

# INNOVATIONISM

A DIGITAL AGE PEDAGOGICAL PHILOSOPHY

By

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## Forward

This work is a fieldwork-based case study that is an examination of the concept of Innovationism.

Innovationism is defined as:

Innovation education and learning (Smith, 2009) applies contemporary technology to achieve personalized learning and differentiated teaching. Innovationism builds upon this existing educational methodology by providing a framework to guide the ongoing transformation of American K-12 education into the digital age; is comprised of a systematic blending of objective and subjective learning elements in a methodology, which by intention, avoids the ideological polarization between behaviorally based curriculum and cognitively based curriculum; and is a framework that supports methodologies that make learning joyous, fun, creative, innovative, and playful while, at the same time, inspiring, motivational, engaging, rigorous, enlightening, and reflective.

The purpose of this study is to investigate the concept of Innovationism in an attempt to better understand the elements that make up the framework of Innovationism so that further in-depth study can be constructed to help alleviate some of the problems now facing U. S. K-12 education such as low motivation and engagement. It is believed that if the concept of Innovationism does show such a concept it may help support the development of innovative digital education and learning.

One of the problems this study hoped to address is whether such a concept shows promise to help mitigate the high drop-out rates of underserved populations in the U.S. K-12 public institutions. This mitigation may take place through the inclusion of the discovered concepts of Innovationism in curriculum designed for blended online teaching and learning environments. The analysis of this field based research was completed using data triangulation. This data analysis methodology was used to better understand the interrelationships of the data gathered from three sources: an extensive review of the related literature, a field study observation of a classroom teacher, and a field study interview of a vice-principal (i.e., administrator). Both of these field based data gathering methodologies (i.e., interview and observation) were completed at a Northern California K-12 public school.

From the data triangulation analysis the findings of this study present the elements discovered representing the concept of Innovationism. These elements may help guide the transformation of teaching and learning, and with the intention to better support the learning of underserved and students at high risk of school dropout.

It was found that the historic existing objective and subjective education philosophies should be combined or used in tandem to create more effective pedagogical methodologies and curricula necessary for contemporary teaching and learning in what is termed by many as the digital age.

There is a need for a follow up comprehensive analysis and development of a prototype curriculum to examine the results of applying innovationist pedagogy and curricula developed using the concept and elements found through this study of the concept of Innovationism.

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# Chapter I

## Introduction

### Thesis Statement

*It is believed that the concept of Innovationism, introduced in this thesis, has the potential to provide elements for a framework that will guide the systematic development of contemporary curricula for K-12 digital and blended learning environments as a means to address the dropout rate for all students grades 6-12, and especially for members of all at risk populations.*

### Problem Statement

Parallel to the concerns about the quality of education, over the last century we have seen the number of students dropping out of public schools increase. But, the most recent K-12 public school dropout data shows that the overall number of students that dropout is being reduced, but the number of students of color dropping out of K-12 public school is continuing to increase.

The problem this study addresses is the high drop-out rates of the underserved populations in the U.S. K-12 public institutions. This study examines the concepts of Innovationism in an effort to provide useful information regarding curricular design that will better serve those students at high risk for dropping out of K-12 Public School.

Here is what is known about this problem. The *No Child Left Behind Act* has done more to address the inequities in U. S. minority education than anything since the Elementary and Secondary Education Act (1965), however the nation's K-12 test scores continued to be low compared to most other developed countries and the high school drop-out rates soared under this act. Although the U. S. high school graduation rate is currently improving going from 79% in 2011 to 81.4% in 2013 (NCES, 2015), there are still over 7,000 students who drop out of high school every day. As a percentage, the dropout rates as of June 2015, were: Asian/Pacific Islander, 3.3; Caucasian, 4.3; Hispanic, 12.5; African-American, 7.5; and American Indian, 14.6. In 2014, approximately 55% of the dropouts were male (NCES, 2015).

The dropout rate in K-12 public schools between students of color and all other students presents a real and significant problem for tens of thousands of African-American (i.e., Black), Hispanic, and American Indians (i.e., Native American) students who are currently facing this serious problem. This thesis examines the concept of Innovationism to help determine whether this concept has the potential to make up a new framework for teaching and learning that balances objective and subjective elements (i.e., methodologies) focused in large part on keeping K-12 public school students from dropping out. It is believed that the concept of Innovationism, introduced in this thesis, has the potential to provide elements of a framework that will guide the systematic development of contemporary curricula for K-12 digital and blended learning environments. It is believed that this balance may have the potential to reduce the dropout rate for all students grades 6-12, and specifically for members of all at risk populations.

### Background

In modern times there are opposing views about the practice of education. There is no general agreement about what the young should learn either in relation to virtue or in relation to the best life; nor is it clear whether their education ought to be directed more towards the intellect than towards the character of the soul. And it is not certain whether training should be directed at things useful in life, or at those conducive to virtue, or at non-

essentials. And there is no agreement as to what in fact does tend towards virtue. Men do not all prize most highly the same virtue. So naturally they differ also about the proper training for it (Aristotle 384-322 BCE).

Aristotle wrote this passage more than 2,300 years ago, and today educators are still debating the issues he raised (IEP, 1996). So it's not surprising that American kindergarten to twelfth-grade (K-12) education has been in conflict since its inception (Bagley, 1940). As Noll (2007) points out: "Concern about the quality of education has been expressed by philosophers, politicians, and parents for centuries and there has been a perpetual and unresolved debate regarding the definition of education, the relationship between school and society, the distribution of decision-making power in educational matters, and the means for improving all aspects of the educational enterprise" (p. xiv).

The contemporary United States K-12 education is not operating as efficiently as it could be and certainly not as effectively as is needed in the rapidly advancing global world of digital technology. Because the entrenched, slow-to-change U. S. K-12 school system is not keeping pace with Internet savvy students, the concept of Innovationism has been looked at to not only enhance effective K-12 pedagogical methodologies but lead the way in defining contemporary methods of digital teaching and learning.

Since the beginning of the twentieth century K-12 educators have debated how American children should be educated. What knowledge is of most worth and what pedagogical methodologies are most effective, are just two of the questions that John Dewey (1938) and William Bagley (1940) debated over the subjective and objective nature of education with Dewey promoting the subjective, student centered, inductive education philosophy of Progressivism (which later evolved into Constructivism) and Bagley championing the objective, deductive oriented education philosophies of Essentialism and Perennialism (e.g. Objectivism).

Many philosophers and educational theorists have proposed numerous learning theories over the last two centuries and now into the 21<sup>st</sup> century. Beginning in the 1800s, many new theories and accompanying pedagogies were created and applied in the U.S. The next generation of theorist would often believe that they could improve learning through the development of a new learning theory. This has been repeated many times up to today and most were created with appropriate intentions of enhancing student learning. As the theories were developed what followed were the associated pedagogies, methodologies and curricula.

Presented in this study's review of the literature, theories were developed by different individuals with different experiences, cultural influences, intellectual capacities, and most often influenced by those who taught them. Out of this ongoing iterational theoretical change, most theories appear to be different in ways related to the beliefs and science used by the theorist. Theories have changed over the centuries and as suggested many have been iterational, but only a few new theories have been original in their approach to learning. History has shown most of these changes were followed up with the development of curriculum and alignment with contemporary learning outcomes and curricula standards. Only relatively recently in the U.S. have performance or learning standards been created at the state and federal levels. Unfortunately, these standards seem to only remain relevant until an idea, a new set of standards, or a new theory is determined to be better than those used before and then another movement is started to find the best theory, the appropriate set of standards, and curriculum used in America's K-12 public schools.

These shifts in K-12 curriculum can be attributed to new ideas or old ideas redesigned for new times. Curriculum can be driven by state or federal learning outcome standards. No matter if curriculum comes from educators, administrators, State Government, Federal Government, educational leaders must constantly face the changes resulting from low achievement scores which often results in the adoption of new K-12 learning standards.

In addition to severe drop out rates mentioned in the problem statement, the families of many of these children are encouraged to a point of pressure, to have them take various drugs to temper or calm their hyperactivity. Approximately 6% of the 23 million students ages 12-18 are currently under the influence of Ritalin (i.e.,

methylphenidate) and/or Adderall (i.e., amphetamines) while in school (Kramer, 1993). This taking of drugs to control behavior accounts for approximately 1.3 million children (Jonas, 2013). Lavoie (2007) informs us that:

The media bombards us with bad news emanating from America's classrooms. Test scores are down, dropout rates are up, and school violence is on the rise while school attendance declines, student high-risk behaviors (drug use, sexual activity, delinquency) increase while SAT scores plummet in some communities. There are many reasons for these statistics, many of which are beyond the control of parents and educators but student motivation is clearly a factor in these negative trends (p. 6).

In his book *The Great Turning: From Empire to Earth/Community*, scholar and financial expert David Korten (2005) criticizes schools that:

Prepare the young for obedient service to the institutions of Empire, but neither for life and leadership in vibrant human communities nor for roles as social architects of a new human era. It is little wonder that so many youth rebel, drop out, and turn to sex, drugs, and violence in a desperate effort to establish any kind of relationship that affirms their existence, even if in fleeting and ultimately self-destructive ways. (as cited in Fox, 2005 p.18)

This study has led the researcher to ask the question:

Why is it that with the many education philosophies and theories that have been conceived over the past three hundred years a concise and effective pre/K-12 philosophy to guide the design and development of curriculum that produces universally accepted learning results has not been developed?

As Kincheloe, et al, (2000) states: "In schools and classrooms today we continue to devalue the subjective aspects of intuition, insight, autobiographical reflection and inner experience and emphasize instead the unbalanced objectivism of structured lessons, measurable outcomes and test scores" (p. 54). It also appears as though educational standards discourage important learning and social skills such as prognosis, (i.e., a personal practical knowledge that fosters social competence) and sophia (i.e., a depth of understanding and insight that fosters wisdom) (p. 34).

Systemic curricular injustice may have arisen from the lack of an inclusive educational philosophy. Exclusionary extremism created by whichever political influence prevails may have prevented the most effective pedagogical methodologies and supporting curriculum from maturing and progressing. As Lavoie (2007) observed, because we are unable to inspire many of the K-12 students and spark their intrinsic motivation, we try to motivate students extrinsically by establishing a complex array of tests, quizzes, evaluations, and grades. In effect, we attempt to force them to be motivated to master the targeted curriculum and earn the grades they need to progress through the grades. This unrelenting coercion seems to be a rather unfair use of our power over children (p. 7).

According to Armstrong (2006), the issue appears to be that when the dialogue in education becomes limited to the narrow framework of grades, test scores, and scientifically based research, then a great deal of what education should be about gets left behind. Armstrong continued by stating that the imbalance of an excessive concentration on developing objective uniform standards, implementing a rigorous curriculum, and focus on raising test scores without alternative subjective pedagogical methodologies appears to have negative consequences that may be creating more harm to students and teachers than benefits (p. 23). Vocational education is being given less emphasis than academic, even though many students will leave school and ultimately make their livelihood from vocational related jobs (p.23). A recent report commissioned by the Council for Basic Education, found that public schools are becoming more committed to the core academic areas of reading, writing, mathematics, science, and secondary school social studies, and less committed to the arts, foreign languages, and elementary social studies, various other project-based programs (e.g., Maker Education) with the greatest erosion of project-based educational programs happening in the schools with a high minority population (Von Zastrow & Janc, 2004 as cited in Armstrong, p. 24).

Fox (2005) argued that teachers are over-worked, underpaid and improperly trained for the responsibilities required of them in the classroom (p. 14). Considering the role they play in the development of the “whole” child they are second only to the parent in the community. Conflicting or unclear educational philosophies within a school district and the schools themselves can cause unnecessary stress on teachers which is commonly passed on to the student either consciously or subconsciously through unnecessary impatience and anxiety. Fox (2005) continued, “One proof that education is in crisis is that so few students, teachers, and administrators find the profession of education fun, playful, or accessible” (e.g., engaging) (p. 14).

Students often complete an extensive educational program without being given a fair opportunity to scrutinize their beliefs, explore their motives, test their values, or compare their convictions. Even if for no other reason than increasing intellectual experience, a systematic effort to examine the bases on which ideas are claimed to be meaningful and defensible is a worthy undertaking. If it is feared that philosophy questions everything and settles nothing, some insight may be found in the words of the late English journalist-critic G. K. Chesterton, who remarked: “Merely having an open mind is not the goal. The object of an open mind is to allow for new ideas and reflect on existing ones (as cited in Horner, et al., 2002, p. 24).

Bill Gates (2005), chairman of Microsoft puts it more bluntly when he says, “Our high schools are obsolete . . . they were designed 50 years ago to meet the needs of another age. Today, even when they work exactly as designed, our high schools cannot teach our kids what they need to know. Frankly, I am terrified for our workforce of tomorrow” (as cited in Fox, 2006, p. 8); and Salmon Khan (2012) continues, instead of inspiring students to think creatively, classes are filled with soul-killing lectures and emphasize conformity and obedience over passion and individuality. “The old classroom model simply doesn’t fit the country’s and indeed the world’s changing needs,” Khan added, “It’s a fundamentally passive way of learning, while the world requires more and more active processing of information” (p.1).

In an article written for the Organization for Economic Cooperation and Development (OECD) project: *Innovative Learning Environments*, Jennifer Groff (2013) writes:

Successfully preparing all learners with the skills and capacities for: 21st century citizenship; global awareness; creativity; collaborative problem-solving; and self-directed learning is no small order, and many educational leaders are finding that the traditional forms of education that have evolved through the end of the last century are simply inadequate for achieving these goals. At the same time, while our outer world was transforming, advances have been made in the learning sciences, forcing educators to reconsider how they approach learning, instruction, and the environments created to foster the aforementioned goals. Dramatic advances in educational technology have inspired powerful new ways for learners to engage with all kinds of content and activities in their own self-directed learning experiences.

In his book *The Best Schools*, author Thomas Armstrong (2006) contrasts two educational discourses of speech and communications, the objective “Academic Achievement Discourse” and the subjective “Human Development Discourse,” that have immediate, practical, and significant impact on classroom practices. Armstrong argues that “educational discourse engaged by educators and politicians today – at least in public settings – are predominantly and increasingly Academic Achievement Discourse which views the purpose of education primarily as supporting, encouraging, and facilitating a student’s ability to obtain high grades and standardized test scores in school courses, especially in courses that are part of the core academic curriculum” (p. 10).

The over 100-year old U. S. K-12 school model of interdependent standardization has been slow to respond to today’s youth culture which Jenkins (2006) refers to as the Participatory Culture. This is a youth culture that is driven by the technological advances of the past ten years and is grounded in how digital technologies are changing the way young people learn, play, socialize, and participate in civic life. The challenge is to create a classroom environment and experiences that are equal to what is realized by today’s youth at home and after-school online activities. As time goes by, cultures, especially those surrounded by technology, change rapidly.

Unfortunately, too often, schools and curriculum are not capable of keeping pace by making the changes necessary to match the changing culture in a timely manner.

In his paper *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*, education psychologist Henry Jenkins (2006) looked how digital technologies are changing the way young people learn, play, socialize, and participate in civic life (p. 3). The study referenced a Pew report (Lenhardt & Madden, 2005, as cited in Jenkins, 2006) that found more than one-half of all teens have created media content, and roughly one-third of teens who use the Internet have shared content they produced. In a more recent Pew report *Teens, Social Media & Technology Overview 2015* Lenhardt (2015) noted that:

Aided by the convenience and constant access provided by mobile devices, especially smartphones, 92% of teens report going online daily – including 24% who say they go online “almost constantly,” according to a new study from Pew Research Center (<http://www.pewinternet.org/2015/04/09teens-socialmedia-technology-2015/>). Retrieved 3/21/2016).

Jenkins, et al., (2006) continues that the term “Participatory Culture,” is being used quite often in academic literature to describe “a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one’s creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices” (p. 4). Schools have been slow to react to the emergence of this new participatory culture as the greatest opportunity for change is currently found in afterschool programs and informal learning communities. Schools and afterschool programs have to put more attention to developing the new media literacies. Jenkins argues that new Habits of Mind are required as changes in the media environment are altering our understanding of literacy. “We have only a broad sense of which competencies are most likely to matter as young people move from the realms of play and education into the adult world of work and society” (p. 4).

In his talk at the 2006 TED Conference, *Do Schools Kill Creativity?*, on how today’s schools are suppressing the subjective human instinct of creativity, education philosopher Sir Ken Robinson (2006) defined the problem in this way:

Our education system is predicated on the idea of academic ability. The modern education system came into being to meet the need of industrialism with the most useful needs for work on the top, like math. Students got benign advice – you will never get a job doing art or dance. Now seeing this as profoundly mistaken the whole world is involved in a revolution – a protracted protest of the university system. The universities designed the system in their own image – academic abilities have come to dominate that image. Many highly talented, courageous and brilliant people think they are not because they didn’t don’t do good in school because they have been stigmatized and we can’t go on this way. UNESCO says that because of technology and its transformation of work, democracy and the population explosion in the next 30 year more people will have devalued traditional college degrees than ever before” (Retrieved, February 18, 2016, from <https://www.youtube.com/watch?v=iG9CE55wbtY>).

