus group process the students will be reminded that participation in the research is voluntary. Participant consent and assent forms are attached to this application as well. The participants will not need to fill out a demographic survey prior to the focus group because this information will be collected on the quantitative survey. At the beginning of the focus group participants will be informed that:

- You will be able to take a break during the focus group when you need one.
- Whether or not you answer questions or participate in the focus groups will have no impact on your grades in your classes.
- If at any time you are not comfortable answering a question, you will have the option of not answering it.
- If, at any time during the focus group, you feel uncomfortable and want to stop participating, you may do so without any penalty.
- If you require any treatment as a result of your participation in the focus group, treatment consisting of the normal range of services offered by the school will be available. The latter may include being referred to a school counselor or another school official.
- To ensure confidentiality you are being asked not to use your last name or the last names of others in this group. Keep the discussion anonymous by not listing the names of people or the places they talk about.
- To ensure confidentiality we must all agree that the information discussed during the focus group must remain confidential, “what we talk about during this focus group stays in this focus group.”
- The entire focus group session will be audio recorded and transcribed, and a small portion of the discussion after the reading will be video recorded. We will keep all recorded materials and transcriptions in a secure and locked area.
- Brief video recordings of this focus group may be used in conference and community presentations to show the possible value of this philosophical inquiry class. Such a focus would be on the philosophical inquiry course, and not on any particular individual or on a particular individual’s belief regarding philosophical inquiry. No video footage will be shown that shows harmful statements. Researchers will be careful about how video footage will be portrayed to audiences in order to protect my youth, while still presenting positive and negative aspects of the philosophical inquiry course.
General discussion topics/specific questions. The two main purposes for the focus groups are to: 1) explore more deeply into the philosophical inquiry course experience for students who participated in the class; and 2) study KHS philosophical inquiry students’ progress, if any in academic engagement, identification of meaning in their schooling and lives, and sense of coherence (Antonovsky, 1987). The following questions/prompts may or may not be used to facilitate discussion during the focus group meetings.

1. What is your biggest take-away from this Philosophical Inquiry class?
2. What is the difference between Philosophical Inquiry course and other social studies courses?
3. Do you feel more engaged in this class? Please use specific examples to support your thinking.
   a. Engaged/engagement both behaviors (i.e., you want to come to this class, you work harder, you pay attention to your peers, you complete your homework, you have a positive attitude toward philosophical inquiry course and school, think about your thinking) and emotions (i.e., enthusiasm, interest, social relationship, making connections to previous knowledge and experience, pride in success).
4. Have you ever thought about the meaning of your life? Or what is a meaningful life? Or do you have a purpose in your life?
5. Does this class help you figure out what is a meaningful life?
6. Did this class help you find learning more interesting?
7. Describe how the philosophical inquiry experience has or has not transformed you.
8. Describe the philosophical inquiry experience has or has not changed the way that you see your self, your future, your life in general.
APPENDIX G: Sense of Coherence Scale

Here is a series of questions relating to various aspects of our lives. Each question has five possible answers. For each question, please mark the answer which best expresses your feelings about your life.

1. How often do you have a feeling that you don’t really care about what goes on around you? (1 = never, 5 = very often) ME
2. How often in the past were you surprised by the behavior of people whom you thought you knew well? (1 = never, 5 = very often) C
3. How often have people you counted on disappointed you? (1 = never, 5 = very often) MA
4. How do you think you are going to feel about the things you will do in the future? (1 = don’t like it at all, 5 = like it a lot) ME
5. How often do you have the feeling you’re being treated unfairly? (1 = never, 5 = very often) MA
6. How often do you have the feeling you are in an unfamiliar situation and don’t know what to do? (1 = never, 5 = very often) C
7. How often do you feel about the things you do every day? (1 = don’t like it at all, 5 = like it a lot) ME
8. How often does it happen that you don’t quite understand your own feelings and ideas? (1 = never, 5 = very often) C
9. How often does it happen that you have feelings inside that you would rather not feel? (1 = never, 5 = very often) C
10. Many people—even those with a strong character—sometimes feel like losers in certain situations. How often have you felt this way in the past? (1 = never, 5 = very often) MA
11. How often does it happen that you have the feeling that you don’t know exactly what’s about to happen? (1 = never, 5 = very often) C
12. How often do you have the feeling that there is little meaning in the things you do in your daily life? (1 = never, 5 = very often) ME
13. How often do you have feelings that you’re not sure you can keep under control. (1 = never, 5 = very often) MA

Please go to page 16 of 19 in Appendix H to view the exact testing format.
Philosophical Inquiry Questionnaire

This is a survey about "Philosophical Inquiry." Answer the questions the best you can. There are a variety of question and answer formats. Please make sure to read the instructions of each section.