Kincheloe, et al, (2000) found that “if schools hope to help improve society and resist injustice, educators must enter contemporary social debates and move beyond the ‘transmission of knowledge’ model that currently dominates schooling. Rather than isolate pieces of memorized information readily available at the touch of a computer key, students need to have media literacy in order to navigate the maze of conflicting ideologies and understand the complexity of living in our postmodern society” (p. 38). However, a seamless remedy to this problem appears nowhere in sight. As Noll (2007) pointed out:

Those who seek radical change in education characterize the present schools as mindless, manipulative, factory-like, bureaucratic institutions that offer little sense of community, pay scant attention to personal meaning, fail to achieve curricular integration, and maintain a psychological atmosphere of

competitiveness, tension, fear, and alienation. Others deplore the ideological movement away from the formal organization of education, fearing an abandonment of standards, a dilution of the curriculum, an erosion of intellectual and behavioral discipline, and a decline in adult and institutional authority (p. xvi).

Because of digital technology blended and virtual learning schools are expanding in K-12 education but not without problems and controversy. Miron and Gulosino (2016), in a recent study: "*Virtual Schools Report 2016: Directory and Performance Review*," for the National Education Policy Center (NEPC), reported that in the school year 2013-2014, 262,000 students in 33 states were enrolled in 447 full-time virtual schools that deliver all instruction online while another 26,155 students across 16 states were enrolled in 87 blended schools, which combine traditional face-to-face and online instruction (p. 3). Virtual and blended schools continue to grow at a rapid pace in spite of weak academic outcomes. The four-year graduation rate in 2014-15 was 40.6 percent for full-time virtual schools and 37.4 percent for blended schools, compared to 81 percent for the nation as a whole. In recent years, despite rising enrollment numbers, the cyber charter sector has come under scrutiny for poor performance and management. On several measures virtual and blended schools perform poorly when compared to traditional public schools, according to the new study by NEPC.

These are but a few of the problem contemporary U. S. K-12 education continues to face. Many of the great education theorists such as Dewey (1902) with his project-based learning theory; Vygotsky (1962) with his zone of proximal development; Bruner (1973) with his theory of looking past the information given; Piaget (1970), with his child-centered learning theory; and Gardner (1983) with his theory of multiple intelligence have worked diligently to balance the objective and subjective nature of education.

### **Innovation Education and Learning**

In her paper, *Innovation in Public Education: Problems and Opportunities*, (2009) for the NewSchools Venture Fund, Kim Smith lamented that:

We find ourselves at a unique moment of broad consensus that the public school system, as it is currently constructed, simply isn't delivering on its promise of educational excellence for all children – particularly for those in underserved communities. While this has been the case for a while, today there is also an unprecedented level of support for doing things differently and widespread recognition that new approaches and new structures will be essential to fixing the situation. When other sectors have faced this challenge, they have turned to innovation – new ways of doing things that bring about an improved result – in order to make this kind of dramatic improvement a reality. We are concerned with innovation as a necessary ingredient in creating and sustaining a culture of performance in public education, one that is based on the kind of continuous improvement that we believe is necessary to bring about faster and better problem solving that can, in turn, increase student achievement results.

In public education today, there are plenty of innovations in the classroom taking place in small pockets across the country but this practice is currently disjointed and fragmented. Public charter schools such as High Tech High (see "What is Innovationism" in this thesis) in San Diego and Denver School of Science and Technology, use military-inspired simulation tools; and Quest to Learn, in New York which uses scientific methodologies and system designs in all curriculum development, are just a few.

In his book *Taking Sides: Clashing views on Educational Issues* (2007) James Wm. Noll points out that,

The schools often seem to be either facing backward or completely absorbed in the tribulations of the present, lacking a vision of possible futures that might guide current decisions. The present is inescapable, obviously, and certainly the historical and philosophical underpinnings of the present situation must be understood, but true improvement often requires a break with conventionality - a surge toward a desired future. The radical reform critique of government-sponsored compulsory schooling has depicted

organized education as a form of cultural or political imprisonment that traps young people in an artificial and mainly irrelevant environment and rewards conformity and docility while inhibiting curiosity and creativity. Constructive (innovative) reform ideas that have come from this critique include the creation of open classrooms, the de-emphasis of external motivators, the diversification of educational experience, and the building of a true sense of community within the instructional environment.

Innovation is defined simply as a "new idea, device, or method" (Merriam-Webster Dictionary). However, innovation is often also viewed as the application of better solutions that meet new requirements, unarticulated needs, or existing market needs (Maryville, 1992). Adapted primarily from the business world the term innovation has a long history dating back to Gabriel Tarde's (1903) S-shaped diffusion curve which defined the innovation-decision process as a series of steps that includes:

- First knowledge
- Forming an attitude
- A decision to adopt or reject
- Implementation and use
- Confirmation of the decision

In Silicon Valley, where the term innovation is widely used, Edison, et al (2013) found the following definition to be the most complete:

Innovation is: production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and establishment of new management systems. It is both a process and an outcome.

Kentucky's new Districts of Innovation statute defines education "innovation" as "a new or creative alternative to existing instructional and administrative practices intended to improve student learning and student performance of all students." To be more specific, "learning innovation" is about moving from the teaching system of the 20th century to a new "learning system" of the digital age where learning and the "facilitation of learning" (teaching) are the central elements. (Cook, 2015)

Many education innovation theorists have called for not augmenting the existing system but have called for an entirely new education platform which would "disrupt" the current over 100 year-old U. S. K-12 education system. The term "Disruptive Innovation Theory" was defined and the phenomenon first analyzed by Clayton M. Christensen beginning in 1995 (Christensen, 2010).

Education Innovation could be considered disruptive as it is an education pedagogical methodology that disrupts an existing educational continuum to create a new way of looking at established values and alliances. Smith (2009) informs us that,

In order for public education to better meet the needs of all students, it must better embrace not only the steady sustaining innovations that are needed, but also the truly disruptive innovations – many of which will come from people and organizations outside of the traditional system – that will lead to a fundamental change in the way the system looks and works, and ultimately to dramatic improvement in outcomes for the children who have so far not been served well.

John Tolley (2015) argued in his paper, *Why the Factory Model of Schools Persists, and How We Can Change It*, (2015):

But the reality is that no matter how well we learn how to hack and disrupt our schools, our best intentions for changing the factory model will fail as long as our efforts culminate in the calibration of our

students to factory standards for the college admissions process or the workplace. More than our schools, our social expectations need disrupting. Our definitions of success and happiness need a paradigm shift. To this end, the lone nuts who attend innovative learning conferences need to carry the conversation forward: Educators and education leaders guiding their learning constituencies toward a tipping point in public opinion. This is the natural way of bringing to reality the ideals of Sir Ken (Robinson) as articulated by Sam Sherratt - a reality wherein "schools ... reclaim their power, the power to shape lives, the power to create cultures and to define societies, instead of the other way 'round.

In his paper, *What is Learning Innovation* (2015) Davis Cook describes innovation learning tenets in Kentucky's new Districts of Innovation statute, which also calls for not modifying the existing teaching system but rather creating a new system of innovation learning, that includes:

- Involving students and teachers in significantly different ways that lead to increased student learning and engagement
- Defining new outcomes for learning and designing new ways of measuring students' progress and mastery
- Creating new ways of facilitating learning and designing different structures for deploying adults in schools
- Moving from "one-size-fits-all" instructional programs to personalized learning focusing on the 21st-century skills of collaboration, teamwork, problem-formulation, creativity and the ability to "learn how to learn."
- Creating systems where students are partners in designing and owning their learning
- Ensuring that a student can learn anywhere he/she can access the instructional material and at any time 24 hours a day/7 days a week and 365 days a year
- Creating a system of support for each student to be successful in this environment

As an example, in the traditional approach, students attend school in blocks of time, between 8-3, and on the same calendar for ALL students. A "Level 1 Innovation" would be moving from the traditional approach to modified schedules using blocks or trimesters or modifying day, offering additional instruction before and after school or moving to a "year-round" calendar. A "Level 2 Innovation" might include a true "flexible" time concept, allowing students and teachers to be on different time schedules and different calendars but with all teachers working equal contracts and all students having the same amount of instructional time.

The statute contains six essential attributes that form the foundation to prepare students for college and career success. Each district and school's innovation may look different, but each is connected through the six design principles.

1. **World Class Knowledge and Skills:** knowledge and skills that prepare students for global success and competency
2. **Personalized Learning:** set goals, assess progress to ensure student academic and developmental support
3. **Anytime, Anywhere Learning:** flexible & Real World learning environment that provide constructive learning experiences
4. **Student Agency:** students owning and shaping their individual learning experience
5. **Performance-based Assessment:** enabling students to demonstrate mastery based on high and shared expectations
6. **Comprehensive systems of support:** providing a culture of support for all students (i.e., social, emotional, physical and cognitive)

Khan (2012) suggests that the digital revolution might finally enable a new model of education, more flexible, inspiring, and affordable than the current system. Rigid bureaucracies, parental anxieties, and political minefields that define much of the US education debate are breaking down as the use of digital technology to define personalized learning is showing real benefits. The challenge educators are left with is to create an in-classroom

environment and experience that is equal to, or better than, what is realized by today's youth at home and after-school online activities. Because of the social benefits and intrinsic values, the K-12 classroom collaborative learning experience is still essential to child development. As insightful schools transform to the digital age platforms of teaching and learning, the concept of Innovationism is intended to offer an educational methodology that is flexible enough to accommodate progressive new programs and the inevitable installation of trail-and-error periods that are a natural byproduct of any innovation. Once the programs are introduced the Innovationism concept guides the pedagogical methodology with which these innovative programs are applied and presented in the classroom.

As we shall see in the following Purpose of this Study, the concept of Innovationism attempts to integrate a balanced and harmonious approach to the objective and subjective learning theories to produce an effective motivational education platform designed for a digital learning experience.

### **Purpose of the Study**

Since the advent of the Progressive Era from 1890 to 1919 education theorists have been debating which education philosophy is best suited for educating children for a society and culture of the period. The progressive education movement was an integral part of the early twentieth-century reform directed toward the reconstruction of American democracy through social, as well as cultural, uplift (Gavin-Loss & Loss, 2002). In response, conservative education theorists called for a return to a classic curriculum that fostered intellectual discipline in the individual. Such conservatives dominated American education for most of the twentieth century and continue to be influential today (Johnson & Reed, 2008). What resulted has been a continuous debate by the followers of the conservative education philosophy of essentialism and the progressive education philosophy of progressivism. Bagley (1940) would often say, "Essentialism and Progressivism are two schools of education theory that have been in conflict for centuries."

The purpose of this study is to examine existing education philosophies and theories in both the literature and the classroom to identify the most effective aspects of the concept of Innovationism. This study is intended to provide a framework needed to guide the ongoing transformation of American K-12 education into a digital age model and pedagogy.

The research is also intended to be the philosophical justification for the changes needed to implement the teaching and learning platforms that have been brought on by digital technological advances in the classroom. As technology is now being applied in virtually every aspect of instruction, a rapid philosophical response is needed to support the innovative changes that happen as a result of integration of technology into educational instruction. As Horner, et al., (2002) noted, in the age of information, educators need to be able to sort out which information is important in order to confront problems and respond adequately to those problems. An innovative education philosophy will aid in this endeavor by transforming contemporary K-12 education into a joyous, fun, and playful learning experiences where each child and each teacher looks forward to coming to school every day.

By recognizing and applying a combination of objective rules and goals along with subjective personal manifestations, the education experience will support the environment necessary to learn in a safe and semi-structured way that insures that each child's educational opportunities are realized. In order to accomplish this all aspects of successful education theory such as blended-learning and proven motivational activities, based on fun and belonging (Glasser, 1997), have to be presented in a student-respected safe environment. As Kincheloe, et al, (2000) observed, "It follows from this realization that students and their context must be the focus of schooling and that education is a process rather than a product" (p. 47).

## **Theoretical Basis**

The theoretical basis for this study is founded on the belief that because of the rapid advance of digital technology, contemporary K-12 education is in need of an educational philosophy that reflects the requirements of a modern, world society. As Noll observed (2007), "A careful analysis of contemporary education demands attention not only to the historical interpretation of developmental influences but also to the philosophical forces that define formal education and the social and cultural factors that form the basis of informal education" (p. xv). The basic structure of the concept of Innovationism is the blending of several objective and subjective education philosophies and learning theories, thus it was necessary that these philosophies and theories be examined to insure they provide the philosophical framework for Innovationism.

## **What is Innovationism?**

Innovation education and learning (Smith, 2009) applies contemporary technology to achieve personalized learning and differentiated teaching. Innovationism builds upon this existing educational methodology by providing a framework to guide the ongoing transformation of American K-12 education into the digital age; is comprised of a systematic blending of objective and subjective learning elements in a methodology, which by intention, avoids the ideological polarization between behaviorally based curriculum and cognitively based curriculum; and is a framework that supports methodologies that make learning joyous, fun, creative, innovative, and playful while, at the same time, inspiring, motivational, engaging, rigorous, enlightening, and reflective.

The educational philosophy that indirectly addresses the concept of Innovationism is divided into two ideological camps. The first is the concept as it applies to the administration of the education system while the second is the philosophy's practical application in pedagogical, methodology, and curriculum. It is in the classroom where philosophy transcends the hypothetical to become practical and then the functional. Without a strong pedagogical foundation it is impossible to develop or select an effective curriculum and deliver that curriculum to effectively motivate and engage students. The concept of Innovationism was developed to support the transition from the late nineteenth century industrial revolution's K-12 education model that is based on interdependent standardization to a student-centered, leaning centered, engaging, and personalized curriculum.

The definition of innovation is "to introduce something new; the introduction of new things or methods; or to make changes" (Merriam-Webster Dictionary, 2015 Merriam-Webster, Incorporated, located at <http://www.merriam-webster.com/> ). Some elements of Innovationism are new, although reconceived would be a better description. In different forms the concept of Innovationism has been used in education and research, especially post-secondary education, for many years. What is original, and learned from this study, is the organization of the basic tenets of the concept of Innovationism.

Bagley (1940) argued traditionally the four main education philosophies of Essentialism, Progressivism, Perennialism and Reconstructionism, and their supporting education theories, have worked at odds with one another. The concept of Innovationism, as studied and defined in this thesis holds that all of these philosophies have merit depending on the subject matter, the learner, and the learning environments in and on which the subject is presented. It was found that an underlying tenet of concept of Innovationism is that no existing educational philosophy or theory should be ignored simply because one aspect of a philosophy or theory conflicts with, or is denied by that of another philosophy or theory's conceptual framework. Innovationism is a normative education concept because it unifies pedagogy, curriculum, and learning theory with the purpose of education. It is grounded in established epistemological assumptions that support education to specifically foster dynamic learning, critical thinking, intellectual flexibility, collaboration, and other skills needed in the world's digital age.

The concept of Innovationism being both progressive and conservative in nature, utilizes proven tenets of existing education philosophies and theories, and blends a philosophy of both rigorous and yet engaging pedagogical ideology. Sometimes an objective approach is necessary especially for establishing discipline and respect and at

other times a subjective approach is called for to allow for creativity and reflection. The concept of Innovationism combines these traditional education philosophies and theories in a balanced and appropriate K-12 education philosophy that provides a conceptual pedagogical foundation for the education of children who in 10-15 years will be competing for jobs in a digital global economy. The concept of Innovationism attempts to bridge the notion of extremes.

Just as the Eastern concept of the yin and yang provide a harmonious balance to life, objectivism and subjectivism potentially can provide a balance to pedagogical practices in the classroom. Jonassen (1996) writes that Instructionism refers to an objective collection of educational practices that are teacher-focused, skill-based, product-oriented, non-interactive, and highly prescribed. Both Goodman (1998) and Honebein (1996) hold that, in contrast, Constructivism refers to a subjective collection of educational practices that are student-focused, meaning-based, process-oriented, interactive, and responsive to student personal interests and needs. Instructionism and Constructivism reflect polarized assumptions regarding the nature of human learning (as cited in Johnson, 2004, p.73). Systems need to exist in balance including the school system. As Kincheloe et al., (2000) observes the out-of-balance Western consciousness of segregation and intolerance that has contributed to many moral catastrophes such as slavery and the Holocaust, is played out daily in schools as various groups vie for prestige, power, resources, influence or control: jocks versus geeks; major sports versus minor sports; men's sports versus women's sports; teachers versus students; administration versus faculty and students; popular kids versus unpopular kids; gifted versus remedial; and rich versus poor (p. 48).

Digital technology has opened contemporary K-12 education to virtually unlimited possibilities of pedagogical and curriculum applications. On one hand, teachers and administrators have access to programs that can customize learning for every child, on the other, it is still too early in the evaluation process to have identified pedagogical and curricular proven paths to successfully customize learning for every individual child. For example, Herman and Linn (2013) point to a recent study that indicates summative assessments (i.e., objective multiple choice and t/f testing) are likely to continue to represent important goals for deeper learning, particularly those related to mastering and being able to apply academic content and cognitive strategies related to complex thinking, communication, and problem solving (p. 17). However, in order to provide a balanced and harmonious K-12 education formative assessment (subjective rubrics) must continue to evolve to allow the maximum benefit of summative evaluations in a stress free environment.

### **Innovationism as a Potential Learning Theory**

Horner, et al., (2002) has stated that: philosophy in general, and education philosophy in particular, can be considered either critical or speculative (p. 24). The primary intent of critical philosophy is to identify meanings by analyzing statements and the mutual relations among concepts. Words must be used carefully and consistently; and language must be clear and precise in order to prevent suspect knowledge from penetrating the theory. Critical philosophers attempt to determine the relations and clarify the meanings of fundamental concepts. They subject initial assumptions or statements of belief to all possible objections. In an attempt to keep all inquiry honest, critical philosophy insists upon being precise in its use of concepts, true to its premises, and logical in drawing conclusions (p.25).

In contrast, A. N. Whitehead (1969) explained speculative philosophy as, "the endeavor to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted" (as cited in Honer, et al, 2002, p. 26). Intuitive judgments, ethical prescriptions, visionary projections, and existential declarations are among the philosophical expressions to which the term "speculative" might apply.

The concept of Innovationism maintains that objective clarity and precision are of importance in the contemporary world while also maintaining that because of the fragmentation of the human experience and the lack of meaning in modern activities the broader, subjective approach to philosophy is also needed to guide K-12 education in the digital age (p.27).

The ultimate goal of the proposed concept of Innovationism is to instill in every child a deep love of learning and that love of learning is powerful enough to keep students who are on the educational margins to stay in school. What is needed to get to these goals are: 1) love of learning, and 2) significant reduction of drop-out rate in the K-12 public schools. This study has resulted in the following core tenets of the concept of Innovationism contained in Table 1 below. These 11 tenets are not a complete list of the potential tenets of the concept of Innovationism. The tenets should be thought of as a point of departure or a starting point for the development of a theory of Innovationism, the pedagogy of Innovationism, the instructional design of Innovationism curricula, and the starting framework for Innovationism constructed within a contemporary digital learning and management system.

Table 1. *Proposed core tenets of the concept of Innovationism.*

<b>PROPOSED CORE TENETS OF THE CONCEPT OF INNOVATIONISM</b>	
1.	Systematically combines balanced and blended objective and subjective elements of teaching and learning.
2.	Above all else and regardless of temperament, honors love and respect of the child (Nodding, 1992; Steiner, 1923).
3.	Identifies the elements and practices of artful teaching according to this definition of pedagogy: the art and science of teaching.
4.	Delivers defined parts of the instruction as an art form.
5.	Advances creative ways to use technology in the classroom.
6.	Is a system of education that attempts to meet the student's need for fulfillment of personal potential.
7.	Focuses on the meaningfulness of real-world applications of learning outcomes.
8.	Reorganizes teaching and learning to promote the joy and fun of education.
9.	Aids in student/teacher motivation and participation through creative and diversified learning opportunities.
10.	Presents methodologies that facilitate individual's processing of information and turning that information into knowledge and then into wisdom.
11.	Includes the learning processes of: inquiry, imagination, questioning, problem-solving, creativity, invention, collaboration, and innovation.

The concept of Innovationism was created in part as a foundation for the development of media education so that social institutions can meet the needs of this and future generations. Characteristics of this digital learning change, which Jenkin's calls the "Participatory Culture" include the characteristics listed in Table 2 below.

Table 2. *Characteristics and activities of a participatory culture.*

<b>CHARACTERISTICS AND ACTIVITIES OF A PARTICIPATORY CULTURE</b>	
1. Affiliations	Social media membership and participation.
2. Expression	Creating and producing new forms of digital expression.
3. Collaborative Problem-Solving	Team work and gaming.
4. Circulation	Pod-casting, Video-casting, and blogging.

Jenkins, et al., (2006) informed us that the advantages of these activities include the development of skills valued in the modern workplace. Acting like a type of curriculum this participatory culture can determine which youth will

succeed and which will be left behind as they enter school and the workplace. Jenkins argues that, even though kids can acquire these key skills and competencies on their own by interacting with popular culture, some concerns exist. The participation gap, which is the unequal access to skills that will prepare youth for participation in the world's future; the transparency problem, which is how youth see the ways that media shapes perceptions; and the ethics challenge, which is the development of alternate forms of professional training and socialization that will prepare young people as media makers and community participants (p. 4).

In order to clarify a primary challenge, to not only reduce the digital divide with technological access but to also, expand the opportunities to participate by developing the cultural competencies and social skills needed for their participation. These skills include the 10 cultural competencies and social skills needed for participation shown in Table 3 below.

Table 3. *Reducing the digital divide by focusing on cultural competencies and social skills needed for participation.*

<b>REDUCING THE DIGITAL DIVIDE BY FOCUSING ON CULTURAL COMPETENCIES AND SOCIAL SKILLS NEEDED FOR PARTICIPATION</b>	
1. Innovation	The use of experimentation as a form of problem solving.
2. Simulation	The ability to construct models of real-world processes.
3. Appropriation	The sampling and remixing of media content.
4. Multitasking	The ability to prioritize and deal with several tasks at one time.
5. Distributed Cognition	The ability to interact with tools that expand mental capacities.
6. Collective Intelligence	The ability to pool knowledge with others.
7. Judgement	The ability to evaluate the credibility of information.
8. Transmedia Navigation	The ability to follow information across multiple modalities.
9. Networking	The ability to connect divergent information sources.
10. Negotiation	The ability to identify the diverse desires and needs marginalized by the digital divide.

As the participatory cultures shift the focus of literacy from one of individual expression to one of authentic community involvement, these new literacies will almost all involve social skills developed through collaboration and networking. In order to effectively function in today and tomorrow's world every student has to have access to the skills and experiences needed to be digitally media literate and to understand how that shapes perceptions and thinking.

Innovationism is intended to provide a flexible philosophical framework which will allow for the rapid adaptability of integrated pedagogical methodology and curriculum changes without the stifling ideological polarization so common in any K-12 progression. Innovationism sees the application of these changes through the lenses of the objective and subjective found in every academic and administrative element and focuses on identifying the appropriate positive and/or negative balance between an element's objective and subjective structures in order to efficiently maximize learning.

## Conclusion

Digital technology has not necessarily made humans more intelligent but it has definitely made us more aware. Digital information is available 24/7 and digital technology is changing the way the world works, and in some cases, how teachers teach. As digital natives (Prensky, 2006) the current and future K-12 students need to be taught decidedly differently than previous generations. Digital technology has opened up a tremendous volume of information never before available and it delivers that information at incredible speeds. The concept of Innovationism argues that in order to maximize the effective transmission and transformation of this information into knowledge and then into wisdom it is believed necessary that K-12 students use all known education philosophies in a balanced and blended objective and subjective pedagogical methodology.

## Why Innovationism?

Educators, parents, teachers, and even students may ask why there is a need for new education theories. Certainly that is an excellent question since humans have been proposing teaching and learning philosophies, pedagogies, standards, and subsequent methodologies for hundreds of years. During this time of the great American experiment, which has lasted from 1647 to today for a total of 364 years, hundreds of philosophies have been proposed and tested for use, many of which were designed by education theorist such as John Dewey (1912).

In his book *Taking Sides: Clashing views on Educational Issues* (2007) James Wm. Noll points out that:

The schools often seem to be either facing backward or completely absorbed in the tribulations of the present, lacking a vision of possible futures that might guide current decisions. The present is inescapable, obviously, and certainly the historical and philosophical underpinnings of the present situation must be understood, but true improvement often requires a break with conventionality - a surge toward a desired future. The radical reform critique of government-sponsored compulsory schooling has depicted organized education as a form of cultural or political imprisonment that traps young people in an artificial and mainly irrelevant environment and rewards conformity and docility while inhibiting curiosity and creativity. Constructive reform ideas that have come from this critique include the creation of open classrooms, the de-emphasis of external motivators, the diversification of educational experience, and the building of a true sense of community within the instructional environment (p. xix).

According to the U. S. Department of Education, in today's increasingly global, knowledge-based economy, education has never been more important. Students need to master important skills like problem-solving, critical thinking, creativity, and team work in order to be prepared for their community responsibilities, the jobs of today and tomorrow, and to provide the scaffolding for individuals to lead fulfilling and successful lives (as cited in U. S. Department of Education, <http://www.ed.gov/news/press-releases/fact-sheet-empowering-states-transform-education-landscape>).

Digital technology has opened contemporary K-12 education to virtually unlimited possibilities of teaching and learning. Traditional academics such as language arts, mathematics, sciences, and social studies are now being redesigned in integrated digital formats to be a more modern, personalized, interdisciplinary, curriculum that reflects the knowledge and skills needed in real world work environments. Because of the flexibility to reach every student by designing personalized learning platforms Innovationism is especially focused on supporting the design of integrated digital curriculums.

The 2015 Every Student Succeeds Act (ESSA) mandates that our educational system must prepare every child to graduate from high school ready for college and careers, and provides more children access to high-quality state preschool programs. This change is from a two tract system (i.e., academic or vocational) to a philosophy of readying high school graduates for both college and careers (as cited in The White House, <https://www.whitehouse.gov/the-press-office/2015/12/10/white-house-report-every-student-succeeds-act>).

Because of the current rapid advances in K-12 pedagogical methodologies, and over the past twenty years digital innovations in the application of those advances, an education philosophy is needed to ground the validity and analysis of such rapid change. Such a philosophy has to be flexible and adaptive as all innovations are situational (Merickel, 1999) and are naturally evolutionary. Meanwhile, new technologies offer hope for more effective ways of teaching and learning, but also engender confusion and even fear; too often the shiny new technology is used as little more than window dressing. (Khan, 2012)

# Chapter II

## Review of the Literature

### Overview

This review of the literature focuses on existing studies and writings that either support or appear not to support this thesis statement:

*It is believed that the concept of Innovationism, introduced in this thesis, has the potential to provide elements for a framework that will guide the systematic development of contemporary curricula for K-12 digital and blended learning environments as a means of addressing the dropout rate for all students grades 6-12, and especially for members of all at risk populations.*

If K-12 education is to continue to evolve to meet the sociological demands of a world community, a harmonious blend of existing learning ideologies must be developed to maximize instructional outcomes.

Noll (2007) wrote that historically organized education has been initiated and instituted to serve many purposes including:

- spiritual salvation
- political socialization
- moral uplift
- societal stability
- social mobility
- mental discipline
- vocational efficiency, and
- social reform

At any given time, competing conceptions may vie for the following examples:

- dominance-social conceptions
- economic conceptions
- conceptions that emphasize spirituality, or
- conceptions that stress the uniqueness and
- dignity of the individual

These considerations of human nature and individual-society relationships are grounded in philosophical assumptions, and these assumptions find their way to such practical domains as schooling. In Western civilization there has been an identifiable, but far from consistent and clear-cut, historical trend in the basic assumptions about reality, knowledge, values, and the human condition. This trend, made manifest in the philosophical positions of the objective philosophies of idealism and realism, and the subjective philosophies of pragmatism and existentialism, has involved a shift in emphasis from the spiritual world; to nature; to human behavior; to the social individual; to the free individual, and from eternal ideas; to fixed natural laws; to social interaction; to the inner person.

The idealist tradition, which dominated much of philosophical and educational thought until the eighteenth and nineteenth centuries separates the changing, imperfect, material world; and the permanent, perfect, spiritual (i.e., mental world). As Plato believed, human beings and all other physical entities are particular manifestations of an

ideal reality that in material existence humans can never fully know. The purpose of education is to bring us closer to the absolute ideals, pure forms, and universal standards that exist spiritually by awakening and strengthening our rational powers. Whereas for Plato, a curriculum based on mathematics, logic, and music would serve this purpose especially in the training of leaders whose rationality must exert control over emotionality and baser instincts.

Against this tradition, which shaped the liberal arts curriculum in schools for centuries, the realism of Aristotle, with its finding of the forms of things within the material world, brought an emphasis on objective scientific investigation and on environmental factors in the development of human potential. This fundamental view has influenced two philosophical movements in education:

- Naturalism, based on following or gently assisting nature (as in the approaches of John Amos Comenius, Jean-Jacques Rousseau, and Johann Heinrich Pestalozzi), and
- Scientific realism, based on uncovering the natural laws of human behavior and shaping the educational environment to maximize their effectiveness (as in the approaches of John Locke, Johann Friedrich Herbart, and Edward Thorndike).

In the twentieth century, two subjective philosophical forces, pragmatism and existentialism, have challenged these traditions. Each has moved primary attention away from fixed spiritual or natural influences and toward the individual as shaper of knowledge and values. The pragmatic position, articulated in America by Charles Sanders Peirce, William James, and John Dewey, turns from metaphysical abstractions toward concrete results of action. In a subjective world of change and relativity, human beings must forge their own truths and values as they interact with their environments and each other. The European-based philosophy of existentialism emerging from such thinkers as Gabriel Marcel, Martin Buber, Martin Heidegger, and Jean-Paul Sartre has more recently influenced education. Existentialism places the burdens of freedom, choice, and responsibility squarely on the individual viewing the current encroachment of external forces and the tendency of people to escape from freedom as a serious diminishment of our human possibilities.

These many theoretical slants contend for recognition and acceptance as we continue the search for broad purposes in education and as we attempt to create curricula, methodologies, and learning environments that fulfill stated purposes. This concept is carried out in the public school where social, political, and economic forces often predominate" (Noll, 2007, p. xvii).

Technology can help facilitate innovating at the local context by bringing new ideas to educators, documenting and sharing practices, and connecting with other schools and professionals around the globe. As Groff (2013) states, "Learning environments that ultimately seek transformation will need a well thought-through approach to the process, garnering the resources, both human and technical, needed to support the school's advancement through the development stages. The most important factors are that goals are underwritten by a clear and collectively-agreed-upon philosophy of how students perform (p. 16).

Just as many emerging digital epistemologically developed pedagogical methodologies are being referred to as innovational the combining of existing objective and subjective education philosophies and theories to guide the balanced transformation of contemporary K-12 education through the digital age is also being called innovational. Goodrum, Dorsey, and Schwen, (1993) noted that innovations operate in a setting of complex, unpredictable, multiform relationships among various elements that make up the life and structure of a working organization (p. 13). This study examines whether the systematic and thoughtful combining of these innovational elements, which are referred to in this study as concepts of Innovationism, has the potential to provide K-12 teachers with new sets of tools to support digital teaching and learning aligned with specified learning outcomes and state standards.

In his online course *Integration of the Disciplines* (1999) Merickel argued, "Trainers with a need to carefully control instructional outcomes because of safety, time, or economic concerns might better work with a more behaviorist

model. Likewise, instructors with an objective, Instructionist epistemology would develop a very different pedagogical model, which could still be effective in achieving their instructional objectives" (Merickel, 1999). Kincheloe, et al (2000) observed that, "The twentieth century French post-modern philosopher Jacques Derrida (1976) contends that there is no singular original author of any book because the voices of other people have so permeated and blended with every author's voice that it is impossible to distinguish among them" (p. 9).

Physicist Thomas Kuhn (1962), who coined the term paradigm shift, referred to the interdependence of related criteria when he claimed that scientific fields undergo periodic radical changes rather than solely advancing in an iterational linear continuum. His theory claims that these paradigms open up new approaches to understandings and that the notion of scientific truth cannot be established only by objective criteria but rather is defined by a consensus of a scientific community. Conflicting paradigms are often competing concepts of K-12 teachers and can even be found in university offered teacher preparation and licensure programs. Accordingly, science can never rely solely on objectivity and must account for the subjective nature of a phenomenon since all objective conclusions are ultimately founded upon subjective conditions (p. 150).

This chapter will specifically focus on the review of the following education philosophies and their supporting theories: Essentialism and Progressivism; and Perennialism and Reconstructionism. Although positioned at different ends of philosophical spectrums, these proven philosophies are not so much blended but rather used in conjunction, both in linear and non-linear formats. The education theorist Ralph W. Tyler (1951) agrees when he states in his text book, *Basic Principals of Curriculum and Instruction*, "Educational philosophers... see the school as aiming essentially at the transmission of the basic values derived by comprehensive philosophical study and hence see in educational philosophy the basic source from which objectives can be derived. Each of these sources has certain values. Each source should be given consideration in planning any comprehensive curriculum program" (p. 15). As Genevieve Marie Johnson (2005) argued, "A combination of instructional methods may ultimately prove most beneficial" (p. 3).