* Required

Your Philosophical Inquiry Number: *

Section 1: Demographics
You may mark more than one answer.

1.1 What is your gender? *
- Male
- Female

1.2 What grade are you currently in? * 9th
- 10th
- 11th
- 12th

1.3 What is your ethnicity? *
- Hawaiian
- Filipino
Section 2: Prior Experiences with Philosophy for Children Hawaii
You may mark more than one answer.

2.1 In which grade(s) did you use a community ball? Mark all grade(s) that apply, including the grade you are in now. *

- [ ] 9th
- [ ] 10th
- [ ] 11th
- [ ] 12th
- [ ] N/A

2.2 In which class(es) did you use a community ball? Mark all class(es) that apply, including the class(es) you are in now. *

- [ ] English
- [ ] Math
- [ ] Science
- [ ] Social Studies
- [ ] World Languages
2.3 In which grade(s) have you used the "Plain Vanilla" format to have a discussion? Mark all grade(s) that apply, including the grade you are in now. *
- 9th
- 10th
- 11th
- 12th
- N/A

2.4 In which class(es) have you used the "Plain Vanilla" format to have a discussion? Mark all class(es) that apply, including the class(es) you are in now. *
- English
- Math
- Science
- Social Studies
- World Languages
- Physical Education
- Music
- Art
- Other: [ ]

2.5 In which grade(s) have you used the "Good Thinker's Toolkit"? Mark all grade(s) that apply, including the grade you are in now. *
- 9th
- 10th
- 11th
- 12th
- N/A

2.6 In which class(es) have you used the "Good Thinker's Toolkit"? Mark all class(es) that apply, including the class(es) you are in now. *
- English
2.7 In which grade(s) have you discussed and practiced "Intellectual Safety" with your peers and teachers? Mark all grade(s) that apply, including the grade you are in now. *

☐ 9th
☐ 10th
☐ 11th
☐ 12th
☐ N/A

2.8 In which class(es) have you discussed and practiced "Intellectual Safety" with your peers and teachers? Mark all class(es) that apply, including the class(es) you are in now. *

☐ English
☐ Math
☐ Science
☐ Social Studies
☐ World Languages
☐ Physical Education
☐ Music
☐ Art
☐ Other:

2.9 In which grade(s) have you made philosophical annotations while reading? Mark all grade(s) that apply, including the grade you are in now. *

☐ 9th
☐ 10th
☐ 11th
☐ 12th
☐ N/A
2.10 In which class(es) have you made philosophical annotations while reading? Mark all class(es) that apply, including the class(es) you are in now. *

- English
- Math
- Science
- Social Studies
- World Languages
- Physical Education
- Music
- Art
- Other:  

2.11 In which grade(s) have you reflected on and/or evaluated your "Plain Vanilla" discussions? Mark all grade(s) that apply, including the grade you are in now. *

- 9th
- 10th
- 11th
- 12th
- N/A

2.12 In which class(es) have you reflected on and/or evaluated your "Plain Vanilla" discussions? Mark all class(es) that apply, including the class(es) you are in now. *

- English
- Math Science
- Social Studies
- World Languages
- Physical Education
- Music
- Art
- Other:  

Section 3: Self Percepcion about Philosophical Inquiry

Bubble in your response on a five point scale, one represents "strongly disagree", and five represents "strongly agree". You may only have one answer.
3.1 In tough situations, I make good choices. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.2 I consider other perspectives when making judgments. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.3 I use what I learn in school to make difficult decisions about my future.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.4 I can think my way through a problem I've never experienced before. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.5 I make good judgments. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
### 3.6 I use what I learn in school to solve complex problems. *

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Neutral
- [ ] Agree
- [ ] Strongly agree

### 3.7 When I get stuck in my thinking, I think flexibly to make good judgments. *

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Neutral
- [ ] Agree
- [ ] Strongly agree

### 3.8 I refer back to prior experiences to make good decisions. *

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Neutral
- [ ] Agree
- [ ] Strongly agree

### 3.9 I am responsible for the learning of my peers. *

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Neutral
- [ ] Agree
- [ ] Strongly agree