Additional support for the idea of combining several existing education philosophies is presented in William James' concept of Pluralism (1909). Pluralism, which is the co-existence of two realities, should not be confused with, as Kincheloe, et al., (2000) stated, "the feminist metaphysical concept of dualism which is the division of reality into separate parts" (p. 32). In *The Child and the Curriculum*, Dewey (1902) discusses two major conflicting schools of thought that are today known as Essentialism and Constructivism. The first is centered on the curriculum and focuses almost solely on the subject matter to be taught. Dewey argues that the major flaw in this methodology is the inactivity of the student. Within this particular framework, "the child is simply the immature being who is to be matured; he is the superficial being who is to be deepened" (p. 13). Dewey argues that in order for education to be most effective, content must be presented in a way that allows the student to relate the information to prior experiences, thus deepening the connection with this new knowledge.

Dewey was also concerned by many of the child-centered excesses of progressive educational pedagogies. Dewey argued that too much reliance on the child could be equally detrimental to the learning process. "We must take our stand with the child and our departure from him - it is he, not the subject matter that determines the quality and quantity of learning" (pp. 13-14). Dewey went on to say, the potential flaw in this thinking is that it minimizes the importance of the content as well as the role of the teacher. Although Dewey was a progressive this statement shows the balance in his philosophical approach to pedagogy, which is also a prime tenet of the concept of Innovationism.

In order to rectify this issue, Dewey advocated for an educational structure that strikes a balance between delivering knowledge while also taking into account the interests and experiences of the student. He notes that "the child and the curriculum are simply two limits which define a single process. Just as two points define a straight line, so the present standpoint of the child and the facts and truths of studies define instruction" (p. 16).

It is through this reasoning that Dewey (1916; 1944) introduced his hands-on, project-based experiential education model which today is being promoted by Common Core State Standards. He argued that "if knowledge comes from the impressions made upon us by natural objects, it is impossible to procure knowledge without the use of objects which impress the mind" (pp. 217–218). Dewey could see that contemporary K-12 education stifles individual autonomy when students are taught that knowledge is transmitted in one direction, from the expert to the learner. Although Dewey's ideas are over 100 years old, they are the foundation for other contemporary experiential models of education such as problem-based learning, inquiry-based learning, and Constructivism.

The foundations of education must look toward the transcendence of the fleeting and parochial debates of all extremes. As Dewey (1938) said in his book *Experience and Education*, "either/or dichotomies are destructive." Progressive education can only work in an environment that transforms polarized ideologies into an integrated vision respecting multiple interests and philosophies. As philosopher Alfred North Whitehead (1933) wrote, "The harmony of the whole is bound up with the preservation of the individual significance of detail" (p. 264) and American President Theodore Roosevelt of the U. S. Republican Party and later the U. S. Progressive Party declared that he "always believed that wise progressivism and wise conservatism go hand in hand" (Eleanor Roosevelt Papers Project, 2000). Balance in the schooling process requires a similar vision constructed upon a foundation of respect for and preservation of each unique contribution to the education structure that guides students to an inclusive love of learning and lifelong intellectual growth.

### **Education Philosophy, Theory, and Practice**

Education philosophy can be referred to as either an academic field of applied philosophy or as a normative field of philosophy. Frankena, et al., (2002), stated that academic philosophy is based on the conceptualization of epistemology while normative philosophy attempts to unify pedagogy, curriculum, and learning theory within its framework while also incorporating any epistemological philosophy and theory that promotes a specific type or vision of education, or which examines the defining goals and meaning of education. The philosophy of education may be either the philosophy of the process of education or the philosophy of the discipline of education. That is, it may be part of the discipline in the sense of being concerned with the aims, forms, methods, or results of the process of educating or being educated; or it may be meta-disciplinary in the sense of being concerned with the concepts, aims, and methods of the discipline" (as cited in Guthrie, J. W., 2002, *Encyclopedia of Education*, 2nd edition). As Noll (2007) observed, "In recent decades the growing influence of thinking drawn from the humanities and the behavioral and social sciences has brought about the development of interpretive, normative, and critical perspectives which have sharpened the focus on educational concerns" (xiv).

The difference between a philosophy and a theory should be defined for this study since many educational philosophies and theories are interchangeable. According to Dr. Christine Jax (2014), Chief Academic Officer and Dean at Digital Media Arts College, the difference is that a philosophy is conceptual and is made up of beliefs based on theories that are practical whereas theories answer the questions that arise within the context of a philosophy. There are several primary philosophies of education, such as Perennialism, Essentialism, Progressivism, and Reconstructionism, and each philosophy has theories supporting it to provide validity, order, and integration of beliefs (Jax, 2014).

According to Frankena, et al., (2002), normative philosophies or theories of education may make use of the results of philosophical thought and factual inquiries about human beings and the psychology of learning; and put forward an idea, theory, or point of view for consideration by others. Views about what education should be, what dispositions it should cultivate, how and whom should do so, and what forms it should take should be clear and easy for all citizens to consider (as cited in Guthrie, J. W., 2002, *Encyclopedia of Education*, 2nd edition). Martinez, Saulea, and Guenter (2001) believe it is the epistemological branch of philosophy that is most aligned with education theory and that epistemological assumptions inform, justify, and sustain all educational endeavors (p. 969).

von Glasersfeld (1995a) explained that there are two basic epistemological orientations, objective and subjective (as cited in Steffe, et al., 1995, p. 8) and Johnson (1993) agreed when she stated objectivism and subjectivism are conceptualized as extremes on an epistemological continuum (p. 12). The contrast between objectivism and subjectivism is sometimes viewed as pessimism versus optimism. Psychologist Ernest Becker (1967) addresses what he believes is the number one issue that separates educational philosophies. What separates educational philosophies is our philosophy of the human person and cognition. "What, then, should be the basic orientation for public school K-12 curriculum" (p. 254)?

Wilson (1997) wrote that, "Although frequently renamed, these two contrasting epistemological assumptions (objectivism and subjectivism) have defined philosophy since the essence of human knowledge was first debated" (p. 297), while Johnson (2009) held that "Indeed, various philosophical treatises, academic disciplines, and all educational practice can be dichotomized on the basis of these two fundamental philosophical assumptions regarding the structure and mechanism of knowledge" (p. 8).

Prawat (1996) saw that currently, as well as historically, the practices of education have corresponded to varying degrees to either a static-passive view of knowledge or an adaptive and active view of knowledge (p. 215). James (1909) reflected this view when he referred to the concept of objective and subjective orientations as tender-minded and tough-minded temperaments. The tender-minded is religion which takes naturally to free will, idealism, monism, and optimism while the tough-minded is irreligious, materialistic, empiricist (i.e., relying only on facts), sensationalistic (i.e., tracing all knowledge to sensation), fatalistic, pluralistic, pessimistic, and skeptical. In each group there are contradictions and, no doubt, there are temperaments that select their theories partly from one group and partly from the other (as cited in Durant, 1926). Durant (1926) continued this thought when he wrote, "There are people (e.g., William James) who are tough-minded in their addiction to facts and their reliance on the senses, and yet tender-minded in their horror of determinism and their need for religious belief. Can a philosophy be found that will harmonize the apparently contradictory demands?" (p. 205). The preceding not only references the concept of subjectivity/objectivity but also is a good representation of the pluralistic nature of the concept of Innovationism.

Johnson (2009) argued that there is disagreement regarding which curricular orientation best serves the educational needs of children. Evaluative outcome research is contradictory and the superiority of either instructional orientation has not been clearly established. A blended balance of Instructionism-Constructivism could promote systematic instruction within a context of individual meaning and personal interest (p. 1).

### **Objective and Subjective Structures of Innovationism**

As Kincheloe, et al., (2000) stated, every philosophy is a dynamic and organic understanding of life, wisdom and knowledge constructed within its own context. As such, education philosophies mean little outside the context of an individual's learning process (p. 17). To provide balance it is suggested that all education philosophies contain both objective and subjective elements but are not necessarily equally balanced and each falls primarily into one camp or the other. This researcher's idea of Innovationism examines a systematic combination of the objective and subjective nature of each philosophy into a practice of educating the whole-person (i.e. personalized) and will propose the guiding principles for developing a pedagogy and curriculum to support the concept of Innovationism.

Within Progressivism is found the theoretical concepts of Constructivism, Experientialism and Pragmatism. Essentialism and Progressivism are two schools of education theory that have been in conflict for centuries (Bagley, 1940). The difference can be seen by pairing such assumed objective and subjective opposites as: effort vs. interest; discipline vs. freedom; logical organization vs. physiological organization; subjects vs. activities; remote goals vs. immediate goals (Bagley, 1940). It would appear from the literature studied thus far that concept of Innovationism would serve all students by providing each of these learning concepts at the appropriate time and

place to create a balanced and blended pedagogy upon which to design curricula needed to support contemporary education in a digital age.

## Objective Education Philosophies

**Essentialism:** Cartwright (1968) observed that Essentialism, an objective normative educational philosophy that states for any specific entity (e. g., animal, groups of people, a physical object, or a concept) there is a set of attributes which are necessary to its identity and function (p. 615).

Essentialism is grounded in Aristotle's realist approach to knowledge in which the individual focuses on informing the mind using stimuli from the world around them. As an educational philosophy, Essentialism advocates instilling in students the essentials or basics of academic knowledge and character development. William Howick (1971) reported that the Essentialist movement first began in the United States in the year 1938. In Atlantic City, New Jersey, a group met for the first time called, The Essentialist's Committee for the Advancement of Education (p.49). Their emphasis was to reform the educational system to a rational-based system (as cited in Wikipedia, [https://en.wikipedia.org/wiki/Educational\\_essentialism](https://en.wikipedia.org/wiki/Educational_essentialism), retrieved 1/18/2016).

Ornstein (1993) wrote that in 1938 Bagley and other educators met together where Bagley gave a speech detailing the main points of the essentialism movement and attacking the public education in the United States. One point that Bagley noted was that students in the U.S. were not getting an education on the same levels as same age students in Europe (p. 167). Ornstein continued that a recent branch has emerged within the Essentialist school of thought called Neoessentialism. Emerging in the eighties as a response to the Essentialist ideals of the thirties as well as to the criticism of the fifties and the advocates for education in the seventies, Neoessentialism was created to try to appease the supposed problems facing United States education that were brought to light in the 1982 "A Nation at Risk" report (p. 465). The most notable change within this school of thought is that it called for the creation of a new discipline known as Computer Science (as cited in Wikipedia, [https://en.wikipedia.org/wiki/Educational\\_essentialism](https://en.wikipedia.org/wiki/Educational_essentialism), retrieved 1/18/2016).

Ornstein (1993) stated that throughout his career Bagley argued against the conservative position that teachers were not in need of special training for their work. He believed that the liberal arts were important in teacher education. Bagley also believed the dominant theories of education of the time were weak and lacking rigor (p. 465). In April 1938, Bagley published the *Essentialist's Platform*, in which he outlined three major points of Essentialism. He described the right of students to a well-educated and culturally knowledgeable teacher; secondly, he discussed the importance of teaching the ideals of community to each group of students; lastly, Bagley wrote of the importance of accuracy, thoroughness and effort on part of the student in the classroom (Bagley, 1940).

As stated on their website The Core Knowledge Schools (1988) are based on Hirsch's essential knowledge philosophy. Although it is difficult to maintain a pure and strict Essentialist-only curriculum, these schools have the central aim of establishing a common knowledge base for all citizens. To do so, they follow a nationwide, content-specific, and teacher-centered curriculum. The Core Knowledge curriculum also allows for local variance above and beyond the core curriculum. Central curricular aims are academic excellence and the learning of knowledge, and teachers who are masters of their knowledge areas serve this aim (as cited in Wikipedia, [https://en.wikipedia.org/wiki/Educational\\_essentialism](https://en.wikipedia.org/wiki/Educational_essentialism), retrieved 2/2/2016).

Armstrong (2012) noted that when Essentialism was first introduced as an educational philosophy in American schools, it was criticized as being too rigid but as Powell (2007) wrote in the *Harvard Gazette*: with the 1957 Russian launch of Sputnik a panic ensued in educational circles as Americans felt they had technologically fallen behind the Soviets. A rethinking of education followed and led to a return to Essentialism.

Larson (2003) wrote that the launching of Sputnik at the height of the cold war gave rise to a number of intellectually objective approaches to disciplinary knowledge, such as Biological Science Curriculum Study in biology and Physical Science Study committee in physics, led by university professors including Jerome Bruner (p. 133). Interestingly, some of these cold war Essentialism reforms incorporated elements of Progressivism. For example, the work of Bruner (1957) was based in the developmental psychology of Jean Piaget (1950) and incorporated many of John Dewey's ideas of experiential education. Bruner's analysis of developmental psychology became the core of a subjective pedagogical movement known as Constructivism. This psychological approach has deep connections to the work of Dewey and led to a resurgence of subjective ideas in the second half of the 20<sup>th</sup> century (as cited in Wikipedia. <https://en.wikipedia.org/wiki/Progressiveeducation>, retrieved 1/25/2016). This provides support for the concept of Innovationism in that it includes the utilization of both objective and subjective education philosophies in a balanced pedagogical methodology. Such a movement appears to have promise regarding what could potentially become curriculum design based on the idea of, and potential educational theory of Innovationism.

Essentialists believe that teachers should instill traditional virtues such as respect for authority, fidelity to duty, consideration for others, and practicality. It is the teacher's responsibility to keep order in the classroom. Howick (1971) sees that the teacher must interpret essentials of the learning process, take the leadership position and set the tone of the classroom. These needs require an educator who is academically well-qualified with an appreciation for learning, development, and order (p. 51). Mortimer Adler (1982) argues, "The quality of learning is dependent largely on the quality of teaching" (p. 64). Advocating a longer school day, a longer academic year, and more challenging textbooks, Essentialism maintains that classrooms should be oriented around the teacher, who serves as the lecturer, intellectual and moral role model. The teachers decide what is most important for students to learn and, because it will divert time and attention from learning the academic subjects, provide little emphasis on student interests. (Adler, 1982)

Essentialists disapprove of vocational education, life adjustment, or other courses of that kind. Elementary students receive instruction in skills such as writing, reading, and measurement. Even while learning the creative subjects of art and music students are required to gather information gradually advancing to more complex skills and detailed knowledge. Only by mastering the required material for their grade level are students promoted to the next higher grade which is the underlying philosophy of the No Child Left Behind "high-stakes testing." Essentialist programs are common subjects for all students regardless of abilities and interests. They are academically rigorous, for both slow and fast learners, but how much is to be learned is adjusted according to student ability. The main focus is on achievement (i.e. test scores) as a means of evaluating progress. (Adler, 1982)

Johnson and Reed (2008) noted that whether the critic is Robert M. Hutchins (1953), Mortimer Adler (1982), Arthur Bestor, or more recently Allan Bloom (1987) or E. D. Hirsch (2010), the antithesis of the Essentialists is often John Dewey and a version of progressive education. That version is often derived from Dewey's theories. Most of these conservative critics espouse a vision of what it means to be an educated individual derived more from the thought of Plato and Aristotle than from John Dewey and his followers. Such conservatives dominated American education for most of the twentieth century and continue to be influential today (p. 15).

The concept of Innovationism applies certain Essentialist beliefs such as children need to be exposed to core curriculums throughout their K-12 experience. Where the concept of Innovationism would deviate from Essentialism in determining what that core curriculum is, how long the curriculum should be based on specific standards, the assessment used by most Essentialists, and by the curricular and learning limitations that are present in an Essentialist-only curriculum.

**Perennialism:** Dewey (1917) and Hutchins (1953) agreed that children need to read, to understand the past, and to experience literature, but they disagree over the appropriate means to achieve these ends. Hutchins favored a great books curriculum with students' reading and engaging the great minds of the Western world as they struggled with the perennial philosophical questions of humankind (p. 14). Dewey (1944) countered by saying that

the "attempt to re-establish linguistic skills and materials as the center of education and to do it in the guise of education for freedom, (p. 156) is directly opposed to all that democratic countries cherish as freedom" (as cited in Johnson & Reed, 2008).

Perennial, an objective normative educational philosophy, means "everlasting," like a perennial flower that blooms year after year. According to Heslep (1997), as the oldest and most conservative educational philosophy, Perennialism finds its roots in both the realism of Aristotle and the idealism of Plato. Perennialists believe that one should teach the things that are of everlasting relevance to all people everywhere, and that the emphasis should be on principles, not facts. Ornstein and Hunkins (2012) wrote that Perennialism dominated much of American education from the colonial period to the early 1990s and is based on the belief that some ideas have lasted over centuries and are as relevant today as when they were first conceived and these ideas should be studied in school (p.33).

Ornstein and Hunkins (2012) stated that although Perennialism may appear similar to Essentialism, Perennialism focuses first on personal development, while Essentialism focuses first on essential skills. Therefore an Essentialist curriculum tends to be more vocational and fact-based, and far less liberal and principle-based. This is often translated by Perennialists as, since people are human, one should teach first about humans, rather than machines or techniques and follow a liberal curriculum rather than vocational topics. Both philosophies are typically considered to be teacher-centered, as opposed to student-centered. Teachers are viewed as experts or authorities in their fields while teaching is based primarily on the Socratic Method which includes: oral exposition, lecture, and explication. There is one curriculum for all students, with little room for elective subjects, vocational education, or technical subject matter. Character training is also important as a means of developing the student's moral and spiritual being (p. 34).

A universal curriculum based upon the common and essential nature of all human beings is recommended by Perennialists. This form of Perennialism comprises the humanist and scientific traditions. Professors Hutchins and Adler implemented these ideas with great success at the University of Chicago, where they influenced the curriculum in the form of the university's undergraduate *Common Core*. Adler argues (1988):

Our political democracy depends upon the reconstitution of our schools. Our schools are not turning out young people prepared for the high office and the duties of citizenship in a democratic republic. Our political institutions cannot thrive; they may not even survive, if we do not produce a greater number of thinking citizens, from whom some statesmen of the type we had in the 18th century might eventually emerge. We are, indeed, a nation at risk, and nothing but radical reform of our schools can save us from impending disaster... whatever the price... the price we will pay for not doing it will be much greater (p. 255).

Kneller (1971) compares the Perennialist with the Essentialists when he observes that Perennialists are educationally conservative in the requirement of a curriculum focused upon fundamental subject areas, but value the notion that the overall aim should be exposure to history's finest thinkers as models for discovery. The student should be taught such basic subjects as English, languages, history, mathematics, natural science, philosophy, and fine arts (P. 181).

Although literature used by Perennialists might change, they hold that human nature is constant. Humans have the ability to reason and to understand nature's universal truths. Kneller (1971) felt that the goal of education is to develop the rational person and uncover universal truths by developing students' intellect and moral character. The Perennialists curriculum is objective centered as it relies heavily on defined disciplines or logically organized bodies of content, emphasizing language, literature, mathematics, and sciences (p. 185).

Mortimer Adler's book, *The Paideia Proposal* (1982) revived Perennialism. Adler advocated three types of learning that improve the intellect:

- Acquisition of organized knowledge, to be taught by didactic (moral) instruction;
- Development of basic learning skills through coaching and presentation of ideas; and
- Acquisition of values, to be taught by the Socratic Method.

These three types of learning are the same as Dewey (1916) outlined in *Democracy and Education* and Ralph Tyler (1951) later presented in *Basic Principles of Curriculum and Instruction*.

According to Ornstein and Hunkins (2012), “Perennialism appeals to a small group of educators who stress intellectual meritocracy. Such educators emphasize testing, tougher academic standards and programs, and identification of gifted and talented students. They advocate a uniform curriculum, usually liberal arts, with few electives. For Perennialists, educational equality results from providing all students with high-quality academic education. Perennialists believe tracking students into a vocational curriculum would deny an equal education” (p.36).

Kincheloe, et al., (2000) continued with the fact that Perennialism stresses ideal truth in the hope that students become philosophers who can articulate such truths and build a great society. Plato even wrote about his goal of the philosopher king, an intellectual who could guide societies in the highest ideals (p.29).

The concept of Innovationism being examined in this study, will share the view of Perennialists regarding non-reliance, on textbooks and lectures in communicating ideas at the secondary level and also believe that classroom emphasis should be on teacher-guided seminars, where students and teachers engage in dialogue and mutual inquiry-based learning. Both the idea of Innovationism and the philosophy of Perennialism would share the idea that students must learn to learn. Schools should not only prepare students for specific careers but also to pursue knowledge for its own sake and ultimately create an understanding of the value of life-long learning.

In order to discipline the minds of students, the concept of Innovationism like Perennialism, is believed to rely on the deduction of scientific reasoning using the inquiry-based Socratic Method, rather than the mere acquisition of facts. Because scientific reasoning is mostly derived from project-based trial and error methodology, the ethics of scientific reasoning, and especially, concepts of right and wrong should be understood and applied so that students will know the value of rules in a democratic society and why they need to be followed to insure a safe and peaceful environment in which they can succeed.

## Subjective Education Philosophies

**Progressivism:** also known as Experimentalism, is an educational philosophy based on the concept of progress that holds the tenets that science, technology, economic development and social advancements are vital to improve the human condition (as cited in Wikipedia; <https://en.wikipedia.org/wiki/Progressivism>, retrieved 2/18/2016). With Progressivist philosophy reality is what is experienced; truth is what presently happens, and what is perceived as good according to situational needs. As observed by Mutah University (2010) schools exist to learn about and expand the society of the world. The instructional objective aligning with the concept of Innovationism is to promote democratic living while, as with Experimentalism, promotes the perception that reality is the world of experience; truth is what works and is what exists.

Mah (2003) wrote that Progressivism became highly significant during the Age of Enlightenment in 18<sup>th</sup> century Europe because of the belief Europe was demonstrating that societies could progress in civility from barbaric conditions to civilization through strengthening the basis of empirical knowledge as the foundation of society. Sociologist Robert Nesbit (1980) defines five crucial premises of the *Idea of Progress* as being: value of the past; nobility of Western civilization; worth of economic/technological growth; reason over faith (i.e., scientific/scholarly

knowledge obtained through reason and, learning must supersede faith); and the intrinsic importance and worth of life (p. 4).

The meanings of progressivism have varied with the political conception of progressivism emerging from the vast social changes brought about by late 19<sup>th</sup> century industrialization. Nugent (2010) argued that it was felt that social progress was being stifled by vast economic inequality between the rich and the poor; minimally regulated *Laissez-faire* capitalism with out-of-control monopolistic corporations; and intense and often violent conflict between workers and capitalists (p. 2). Nesbit (1980) observed that eighteenth century philosopher and political scientist Marquis de Condorcet predicted that political progress would involve the disappearance of slavery, the rise of literacy, the lessening of inequalities between the sexes, reforms of harsh prisons and the decline of poverty (p.4). Appleby, et al., (1995) continued this thought when he wrote, "The primary idea of progress as viewed by classical liberals in the 19th and 20th centuries called for the rapid modernization of the economy and society to remove the traditional hindrances to free markets and movements of people (p. 78).

In America, Progressivism began as a social movement in the late 19th and early 20th centuries and then grew into a political movement, in what was known as the Progressive Era. The Progressive Era timeline was from about 1890 to 1920 and included such events as the Sherman Anti-trust Act (1890); John Dewey's "Laboratory School" (1896); the Pure Food and Drug Act (1906); Formation of the NAACP (1909); the Federal Reserve Act (1913); and women suffrage 19<sup>th</sup> Amendment (1919) (as cited in <http://www.windsor-csd.org/Downloads/Progressive%20Era%20Timeline.pdf>., retrieved 4/2/2016).

While the term "American Progressives" represent a range of diverse political pressure groups that are not always united, some American Progressives rejected Social Darwinism believing that the problems society faced (e.g., poverty, violence, greed, racism, class warfare) could best be addressed by providing good education, a safe environment, and an efficient workplace. Johnson (1893) argued that, "Progressives lived mainly in the cities, were college educated, and believed that government could be a strong tool for change" (p. 40).

Johnson and Reed (2008) wrote that Education Progressivism, which is a subjective normative education philosophy, is grounded in Plato's concept of idealism in which knowledge is gained from the inside out and looked at education as a kind of birthing process (p. 5). Idealists focus on the spiritual, the artistic, the intuitive, even the mystical in the pursuit of the more abstract realities and emphasize the study of ideas through the fields such as literature, history, philosophy, and religion. Progressivism argues that learning must be based on the fact that humans are social creatures and by nature learn best in real-life activities with other people (Vygotsky, 1978).

John Dewey wrote extensively on psychology, epistemology (i.e., the origin of knowledge, ethics and democracy) but it was his philosophy of education that laid the foundation for Progressivism. In 1896, while a professor at the University of Chicago, Dewey founded the famous Laboratory School to test his educational ideas. His writings and work with the Laboratory School set the stage for the Progressive Education Movement. (Ornstein & Hunkins, 2012)

Ornstein and Hunkins (2012) wrote that the Progressive Movement's intent was to make education more relevant and interesting to students by encouraging schools to expand their curriculum to meet the needs of the burgeoning immigrant population (p.69). Dewey's philosophy of education was the cornerstone of Progressivism which saw the role of education to prepare young people for adult life. He believed that for democracy to flourish education should allow learners to follow their interests and potential. Learners should learn to work with others because learning in isolation separates the mind from action and certain abilities and skills can only be learned in a group setting. Dewey felt that social and intellectual interaction dissolves the artificial barriers of race and class by encouraging communication between various social groups (Dewey, 1920, as cited in Ornstein & Hunkins, 2012).

Progressive curriculum emphasizes the study of the natural and social sciences which includes the exposure to new scientific, technological, and social developments. Believing that people learn best from what they consider most relevant to their lives, the curriculum centers on the experiences, interests, and abilities of students (Dewey,

1920). According to Progressivist thought, the skills needed in the real world include problem-solving and scientific methods of inquiry. Dewey continued this line of thought by stating that schools should nurture cooperation and self-discipline and transmit the society's culture. Because reality is constantly changing, Dewey saw little need to focus on a fixed body of knowledge. Progressivism emphasized how to think, not what to think. Traditional education of the time, with its method of imposition from the side of the teacher and reception (i.e. absorption) from the side of the pupil, Dewey wrote, "the method of imposition may be compared to inscribing records upon a passive phonographic disc to result in giving back what has been inscribed when the proper button is pressed in recitation or examination" (p. 212).

For Dewey and other Progressivists, the curriculum should be interdisciplinary and teachers should guide students in problem solving exercises and scientific projects. Teachers should not be confined to focusing on one discrete discipline at a time but should introduce lessons that combine several different subjects. Dewey saw the teacher as the "leader of group activities" and allowed students to analyze and interpret data and to draw their own conclusions. Teachers should plan lessons that arouse curiosity and push students towards higher order thinking and knowledge construction. For example, in addition to reading textbooks, students must learn by doing such as fieldtrips where they can interact with nature and society. Teachers should not only emphasize drill and practice, but should expose learners to activities that relate to the real-life situations of students, emphasizing learning by doing (Dewey, 1916).

Students are encouraged to interact with one another and develop social virtues such as cooperation and tolerance for different points of view. Students are to be exposed to a more democratic curriculum that recognizes accomplishments of all citizens regardless of race, cultural background or gender. According to Dewey children should learn as if they were scientists constantly experimenting and solving problems; reconstructing their experiences and creating new knowledge using the five steps proposed by Dewey (1920):

- To be aware of the problem (e.g., plants need sunlight to grow).
- Define the problem (e.g., can plants grow without sunlight?).
- Propose hypotheses to solve problems.
- Test the hypotheses.
- Evaluate and select the best solution to the problem.

By including instruction in industrial arts and home economics, Progressivists strive to make schooling both interesting and useful. Ideally, the home, workplace, and schoolhouse blend together to generate a continuous, fulfilling learning experience throughout life. It is the Progressivist dream that the dreary, seemingly irrelevant classroom exercises that so many adults recall from childhood will someday become a thing of the past (Dewey, 1920).

According to Bhattacharyya (1996), the progressive movement in education encompassed many different theories and practices but jointly they oppose the following traditions and practices:

- The authoritarian teacher.
- Excessive dependence on textbooks.
- Memorization of factual data by constant drill and practice.
- Static aims and materials that fail to take into account the realities of a changing world.
- Intimidation or corporal punishment as a form of discipline.
- Attempts to isolate education from individual experiences and social reality.

Ornstein and Hunkins (2012) wrote that by the end of the 1920s a former student and later colleague at Columbia University (Dewey left the University of Chicago for Columbia University in 1904) William Kilpatrick (1925) envisioned a greater role for students in curriculum making, and he urged elementary school teachers to plan and organize around social activities, group enterprises, and group activities. Kilpatrick encouraged teachers to allow

students to say what they think and to think for themselves, not just please the teacher. Kilpatrick was more progressive than Dewey and was more heavily involved in many social issues related to schools and society (p. 40, Kindle edition). Whereas Dewey sought a new curriculum with organized subjects based on the child's experiences, Kilpatrick maintained that the child's needs and interests were uncertain and rejected the notion of a fixed curriculum.

Because of the differences of opinion, the progressive movement split into several groups: the child centered, activity centered, creative, and Neo-Freudian. Dewey criticized Progressivist educators who devalued knowledge or thought it had little value but also Progressivists who rejected adult authority over school children (as cited in Ornstein & Hunkins, 2012).

Boyd Bode (1938), another leading Progressivist, warned his associates of an impending crisis. Bode stated that the Progressive Movement had "nurtured the pathetic hope that it could find out how to educate by relying on such notions as interests, needs, growth and freedom" (p. 112). He continued this line of thinking by saying: "one-sided devotion to the child actually betrayed the child by depriving him or her of appropriate subject matter" (p. 115). Bode predicted that unless Progressivism changed course, it would be "circumvented and left behind" (p. 115). Bode's words proved prophetic. More and more Progressive thinkers responded to the growing criticism with self-justifying theories and impractical methods such as learner rather than subject focus; activities and experiences rather than verbal or mathematical skills; and cooperative group-learning activities rather than competitive individual learning (as cited in Ornstein, et al, 2012). Bode's insights are a compelling inspiration for a primary tenet of Innovationism by blending and balancing objective and subjective learning theories with pedagogical methodologies. The concept of Innovationism appears to have the potential to provide a needed step in moving contemporary diversified curriculum forward and possibly, a new educational theory.

Illich (1971) envisioned a new society that could emerge only after, what he called, de-schooling. He wanted to completely do away with schools as a counter to institutional and capitalistic indoctrination. Illich (1971) wrote, "Society would be the better if there were no longer discrimination based on a person's length of formal education." Instead of schools Illich wanted small learning networks characterized by:

- Educational objects (e.g., shops, libraries, museums, art galleries, and so on) open to learners.
- Peer matching (e.g., identifying and bringing together students who wish to engage in a particular learning activity).
- Skill exchanges (e.g., exchanges between those who are competent in a particular skill and wish to teach it and those who wish to learn it), and
- Educators at large (counselors who advise students and parents, and intellectual initiators and administrators who operate the networks).

As stated earlier, one of the concepts of Innovationism's core tenets is the belief that the blending of objective and subjective elements in contemporary pedagogical methodology and curriculum is necessary to maximize the effectiveness of rapidly evolving K-12 education.

**Reconstructionism:** As Kincheloe, et al., (2000) stated, Reconstructionism is a subjective normative education philosophy and, unlike Essentialism, Progressivism, and Perennialism which look to change education from within, it is rather challenging to K-12 public schools in that it attempts to challenge students to study social problems and to think of ways to improve society. Where progressive educators base their subject matter on social experiences by asking their students to solve problems using projects and groups, Reconstructionists look for education to "reconstruct society by addressing current events and social problems" (p.30). This difference between progressive and reconstructive educators can be clearly seen in the philosophy where both have the intention of understanding and even changing society, but Reconstructivism would take what is called an authentic approach to solving problems and attempting to reconstruct society based on the students' social experiences and using

authentic social information, data, and changes in the community and around the world. It is social activism of the students directly in the community that differentiates Reconstructionism from Progressivism.

Bhattacharyya (1996) writes that Reconstructionism holds two premises: 1) Society is in need of constant reconstruction or change, and 2) such social change involves both a reconstruction of education and the use of education in reconstructing society. Believing that education extends beyond the information in books to include outside involvement in the community, Reconstructionists promote change through social activism. Kincheloe, et al., (2000) argue the like progressive educators, Reconstructionists believe that “the teacher should guide students in projects and activities that will improve society rather than simply teach lessons that conform to the status quo” (p. 30).

Most advocates of Reconstructionism are sensitive to race, gender, ethnicity and differences in socioeconomic status. Related to Reconstructionism is another belief called *Critical Pedagogy* (Giroux, 2004). Critical pedagogy, designed by Henry Giroux and Peter McLaren, is primarily a teaching and curriculum theory which focuses on the use of revolutionary literature aimed at liberation which calls for teachers to be responsible public intellectuals and agents of change. Radical in its conception, Critical Pedagogy was based on Marxist ideology which advocates equality in the distribution of wealth and strongly against capitalism (Giroux, 2004). The last major Reconstructionist upheaval was during the cultural revolution of the 1960s. Paulo Freire (1968) in his book *Pedagogy of the Oppressed* advocated a revolutionary pedagogy so that the poor can move through different stages to ultimately be able to take action and overcome oppression. He argued that students have to be active participants in change to bring about social justice through social action.

The Progressive Educational Movement was at the height of its popularity when a small group of progressive educators became disillusioned with U.S. society and impatient for reform. Members of this group argued that progressivism overemphasized child-centered education and, as Counts (1932) had argued, mainly served the middle and upper classes with its play theories and private schools. They advocated greater emphasis on society-centered education that addressed the needs of all social classes. George Counts, arguably the best known Reconstructionist, was an education theorist and early proponent of the Progressive Education Movement of John Dewey, who suggested that schools become the agent of social change and reform as students cannot afford to be neutral (p. 44, as cited in Ornstein & Huskins, 2012).