### 3.10 I am responsible for sharing my thinking with others. *

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Neutral
- [ ] Agree
- [ ] Strongly agree
3.11 I contribute to positive changes in my community.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.12 When I talk with others, I treat them with respect. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.13 I am a responsible member of my community. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.14 I am an ethical member of my community. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.15 I do what is “right” because it helps my community. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.16 In my community we work as team to make positive changes. *
3.17 I ask philosophical questions. *

3.18 I wonder when I learn. *

3.19 I think about my own thinking. *

3.20 I reflect on my experiences. *

3.21 I live the examined life. *
3.22 Sometimes, the best answer to a question is more questions. *
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

3.23 Confusion is a part of the thinking process. *
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

3.24 I have a questioning attitude. *
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

3.25 I am connected with other people. *
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

3.26 I care about my peer's ideas. *
   - Strongly disagree
   - Disagree
3.27 I understand other people's emotions. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.28 Learning the perspectives of others helps me understand myself better. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.29 Listening connects me to others. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.30 I feel for the struggles of others. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.31 I care about other people's points of view that are different from mine. *

- Strongly disagree
- Disagree
- Neutral
3.32 I do my best to reduce my prejudices. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.33 Philosophical Inquiry helps me improve myself. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.34 Philosophical Inquiry transforms my thinking. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.35 Philosophical Inquiry helps me understand myself better. *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.36 Philosophical Inquiry helps me see the world differently. *

- Strongly disagree
- Disagree
- Neutral
- Agree
3.37 Philosophical Inquiry changes my understanding of things. *
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.38 Philosophical Inquiry supports my growth as person. *
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.39 Philosophical Inquiry makes me a better person. *
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.40 Philosophical Inquiry is meaningful. *
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.41 Learning is interesting. *
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
3.42 Learning is a worthwhile lifelong commitment.
- * Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.43 I can't stop thinking about what I learn in school. *
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.44 I find joy in learning.
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.45 What I learn in school connects to my life. *
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.46 I am an engaged learner. *
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3.47 I have a positive attitude towards learning. *
3.48 School has meaning in my life. *

3.49 I would recommend a "Philosophical Inquiry" class to others. *

3.50 I feel more engaged in my learning in "Philosophical Inquiry" class. *

3.51 What are the reasons for taking a "Philosophical Inquiry" course? *
3.52 What is "philosophical inquiry?" *

Section 4: Sense of Coherence Scale

Here is a series of questions relating to various aspects of our lives. Each question has five possible answers. For each question, please mark the answer which best expresses your feelings about your life. You may only have one answer.

4.1 How often do you have the feeling that you don’t really care about what goes on around you? *

- Very often
- Often
- Sometimes
- Seldom
- Never

4.2 How often has it happened in the past that you were surprised by the behavior of people who you thought you knew well? *

- Very often
- Often
- Sometimes
- Seldom
- Never

4.3 How often has it happened that people whom you counted on disappointed you? *

- Very often
- Often
- Sometimes
- Seldom
- Never
4.4 How do you think you are going to feel about the things you will do in the future? *
- Like it a lot
- Like it
- It’s OK
- Don’t like it
- Don’t like it all

4.5 How often do you have the feeling that you are being treated unfairly? *
- Very often
- Often
- Sometimes
- Seldom
- Never

4.6 How often do you have the feeling that you are in an unfamiliar situation and don’t know what to do? *
- Very often
- Often
- Sometimes
- Seldom
- Never

4.7 How do you feel about the things you do every day? *
- Like it a lot
- Like it
- It’s OK
- Don’t like it
- Don’t like it all

4.8 How often does it happen that you don’t quite understand your own feelings and ideas? *
- Very often
- Often
- Sometimes
- Seldom
- Never
4.9 How often does it happen that you have feelings inside that you would rather not feel? *
   - Very often
   - Often
   - Sometimes
   - Seldom
   - Never

4.10 Many people—even those with a strong character—sometimes feel like losers in certain situations. How often have you felt this way in the past? *
   - Very often
   - Often
   - Sometimes
   - Seldom
   - Never

4.11 How often does it happen that you have the feeling that you don’t know exactly what’s about to happen? *
   - Very often
   - Often
   - Sometimes
   - Seldom
   - Never

4.12 How often do you have the feeling that there is little meaning in the things you do in your daily life? *
   - Very often
   - Often
   - Sometimes
   - Seldom
   - Never

4.13 How often do you have feelings that you’re not sure you can keep under control? *
   - Very often
   - Often
   - Sometimes
   - Seldom
   - Never
4.14 In general, how do you feel about school? *
Use examples and reasons to support your response.

4.15 In general, how do you feel about your future? *
Use examples and reasons to support your response.

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