As Ornstein and Huskins (2012) wrote that at the 1932 annual meeting of the Progressive Education Association, Counts encouraged progressive educators to consider the era’s social and economic problems and use the schools to help reform society. He criticized his progressive colleagues for not being more involved in social and economic issues. Counts was also an early proponent for teachers to organize into unions (p.44). According to Counts, Progressive Education had ignored the social problems of the 1920s and 1930s, which included discrimination, poverty, and unemployment. Counts stated:

f Progressive Education is to be genuinely progressive, it must . . . face squarely and courageously every social issue, come to grips with life in all its stark reality, establish an organic relation with the community, develop a realistic and comprehensive theory of welfare, fashion a compelling and challenging vision of human destiny, and become less frightened than it is today at the bogeys of imposition and indoctrination (p. 7).

A tenet which is believed will fit within the concept of Innovationism is that students and teachers should actively work and learn how to improve society by challenging the single focus of education to be based on either objective or subjective focused curriculum. Much like the world we all live in, most things need to be in balance. Today, there are many things in the world that are out of balance such as the climate, politics, nutrition, wealth, privilege, health care, education, and more. There is no rational reason why educators focus on and apply the newest educational theories and curriculum aligned with that theory. What is believed to be needed in K-12 education is

not to only focus on one philosophy such as objective scientific inquiry, but include subjective (i.e. liberal arts) educational methodologies in that same class in a planned and symbiotic way that will motivate students to enjoy learning; to learn to learn for a lifetime; to interact with and when necessary, change society for the betterment of all its members; and always be excited and happy to attend school. Each of these elements are proposed to be important parts of the concept of Innovationism. Brameld (1950b) believed that both teachers and students have a right to take sides in critical issues. Brameld specifically addressed the responsibility of teachers in that they must measure up to their social responsibilities (p. 70, as cited in Ornstein & Huskins, 2012, p. 44).

Bhattacharyya (1996) observed that while Counts advocates that education must be used as a positive force for establishing new cultural patterns and eliminating social evils, Brameld views Reconstructionism as crisis philosophy, not only in terms of education, but of culture as well. Brameld holds that Reconstructionists are critical of most of the methods generally used in all levels of schooling and argued that these methods reinforce traditional values and attitudes underlying the status quo and resistance of change (as cited in Bhattacharyya, 1996). The teacher becomes an unwitting agent of entrenched values and ideas as the hidden curriculum underlines the educational process and students are shaped to fit preexisting models of living and society. Reconstructionism wants to see activism rather than the passivity that exists in traditional schooling. Therefore, education should be directed toward arousing interests in public activism (Bhattacharyya, 1996).

Table 4. *Toffler's Future-Oriented Curriculum Reversal*

<b>Toffler Future- oriented Curriculum Reversal</b>	
<b>From</b>	<b>To</b>
Mass teaching	Personalized teaching
Single learning	Multiple learning
Passive answer-absorbing	Active answer-seeking
Rigid daily program	Flexible schedule
Training in formal skills and knowledge that stimulate a questioning for knowledge	Building desirable appreciations
Teacher initiative and direction	Child initiative and group planning
Isolated content	Interrelated content
Memorized answers	Problem awareness
Emphasis on textbooks	Use of many media in addition to text
Passive memory of information	Active stimulation of intellect

For Reconstructionists, analysis, interpretation, and evaluation of problems are not sufficient by themselves, students and teachers must effect change. Society is always changing and Reconstructionists believe that the curriculum of U.S. K-12 public education has to change as well. To address this position Reconstructionists advocated a program of education that:

- critically examines a society's cultural heritage,
- examines controversial issues unabashedly,
- commits to bringing about constructive social change,
- cultivates a future-oriented attitude that considers school reform, and
- enlists students and teachers to enhance educational opportunities for all children and youth

In Alvin Toffler's book *Learning for Tomorrow: The Role of Future Education* (1974), he states that the development of an image of a good future implies developing inquiring minds. The futurizing of education implies that the learner will begin to sense and to accept both the constraints and advantages of freedom. Such a future-oriented learning would decrease inequality in the ability of all persons to engage in effective, receptive, and expressive communication in their many forms (as cited in Bhattacharyya, 1996). The best future-oriented education could be based on a reversal of contemporary practice. Curriculum switching might undergo changes as stated below:

As Ornstein and Hunkins (2012), tell us Reconstruction curriculum favors a world curriculum with emphasis on truth, brotherhood and social justice. It is opposed to narrow or parochial curriculum that deals only with local and community ideas and ideals. It insists upon multicultural education and it must include the actual facts of historical and contemporary life. Reconstructionists want teaching to be internationally oriented and humanitarian in their outlook. Interdependence among nations no longer allows Americans to remain isolationist. Reconstructionist educators believe an international component in U.S. curricula would require students to acquire knowledge and skills essential for global peace, and better conditions for the poor around the globe. It is also believed that students must acquire an awareness of global events and an understanding of worldwide systems. These systems are social, political, economic, physical, cultural, communicative, religious, and historical. This new curriculum would focus on the Earth's ecosystem and world problems. According to Spring, these might also address: Western imperialism, Arab nationalism, and the growing economic influence of China and India (as cited in Ornstein & Hunkins, 2012, p.45).

The idea of Innovationism is like Reconstructionism in the way it is committed to the analysis, interpretation and evaluation of social problems. It may discuss methods of change but also to be proactive in encouraging action to bring about constructive change. It is also believed that curriculum based on the concept of Innovation potentially addresses social and economic issues as well as social service and engages students in critical analysis of the local, national and international community. There are many injustices in society today. These include but are certainly not limited to race, gender, and socioeconomic status. This is where once again the concept of Innovationism could promote similarities, goals and critical analysis as does Reconstructionism. One of the ideas that could be presented with Innovationism is the social goal to educate children towards resolution of these injustices and to teach students to collaboratively examine controversial and socially difficult issues and come to a consensus around solutions.

Since the concept of Innovationism is predicted to be blended or wholly digital it should be able to be updated on a daily basis or as needed to address current global affairs. This allows for changes to be made in the curriculum and learning outcomes when changes occur in the world. This practice should help students be aware of changing global issues. In general, it is believed that the concept of Innovationism, like Reconstructionism, will emphasize the social sciences (e.g., history, political science, economics, sociology, religion, ethics, poetry, and philosophy). Where the two are predicted to vary is in that the concept of Innovationism promotes the application of science in the K-12 curriculum whereas Reconstructionism is committed to a curriculum framed only within social science and social justice.

### **Review of the Literature Summary**

In summary, in this Review of the Literature the researcher was looking for the two related aspects of this thesis which are: 1) the identification of scholarly arguments and practical application for the support or opposition to a balanced and blended integration of objective and subjective education concept; and 2) how those identified arguments and applications relate to and support the concept of Innovationism. A good example of the former

would be Physicist Thomas Kuhn (1962), observation that “science can never rely solely on “objectivity” and that science must account for the “subjective” nature of a phenomenon as well since all objective conclusions are ultimately founded upon a subjective conditioning” (p. 150); and John Dewey’s (1938) argument, “Either/or dichotomies are destructive.” Progressive education can only work in an environment that transforms polarized ideologies into an integrated vision respecting multiple interests, philosophies, and creating motivational potential for every student no matter what their background, social status, race, religion, class, gender, ethnicity, learning style, and respect of other’s beliefs and ideas. Respect is not the same as agreeing. Just as Evelyn Beatrice Hall said "I disapproved of what you say, but I will defend to the death your right to say it." People and their opinions are different and you don't need higher education to understand this. There should be disagreements regarding student’s positions, but there is no place in the concept of Innovationism to feel the need to ridicule others, it presents an opportunity to learn from them.

The following analysis contained in this study will reveal how the findings in the Review of the Literature were coded and aligned with the proposed elements of the concept of Innovationism.

## CHAPTER III

### METHODOLOGY

#### Research Method

In order to determine whether there is justification for the need of a digital age contemporary educational concept of Innovationism, an in-depth review of the related literature and a focused fieldwork research methodology were employed. This study is an exploration of an educational concept.

As Williams (2005) observed research philosophy is associated with clarification of assumption about the nature and the source of knowledge. All studies are based on some kind of assumptions about the world and the ways of understanding it (p. 85). There is no consensus among philosophers about the most appropriate ways of understanding the world. This fieldwork study used a phenomenological approach which is subjective and takes into account human interests. This study focuses on the research and writings of experts throughout history and up to today.

The methodology for this study was also inductive, and because no conclusive evidence will be presented in this thesis, the research design will be considered exploratory. Primary, secondary, and tertiary data was used to determine the findings. Primary data was collected through interviews, secondary data was collected by an extensive review of the literature, and tertiary data was collected from observation. Secondary data refers to a type of data that has been previously published in journals, magazines, newspapers, books, online portals and other sources.

Although containing many of the same characteristics, the difference between fieldwork research and qualitative research is that fieldwork research is not restricted by what is known today as is qualitative research. For example, if this were a qualitative research, a much deeper analysis would be required in the observation and interview phases of this methodology including thematic analysis which, as Greg, & MacQueen (2012) explained “qualitative research goes beyond simply counting phrases or words in a text, and moves on to identifying implicit and explicit ideas within the data (“Introduction to Thematic Analysis” as cited in [https://en.wikipedia.org/wiki/Thematic\\_analysis](https://en.wikipedia.org/wiki/Thematic_analysis), retrieved 5/12/2016).

Fieldwork as a mode of inquiry is an artistic undertaking as well as a scientific one. In his book *The Art of Fieldwork* (2001), H. F. Wolcott stated “The Nexus between fieldwork and data collection is a central issue to be considered” (p. 3). So, too, is the relationship between the scientific aspects of the fieldwork tradition on one hand and what anthropologist Evans-Prichard has described as the “imaginative insights of the artist which is required in interpretation of what is observed” (Evans-Prichard, 1953 p. 82, as cited in Wolcott, H. F., 2001). Wolcott (2001) continues:

Collecting data can be done scientifically, but fieldwork consists of more than collecting data. Whatever constitutes that elusive more makes all the difference. That needs to be stated emphatically, for a crucial aspect of fieldwork lies in recognizing when to be unmethodical; when to resist to potentially endless task of accumulating data; and to begin searching for underlying patterns, relationships and meanings (p. 3).

Good fieldwork is reflective and deeply human in that it shows evidence of imagination and emotion. The discipline of fieldwork evolved out of a different tradition, one based on “naturalistic” observation over extended periods of time with as little intervention as possible and is not preoccupied with data-gathering alone. Fieldwork aims at representation. The real genius in fieldwork lies in knowing what counts and how to answer those seemingly simple questions (p. 4).

Anthropology and sociology are where fieldwork got its start and, as such, involves the study of human beings in social interaction. The physical properties of those human beings can explain only a part of what goes on in everyday discourse. The ability to do successful fieldwork (e.g. in an observation) does indeed include the capacity for systematic work, but it also requires a sensibility that recognizes when systematic data are or are not called for. Following the work of Johnson & Christensen, (2008) this study paid particular attention to the construction of the data-collection instrument for observation and interviews (p.218).

### **Jotted Condensed Notes**

Jotted (i.e. condensed) notes were first taken consisting of key words or phrases based on an observation of a fourth grade elementary class in Northern California. The class started at 8:30 in the morning and ended at 3:00 in the afternoon. There were 31 students in the class including: 14 African-Americans; 10 Latinos; 6 White; and 1 Asian. The genders were approximately equally divided.

These field notes were taken openly. The notes were taken on the margins of the events (e.g. observation elements). In order not to be effected by diminished recollection the jotted notes were then converted to proper detailed field notes within five days of the in-field experience. Included in the field notes is a description of the physical context and the people involved, including their behavior and nonverbal communication; recorded terminology is as close as possible to the words used by the participants; and the field notes also included thoughts, impressions, and explanations on the part of the researcher. As stated by DeWalt (2011), "In assessing the quality of field notes, the accuracy of the description and the level of detail are of utmost importance (DeWalt, K. M., DeWalt, B. R. (2011). *Participant Observation*. Walnut Creek, CA: Alta Mira Press, pp: 165-168, as cited in <https://en.wikipedia.org/wiki/Fieldresearch>, retrieved 5/12/2016).

### **The Guiding Premise of this Fieldwork Narrative Study**

This study allowed the researcher to describe and analyze the practices of one fourth grade teacher in a learning environment as it related to the concept of Innovationism. The focus was to understand the culture or community from the participant/observer perspective that takes into account the insider's and the outsider's perspective (modification of D. Mertens, 1998, p. 164). As recommended by Senge (1990), it was also guided by the investigator's mental models; that is, it is guided by the researcher's own paradigm and/or beliefs about the way Innovationism would be applied in K-12 public school settings.

The fieldwork study allowed the researcher to observe a complex K-12 (i.e. 4<sup>th</sup> grade public school mixed gender and race class) environment in a way that the interrelationships among previously unknown themes and patterns were described, and in turn, in a way that expanded and informed the researcher's perspective regarding the concept of Innovationism.

To ensure quality and accuracy of the data, the researcher employed the strategies of multiple sources and theories (Lincoln & Guba, 1985). The researcher also was prepared to recognize the subjectivity found in K-12 public education classrooms. As Fetterman (1989) stated, patterns of thought and behavior can be used as a form of fieldwork research validity. This research was developed on an individual basis and individual measures were analyzed to interpret the primary findings from the fieldwork. The analysis was accomplished by taking into account the unique characteristics of the research through the interpretation of observation and interview responses, the related literature, and images from observation. Finally, the findings are described in a narrative fashion appropriate for this type of fieldwork research.

## Ethical Considerations

Ethical concerns are important, particularly in reference to planning, conducting, and evaluating fieldwork research. This study presented no risk to participants pertaining to experimental treatment or exposure to physical or psychological harm. Care was taken to ensure that the participants understood why the observer was present and insured that it was understood participation was voluntary, not required, or had anything to do with their grades. Confidentiality of data and subjects will be maintained at all times, and identification of participants will not be available during or after the study.

## Data Triangulation

In order to insure a reasonable level of validity and reliability, the study used a methodology called Data Triangulation. This triangulation consists of one observation; one interview; and a review of the education literature. The data from the interview and observation are generated as a result of the researcher taking a hermeneutic (i.e., the philosophy and methodology of text interpretation, especially the interpretation of wisdom literature and philosophical texts) phenomenological (i.e., subjective) approach to the research. The basic tenet of hermeneutic phenomenology is that our most fundamental and basic experience of the world is already full of meaning (Merleau-Ponty, 1962/ 2006; van Manen, 2014). A representation of the Data Triangulation model is presented below:

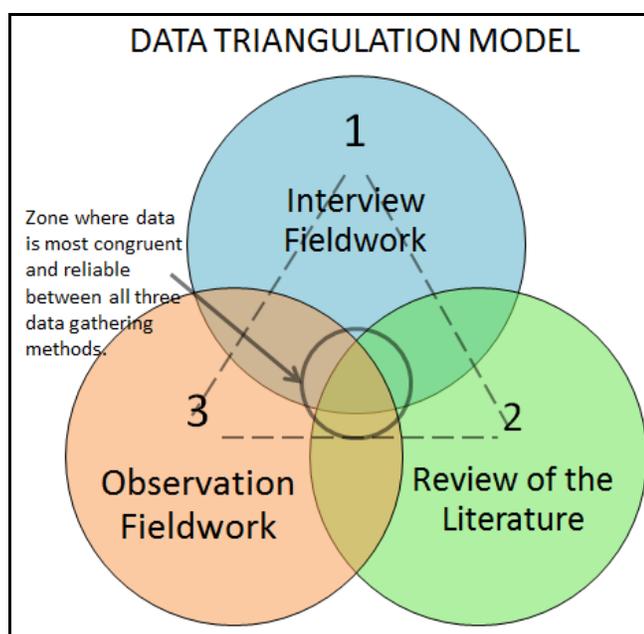


Figure 2. Data Triangulation Model used in the study.

The reason for using a hermeneutic phenomenological research analysis approach was to bring to light and reflect upon the meaning of these experiences through the researcher's observation, interview, and related literature on educational philosophies and learning theories that were intended to help better understand if there is support for the concept of Innovationism.

The Data Triangulation analysis strengthened this research and allowed the researcher to perform high level fieldwork research due to:

1. Additional sources of information gave more insight into the research topic.
2. Inadequacies found in one data source were minimized when multiple sources confirmed the same data.
3. Multiple sources provided verification and validity by complementing similar data.

4. More comprehensive data was obtained.

Beyond the extensive review of the literature, the two remaining vertices used in this data triangulation are made up of convenience samples. These samples consist of:

1. Interviews of a K-12 4<sup>th</sup> grade public school instructor and K-12 administrator, and
2. observations of a K-12 public classroom.

Reviewing the data from these three data points, against each other, allowed the findings to be validated to the highest degree possible in this study and when using fieldwork research.

### Observation

The objective of the fieldwork research observation was to identify both objective and subjective elements of pedagogical methodologies and curriculum in a K-12 public school, with its classroom in Northern California, but also to evaluate to the degree possible how well objective and subjective elements worked in unison, in tandem, or discretely in the teaching and learning process. The physical layout of the classroom, pedagogical methodologies and curriculum elements used as classroom activities or student management were identified and documented. Because of time limitations it must be noted that not all of the following in-class observation criteria and questions were addressed in this study.

Table 5. *Predefined guide for the observational fieldwork process.*

<b>PREDEFINED GUIDE FOR THE OBSERVATIONAL FIELDWORK PROCESS</b>
<b>Classroom Characteristics</b>
1. How many students in the class?
2. Do students sit at desks or tables?
3. If tables how many at each table?
4. What type of chairs?
5. What type of classroom lighting was used?
6. What are the objective and subjective symbols on the walls?
<b>Pedagogical Methodologies and Curriculum Used in the Observation</b>
1. What are the objective and subjective teaching methodologies used by the teacher?
2. What objective and subjective assessment techniques are used?
3. What is the order of curriculum instruction?
4. What educational digital technology is used in the classroom?
5. Where are both objective and subjective teaching techniques used in tandem?
6. Were any elements of Innovationism present or used in the teaching platform?
a) Personalized learning
b) Project-based learning
c) Inquiry-based learning
d) Blended learning
e) Peer-based learning
<b>Scientific Method-Learning</b>
1. Systems-based learning
2. Design thinking
3. Trial and error
4. Cause and effect
5. Serendipity
<b>Common Core Elements</b>
1. Critical thinking
2. Creative-based learning
3. Communication
4. Collaboration
<b>Were any of the lessons taught through an artful format?</b>
1. Visual
2. Kinetic
3. Audio
4. Logistic

If any of the observation criteria were encountered and observed it was included in the findings. Table 5 provides each of the characteristics and elements that were predefined from the review of the literature to guide the observational fieldwork process.

### Interview

This stage of the study's Data Triangulation was an interview with a Northern California elementary school assistant principal. The administrator was a white female in her early thirties and was a colleague of the researcher. The interview question were designed to learn how she used objective and subjective elements in her work with her superiors at the district level; peers at her work level; and the teachers she supervised at the classroom level. A question and answer format was used for this part of the study. The interview questions used by the researcher are listed in Table 6 below:

Table 6. *Predefined guide for the interview fieldwork process.*

<b>PREDEFINED GUIDE FOR THE INTERVIEW FIELDWORK PROCESS</b>	
<b>Interview Questions</b>	
1.	Do you ever think about the objective vs. the subjective nature of your work? If yes, please describe how, when, and why. If no, why not?
2.	Do you ever look for objective and subjective methodologies used in your work? If yes, please describe how, when, and why. If no, why not?
3.	Are you aware of the objective and subjective dictates from your school district level? If yes, please describe how, when, and why. If no, why not?
4.	Would you find looking at your work through an objective and/or subjective lens useful? If yes, please describe how, when, and why. If no, why not?
5.	Do you think that using a balanced objective and subjective approach with teachers would be useful? If yes, please describe how, when, and why. If no, why not?
6.	Are you looking to employ progressive pedagogical methodologies and curriculum in your K-12 school? If yes, please describe how, when, and why. If no, why not?

### Review of the Literature

A systematic review of studies, reports, essays, articles, philosophies, educational theories and methodologies, and other materials that pertain to the development and implementation of contemporary K-12 teaching and learning methodologies from around the world was conducted. The researcher used studies found on Google Scholar and Education Resources Information Center ([eric.ed.gov](http://eric.ed.gov)); articles and source materials were also found on electronic media services such as Education Week and eSchool News. Most of this research material was peer reviewed either in the source material itself or in the material's cited references.

### Limitations of the Study

The thesis methodology also used a description research method which allows for description of behaviors but is limited by the fact that this method of research does not support reliable predictions nor does it support cause-and-effect analysis and explanations (Jackson, 2011).

In traditional research, objectivity has usually been a primary goal while subjectivity would be avoided. As Eisner (1998b) stated "Objectivity usually means seeing things the way they are while being objective is to experience a state of affairs in a way that reveals its actual features" (p.43). Eisner goes on to say:

Personalization undermines objectivity; that is, we fear that it will suggest that what we have to say about the world will reflect more about ourselves than about the world as it is. How can we ever know if our views of reality match or correspond to it? To know that we have correspondence between our views of reality and reality itself, we would need to know two things. We would need to know reality, as well as our view of it. But if we knew reality as it really is, we would not need to have view of it. Conversely, since we cannot have knowledge of reality as it is, we cannot know if our view corresponds to it. (p.45)

Since the researcher has a vested interest in the conclusions of this thesis, complete objectivity cannot be relied on. In addition, since the researcher was primarily looking for substantiating data it is possible that contradictory data could have been misinterpreted and overlooked. Specifically the researcher has attempted to gather enough evidence from a triangulation methodology to substantiate certain representations. It is of the utmost importance that the conclusions supporting data of this thesis be as objective and non-biased as possible so there is no doubt as to the creditability of the concept of Innovationism. The underlying tenets of the concept of Innovationism are intended to guide the development of digital age K-12 pedagogical methodology and curriculum design. In an attempt to develop the highest validity of this study's data and the concept of Innovationism, it should be clearly understood that the researcher bias must be taken into account.

Another limitation of the study is the common problem of generalizability. In this research study it must also be clear that results cannot be generalized. As Bogdan and Biklen (1992) argued "When researchers use the term generalizability they are usually referring to whether the findings of a study hold up beyond the specific research subjects and the setting involved" (p. 44). Eisner (1998b) substantiates this when he writes:

Personal biographies and unique modes of thinking make it possible for individuals to experience the world in unique ways. These unique ways of experiencing make possible new forms of knowledge that keep culture viable. These new forms then become candidates for shaping the experiences of others, who in turn can use them to create even newer, forms, which in turn...and so forth (p. 48).

The primary problem with using generalizability is that human behavior is not standardized. The lives of people in reality are complex, unpredictable, and interpretive. To assume similar interpretations from similar situations with different people lead to overgeneralized representations.

In summary the limitations of this study are relatively common. Most localized qualitative research would disclaim generalizations because the sample size does not fit all. The best that could be hoped for would be matching or finding related data in all three of the triangulation vertices (i.e., Review of the Literature, Observation, and Interview). This process has allowed the research to be reasonably effective within limited samplings.

### **Methodology Summary**

This chapter presented the fieldwork research methodologies of Literature Review; Observation; and Interview used in this study. The justifications for use of these methodologies included stronger research insights; multiple confirmations of data; and more comprehensive data. Interview, observation, and review of the related literature were the main methods of data collection. The data gathered was relevant to achieve the research objectives which were the identification of objective and subjective teaching methodologies as they related to the concept of Innovationism.

## Chapter IV

### Findings

This chapter summarizes what was found from the researcher's Review of the Literature and fieldwork, (i.e., observations and interviews) to support the concept of Innovationism whose thesis statement is:

*It is believed that the concept of Innovationism, introduced in this thesis, has the potential to provide elements for a framework that will guide the systematic development of contemporary curricula for K-12 digital and blended learning environments as a means of addressing the dropout rate for all students grades 6-12, and especially for members of all at risk populations.*

The thesis statement was used as a guide to identify the study's findings. Accordingly, the Review of the Literature was examined for concepts that represent objective and subjective methodologies and the four sub-philosophies. These are presented under four major titles, two for objective and two for subjective. The questions asked to interview the K-12 administrator were intended to identify what objective and subjective concepts are used in relationship to the four philosophies and how those concepts or themes align with the corresponding elements that were found in the Review of the Literature. This data was then triangulated to identify common themes and relationships of the three elements (i.e., Review of the Literature, Interview, and Observation) to the concept of Innovationism.

The purpose of the triangulation is to increase the finding's validity to the highest level under the conditions of this study. If support was found from just one it was reported; if support was found from two of the triangle's vertices the common elements were reported; and if common support was found from all three that was reported.

The Findings process starts with the Review of the Literature to identify support for a primary tenet of the concept of Innovationism which is that the historic existing objective and subjective education philosophies should be combined or used in tandem to create more effective pedagogical methodologies and curricula necessary for contemporary teaching and learning in what is termed by many as the digital age. These findings were then related to the same themes, elements, and methodologies found in the two other vertices (i.e., Interview and Observation).

It was found that objective and subjective pedagogical methodologies are sometimes referred to as Instructionism and Constructivism respectively; and that Instructionism refers to the objective deductive educational practices that are teacher-focused, skill-based, product oriented, non-interactive, and highly prescribed; while Constructivism refers to the subjective inductive educational practices that are student-focused, meaning-based, process-oriented, interactive, and responsive to student interest. Showing potential support for the concept of Innovationism, Johnson (2009) argued that, "There is disagreement regarding which curricular orientation best serves the educational needs of children and that evaluative outcome research is contradictory and the superiority of either instructional orientation has not been clearly established while a blended balance of Instructionism/Constructivism could promote systematic instruction in a context of individual meaning and personal interest (p. 1).

Also appearing to support the combining of both objective and subjective philosophies, Kincheloe, et al (2000) observed, "The twentieth century French, postmodernism philosopher Jacques Derrida contends that there is no singular original author of any book because the voices of other people have so permeated and blended with every author's voice that it is impossible to distinguish among them" (p. 9). Adding to this support, Genevieve Marie Johnson (2005) argued, "A combination of instructional methods may ultimately prove most beneficial [in education]" (p. 3).

It was identified that supporting this reasoning, Dewey (1916) introduced his subjective hands-on, project-based experiential education model which is today being promoted by Common Core State Standards. Dewey could see that objective K-12 education stifles individual autonomy when students are taught that knowledge is transmitted in one direction, from the expert to the learner. Although Dewey's ideas are over 100 years old, they are the foundation for other contemporary experiential models of education such as problem-based learning, inquiry-based learning, Constructivism, and even Maker Programs. Dewey recognized the importance of combining objective and subjective education when he said in his book *Experience and Education*, (1938) "either/or dichotomies are destructive."

These findings appear to support the proposed concept of Innovationism by showing the notion that balance in the K-12 schooling process requires a similar vision constructed upon a foundation of respect for and preservation of each unique contribution to the education structure, both objective and subjective, that can be applied to guide student's to fundamental knowledge while at the same time fostering an inclusive love of learning.

It was also found that many of the historical education theorists, especially John Dewey, wrote about elements of education which are now being reintroduced through the concept of innovative education and learning. For example, Dewey's concept of project-based learning and peer collaboration and Piaget's concept of student centric constructivism are now being featured in contemporary progressive education.

### **Observations**

The second point of the Data Triangulation was based on an observation of a fourth grade elementary class. The class started at 8:30 in the morning and ended at 3:00 in the afternoon. There were 31 students in the class including: 14 African-Americans; 10 Latinos; 6 White; and 1 Asian. The genders were approximately equally divided.

The classroom contained 14 wheeled tables with two each pushed together in a wedge shape which made seven tables six of which were used at each end by the students. All the chairs had wheels which allowed the students to roll around to different station. This activity had the added benefit of causing a lot of the kinetic energy typically generated by this age group to be somewhat defused. The classroom furniture was subjective in nature as it allowed the students to move, or "wobble," in a personalized manner and not to be "confined" by the traditional individual one-person per desk lined up in rows facing the teacher in a "sage on the stage" format. The lighting was typical overhead florescent lighting with a full row of window on the west side of the classroom.

It was observed that the teacher reflected the ideas of Innovationism as she effectively combined objective and subjective pedagogical methodology and curriculum elements. Using an element of Essentialism she started the class by objectively telling the student what they would be learning that day and what was expected of them. She then showed the students a video about a football team comprised of incarcerated teenagers after which she guided them through an analysis using in tandem the objective Perennialist Socratic Method of discussion and the subjective philosophical tenets of Reconstructionism with a look at the video's theme of social justice. This pedagogical methodology was philosophically both objective and subjective and reflected the Common Core goals of critical thinking and communication. This activity lasted twenty minutes.

The rest of the morning was used for English Learning Arts (ELA). The lesson was taken from an article that the student were assigned to read as home work. When queried about 6 to 8 had said they had read it. The teacher then posted a paragraph from the article on the large 4x6 foot television monitor that was hung near the ceiling in front of the classroom. The teacher told the researcher that this computer monitor replaced the older classroom whiteboard. The students were then divided up into groups of three and sat at the end of the tables. Although the groups were not fixed the researcher learned that the teacher tries to group the students by a range of abilities according to the subject matter. This structure is definitely Progressivism as "Progressivism argues that learning must be based on the fact that humans are social creatures and by nature learn best in real-life activities with

other people (Vygotsky, 1978), but it also has elements of Perennialism as Adler (1982) writes, "They are academically rigorous, for both slow and fast learners, how much is to be learned is adjusted according to student ability" (p. 72). The student "leaders" were told to retrieve their 10x10 inch erasable whiteboards and felt-tip black markers. The students were then instructed to write a paragraph using key words from the article. The group leaders led the activity but by using this method all the students in the group took part even if they were slow learners or had attitude problems. This peer-based learning is also progressive and is reflected in Dewey's (1920) remark, "Learners should learn to work with others because learning in isolation separates the mind from action and certain abilities and skills can only be learned in a group setting. Dewey felt that social and intellectual interaction dissolves the artificial barriers of race and class by encouraging communication between various social groups (Dewey, 1920, as cited in Ornstein and Hunkins, 2012).

During this observation the teacher experienced several discipline episodes with the students. It was obvious that she knew her students' well as she didn't have to say a word before the student being disciplined was walking to a corner of the classroom for a time out. Several times during the day the teacher would take the offending student to the hall for about a thirty-second lecture. It is interesting to note that one of the male students who has had continual disciplinary issues has a 4.0 grade average thus indicating that behavioral issues are not always linked to scholarship. The teacher had complete control of her classroom which was no small feat considering the constant motion of this age group. This interaction between teacher and student reflects Essentialism as:

Essentialists believe that teachers should instill traditional virtues such as respect for authority, fidelity to duty, consideration for others and practicality. It is the teacher's responsibility to keep order in the classroom. Howick (1971) continues that the teacher must interpret essentials of the learning process, take the leadership position and set the tone of the classroom. These needs require an educator who is academically well-qualified with an appreciation for learning and development. The teacher must control the students with distributions of rewards and penalties (p. 87).

In engaging the students in critical thinking about the zoo article the teacher was coming from a Perennialist point of view because this philosophy holds that, as Ornstein and Hunkins (2012) write, "students must learn to recognize controversy and disagreement in literature because they reflect real disagreements between persons. Students must think about the disagreements and reach a reasoned, defensible conclusion."

The teacher then told the students to put their whiteboards away and get out their history folders. All of the student's individual folders are kept under the work tables under the windows. One couldn't get more Essentialist than by starting a count down from twenty every time the students are instructed to do an activity that requires physical movement. At this point the teacher told the students that it was time for a break and she put on a Rap dance video that showed people dancing around the world. Even this activity has roots in Reconstructionism because as Garter (1987); Hill (1989); and Nixon (1991) all found:

Contemporary Reconstructionist educators tend to be more in tune to global issues as part of the world social order. Reconstruction curriculum favors a "world" curriculum with emphasis on truth, brotherhood and social justice. It is opposed to narrow or parochial curriculum that deals only with local and community ideas and ideals. It insists upon multicultural education and it must include the actual facts of historical and contemporary life. Reconstructionists want teaching to be internationally oriented and humanitarian in their outlook (Garter, 1987; Hill, 1989; Nixon, 1991, as cited in Ornstein and Hunkins, 2012, p. 45).

After switching group members the teacher had the students, in a subjective peer collaboration activity, paste the cut zoo article paragraphs in the order they should appear based on the information given in each paragraph. Again, Dewey (1916) would see this activity as progressive when he stated, "Students are encouraged to interact with one another and develop social virtues such as cooperation and tolerance for different points of view." In

order to review this work the teacher put a completed text under the camera tube on her desk so the students could see the finished product on the T. V. monitor.

It was now 10:30 and the teacher moved on to a California history lesson. She showed a paragraph about people on the East coast buying tickets and taking a ship voyage to the 1850s California gold fields. After getting out a template map of North and South America from their history folders the students were instructed to draw an image of the paragraph narrative that was posted on the T. V. monitor. This activity reflects a component of Innovationism as the students were learning by integrating a literature lesson and a history lesson as illustrated in an art format. This pedagogical methodology is definitely a Progressivism tenet as Dewey and other progressivists held that the curriculum should be interdisciplinary and teachers should guide students in problem solving exercises and scientific projects. As Dewey (1916) writes:

Teachers should not be confined to focusing on one discrete discipline at a time but should introduce lessons that combine several different subjects. Dewey saw the teacher as the “leader of group activities” and allowed students to analyze and interpret data and to draw their own conclusions. Teachers should plan lessons that arouse curiosity and push students towards higher order thinking and knowledge construction. Teachers should not only emphasize drill and practice, but should expose learners to activities that relate to the real life situations of students, emphasizing learning by doing.

At 12:00 the students came back from their lunch break to start their math lessons. She started them off sing a rhyming tune to recite their multiplication tables. The students liked this activity and all join in. This is potentially an Innovationism tenet of learning because it was active entertainment, which in this case was music. The teacher then gave them a one page drill and practice multiplication table questionnaire. This was the only summative drill aspect observed by the researcher. As Adler (1982) noted (Essentialism’s) main focus is on achievement test scores as a means of evaluating progress.

The main math exercise was on fractions. The teacher drew two “cakes” on the erasable whiteboard. The student had to figure the total units needed if one cake was eaten by the teacher’s brother and one third of the remaining cake was eaten by the teacher. The student had to figure what percentage of the remaining cake would be needed to feed eight more people equal portions of cake. As the students drew the two cakes and divided the remaining two-thirds of a cake into eight pieces the teacher walked around the class room and, using her iPhone as a camera, she live-imaged a student’s whiteboard that had done the assignment correctly onto the T. V. monitor for all students to look at and emulate. This lesson pedagogy methodology used subjective Progressivism by utilizing the familiar symbol of a cake which, as a comfort food, relaxes people and makes the mind more susceptible to stimuli.

At 2:00 the teacher and students adjourned to the school gym for a school assembly. The purposed of the assembly was to honor students for their scholarship. Of the thirty-one students in the class twelve received awards for scholarship and merit. As noted above this activity of rewards is favored by the Essentialist and is grounded in the Essentialism support theory of Behaviorism (Skinner, 1968).

Every student in the class had their own Chromebook which they were allowed to take home at night. The one evidence of the Chromebook use by the researcher was when the students were given about twenty minute to work on an on-going essay project. As the teacher was stating that some days the class spends much of the day learning on their Chromebook, a student would show her their work on their Chromebook and the teacher would offer short comments either positively or negatively. A more in-depth observation of student use of Chromebooks is recommended in any future research.

The signs and art work posted on the classroom walls were divided between objective and subjective symbolism. The subjective symbolism consisted mainly of positive self-image messages. The teacher’s workstation was busy but neat, filled with personal photographs, multi-colored figurines and various teaching aids. The objective symbols related mostly to current lessons and student advancements, accomplishments and standings regarding

learning activities. The classroom icons reflected the idea of Innovationism as the images showed a balance between the objective goals of Essentialism and the personal growth and self-esteem goals of Progressivism. Perennialism was reflected in the number of words each student has read since the beginning of the school year. The researcher saw no obvious links to Reconstructionism posted in the classroom as this particular education philosophy is found mostly in lessons on history and sociology.

In conclusion, this researcher recognized that the class structure showed elements of balance and blending reflecting all four education philosophies depending on the lesson or activity at hand. The students responded well to the inviting and secure environment created by the teacher. Technology in the classroom was very advanced and skillfully used by the teacher to motivate and engage the students. The researcher saw no evidence of student smartphones or other mobile devices. Elements of the Common Core Standards were the most evident pedagogical methodology employed by the teacher. Other than a reference to cause and effect in a literature analogy there was no evidence of the use of the scientific method of teaching and learning that is a tenet of Innovationism. This, however, may only be due to the fact that no science lessons were presented on the day of the observation. No textbooks were observed as the curriculum for all lessons was a combination of individual essays, graphs, worksheets and templates.

### **Interview**

The researcher recognized that the interviewed administrator uses elements of both the subjective and objective elements in her work which can be triangulated with the four education philosophies and including an apparent relationship with the concept of Innovationism. When asked if she ever thought about the objective and subjective in her work she replied that she does on a regular basis. The transition from teaching to administration was interesting for her in several ways. Her relationship with the teachers that she now supervises had a steep learning curve. She now has to take a more objective approach by learning to delegate whereas when she was a teacher she would subjectively think that she could do a task better and just did it. Delegating has its own skill set. Although teaching has both elements of the objective and subjective it's more subjective because it's an intrinsic activity whereas supervising has to be more objective because there are policies and procedures that have to be followed as dictated by a higher authority. This insight reflects an Innovationism goal which is to combine, in not necessarily equal parts, the objective and subjective nature of each philosophy into a practical whole to be used as a guide to pedagogy and curriculum development.

She was coming from a Reconstructionist point of view when she commented on the fact that proactively balancing and blending the objective and subjective helped her in dealing with the community; the various task forces; committees, assessment evolution and the transition of classroom technology from a separate entity to an accepted normal standard operation element. Kincheloe, et al., (2000) informed us that "Believing that education extends beyond the information in books to include outside involvement in the community, Reconstructionists promote change through social activism" (p. 40).

Elements of other Essentialism and Progressivism were found when the interviewee was asked about the objective and subjective dictates from the school district level. She was reflective when she stated that most of her work is objectively extrinsic meaning that she has to follow guidelines that are dictated at the state and district level. As a nod toward Innovationism's concept of balance (see p. 26 of this thesis) she continued that although she knows that objective rules are needed to function but a lot of times the rules seem to be outdated and not in tune with the realities of today's education. For example, the rules now state that a teacher needs to be evaluated for tenure after 18 months. The interviewee felt that time frame is way too short for two reasons. First, most new teachers are just getting teaching procedures down for doing their work; and second, eighteen months is just too short of a time frame to see success in student accomplishment. It was Adler (1982), from a Perennialist point of view, who stated that teachers should be well trained before being allowed in the classroom.

When asked if she would find looking at her work through an objective or subjective lens useful she was taking a Progressivist position when she replied that the objective extrinsic part of her work is following the rules to keep her job but the intrinsic value of her job such as making progressive rule changes and job satisfaction are often at odds. She continued by saying that, “the more that the extrinsic and intrinsic aspects of her job are identified hopefully small progressive advances can be made without rocking the extrinsic boat.”

The Essentialist and Perennialists position on authority was reflected when the interviewee responded to a question asking if using an objective and subjective approach with teachers would be useful. She felt that it would be a value in teacher evaluation. Right now she has to take a mandated objective evaluation approach and if one of the criteria is not met she has to devalue that teacher’s assessment. For example, a person could be a stellar teacher but if they don’t have their objectives posted in their classroom she has to use that as a mark against them.

The next question was an inquiry to see if she was looking to install progressive pedagogical methodologies and curriculum. In step with Innovationism’s integrated digital curriculum concepts (see page 34 of this thesis) she said that her school had just bought a new reading application called “Night Zoo Keeper” and recommended the interviewer take a look at it. She concluded with her view that with the advancements in digital technology the opportunities for subjective customized learning are endless.

In conclusion, it was found that the school administrator interviewed in this study, uses a balance and blending of objective and subjective elements in order to make their work functional and effective. This would appear to support the concept of Innovationism’s approach to administration, using a balanced and blended approach of objective and subjective administration methodologies.

### **Objective and Subjective Structure of the Concept of Innovationism**

Kincheloe, et al., (2000) felt that every philosophy is a dynamic and organic understanding of life, wisdom, and knowledge constructed within its own context, and, as such, education philosophies mean little outside the context of an individual’s learning process (p. 17). Most curricula in K-12 education contain both objective and subjective elements, but each falls primarily into one methodology or the other. However, a goal of the concept of Innovationism is to combine, beginning with balanced and blended parts, the objective and subjective nature of each philosophy into a practical whole to be used as a guide to pedagogy and curriculum development. It has also become clear that curriculum design for the concept of Innovationism is just a starting point. It will be necessary for K-12 educators or digital learning systems to make ongoing adjustments to the curriculum throughout a lesson and class to insure that student’s specific learning needs are met. Here the question could be asked, “If the school is already doing tracking and making adjustments to their existing learning system why is there a need for Innovationism?” The reason is that Innovationism provides a flexible guide to identify if a system or curriculum is in objective and subjective balance and blended to meet the integration goals of any K-12 innovative education and learning platform.

The research for this thesis found that in her work *The Crisis in Education*, (1950) Hannah Arendt is critical of the hold that Progressivism has on America but is not completely committed to a conservatism agenda of Essentialism and Perennialism. Her view of education philosophy mirrors that of the concept of Innovationism in that she is a strong believer in conservative authority as it functions as a positive and constructive element that establishes societal boundaries which enables each person to develop within these parameters and to eventually go beyond them, a decidedly progressive notion (as cited in Johnson & Reed, 2008). Because there was only one person interviewed plus the fact that the interviewee was a colleague of the researcher, any conclusion regarding this interview has to be discounted because of the possibility of bias.

## Objective Education Philosophies

### Essentialism

This study recognizes that Essentialists believe that teachers should instill traditional virtues such as respect for authority, fidelity to duty, consideration for others and practicality and that it is the teacher's responsibility to keep order in the classroom. The research disclosed that Essentialists disapprove of vocational education, life adjustment, or other courses of that nature and that elementary students receive instruction in skills such as writing, reading, and measurement while learning the creative subjects of art and music, students are required to gather information gradually advancing to more complex skills and detailed knowledge. Only by mastering the required material for their grade level are students promoted to the next higher grade which is the underlying philosophy of the No Child Left Behind "high-stakes testing."

Innovationism sides with the Essentialist in that children need to be exposed to core curriculums and learn certain disciplines throughout their K-12 experience. Just what that curriculum is and for how long it should be standardized and the manner of assessment; and in what manner of pedagogical methodologies that curriculum should be presented is where Innovationism would deviate from Essentialism.

### Perennialism

The study found that Perennial, an objective normative educational philosophy, means "everlasting," like a perennial flower that blooms year after year and according to Heslep (1997), as the oldest and most conservative educational philosophy, Perennialism finds its roots in both the realism of Aristotle and the idealism of Plato. The research found that Perennialists believe one should teach the things that are of everlasting pertinence to all people everywhere, and that the emphasis should be on principles, not facts and Ornstein and Hunkins (2012) found that Perennialism dominated much of American education from the colonial period to the early 1990s and is based on the belief that some ideas have lasted over centuries and are as relevant today as when they were first conceived and these ideas should be studied in school (p.33).

It was identified, that although Perennialism may appear similar to Essentialism, Perennialism focuses first on personal development, while essentialism focuses first on essential skills and, according to Essentialist curricula, thus tends to be much more (although claiming otherwise) vocational and fact-based, and far less liberal and principle-based. This is often translated by Perennialist as since people are human, one should teach first about humans, rather than machines or techniques and follow a liberal curriculum rather than vocational topics.

It was further discovered that both philosophies are typically considered to be teacher-centered, as opposed to student-centered where teachers are viewed as authorities in their fields while teaching is based primarily on the Socratic Method: oral exposition, lecture, and explication. There is one curriculum for all students, with little room for elective subjects or vocational or technical subject matter and Ornstein and Hunkins (2002) stated that character training is important as a means of developing the student's moral and spiritual being (p. 34).

It was found that the concept of Innovationism, as proposed in this study, would share the view of Perennialists regarding non-reliance, on textbooks and lectures in communicating ideas at the secondary level and also believe that classroom emphasis should be on teacher-guided seminars, where students and teachers engage in dialogue and mutual inquiry-based learning.

Both the idea of Innovationism and the philosophy of Perennialism share the idea that students should learn to learn, and not be evaluated in only one way; and that schools should not only prepare students for specific careers but also to pursue knowledge for its own sake and ultimately life-long learning.

Also found was the idea that in order to discipline the minds of students, Innovationism like Perennialism relies on the deduction of scientific reasoning using the inquiry-based Socratic Method, rather than the mere acquisition of facts. In addition, because so much of scientific reasoning is derived from project-based trial and error methodology of research, the ethics concepts of right and wrong should be prioritized so that students will know definite rules that they must follow to be successful.

## **Subjective Education Philosophies**

### **Progressivism**

The research found that Progressivism, also known as Experimentalism, is an educational philosophy based on the concept of progress that holds the tenets that science, technology, economic development and social advancements are vital to improve the human condition and reality is what is experienced, truth is what presently happens, and what is perceived as good changes according to situational needs (as cited in Wikipedia; <https://en.wikipedia.org/wiki/Progressivism>, retrieved 2/18/2016). As observed by the Utah State Office of Education (2010) schools exist to learn about and expand the society of the world. The instructional objective of Innovationism is to promote democratic living while also, as with Experimentalism, promote the perception that reality is the world of experience; and truth is what works and what is.

Mah (2003) informed us that Progressivism became highly significant during the Age of Enlightenment in 18<sup>th</sup> century Europe because of the belief Europe was demonstrating that societies could progress in civility from barbaric conditions to civilization through strengthening the basis of empirical knowledge as the foundation of society. It was found that in America, progressivism began as a social movement in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries and grew into a political movement, in what was known as the Progressive Era (timeline from about 1890 to 1920).

Johnson and Reed (2008) informed us that education Progressivism, which is a subjective normative education philosophy, is grounded in Plato's concept of idealism in which knowledge is gained from the inside out and looked at education as a kind of birthing process (p. 5). Idealists focus on the spiritual, the artistic, the intuitive, even the mystical in the pursuit of the more abstract realities and emphasize the study of ideas through the fields such as literature, history, philosophy, and religion while Progressivism argues that learning must be based on the fact that humans are social creatures and by nature learn best in real-life activities with other people (Vygotsky, 1978).

John Dewey's philosophy of education was the cornerstone of progressivism which saw the role of education, similar to the concept of Innovationism, is to prepare young people for adult life. The research found that Progressivism-based curriculum, like the concept of Innovationism, emphasizes the study of the natural and social sciences which includes the exposure to new scientific, technological, and social developments. Believing that people learn best from what they consider most relevant to their lives, the curriculum centers on the experiences, interests, and abilities of students (Dewey, 1920). It was further learned that according to progressivist thought, the skills needed in the real world include problem-solving and scientific methods of inquiry which are vital in the digital age.

When Dewey continued this line of thought by stating that schools should transmit the society's culture by nurturing cooperation and self-discipline he was expanding on an Innovationism concept of the balancing and blending of objective and subjective elements. Like Dewey, the concept of Innovationism holds that because reality is constantly changing, there is little need to focus on a fixed body of knowledge while the emphasis is on how to think, not what to think. In lock step with Dewey's Progressivism the concept of Innovationism's curricula should be interdisciplinary and teachers should guide students in problem-solving exercises and scientific projects and not be confined to focusing on one discrete discipline at a time but rather should introduce lessons that integrate several different subjects.

As with the proposed concept of Innovationism's view that the teacher is the guide on the side, Dewey saw the teacher as the leader of group activities and allowed students to analyze and interpret data and to draw their own conclusions and therefore teachers should plan lessons that arouse curiosity and push students towards higher order thinking and knowledge construction. The concept of Innovationism drew from Dewey the concept that by including instruction in industrial arts and home economics, schooling is made both interesting and useful; and, ideally, the home, workplace, and schoolhouse blend together to generate a continuous, fulfilling learning experience in life. The concept of Innovationism aligns with the progressivist dream that the dreary, seemingly irrelevant classroom exercises that so many adults recall from childhood will someday become a thing of the past (Dewey, 1920).

In support of one of the concepts of Innovationism's core tenets, the belief that the balancing and blending of objective and subjective elements in contemporary K-12 pedagogical methodology and curriculum is necessary to maximize the effectiveness of a digital age education. The literature revealed that Dewey (1944) warned against non-collaboration of the objective and subjective, the either/or worldview, that dominated the Western world for centuries. "From this rather traditional perspective, knowledge is either innate, that is, inside the individual at birth awaiting the right mnemonic device to bring it to consciousness or external to human beings awaiting our discovery. In either case, an absolute is implied which results in the imposition of knowledge and values upon each generation" (p.156, as cited in Johnson and Reed, 2008, p.13). In other words, it is quite unfair for previous generations to put forth absolutes, implied or otherwise, since the epistemological science of education can never be fixed and is always open to change and/or reevaluation. This is a good example of how, if allied properly, the flexibility of the Innovationism concept allows either or both the innate and external elements of cognitive development to be manifested in the proper situation singularly, linearly or in unison.

### **Reconstructionism**

It was found that Kincheloe, et al., (2000) stated that Reconstructionism is a subjective normative education philosophy and, unlike Essentialism, Progressivism, and Perennialism which look to change education from within, it is rather radical in that it attempts to challenge students to study social problems and to think of ways to improve society. Where progressive educators base their subject matter on social experiences by asking their students to solve problems using projects and groups, reconstructionists look for education to "reconstruct society by addressing current events and social problems" (p.30).

This study has shown that by believing that education extends beyond the information in books and new digital technologies such as the Internet, to include outside involvement in the community; Reconstructionists promote change through social activism. Kincheloe, et al., (2000) argued that like progressive educators, Reconstructionists believe that "the teacher should guide students in projects and activities that will improve society rather than simply teach lessons that conform to the status quo (p. 30).

This study revealed that according to Theodore Brameld (1977), students and teachers must improve society as classroom political neutrality, disguised as objectivity and scientific inquiry, does not suit the democratic process. Brameld believed, in alignment with the concept of Innovationism, that both teachers and students have a right to take sides in these critical issues. Brameld specifically addressed the responsibility of teachers in that they must measure up to their social responsibilities (p. 70, as cited in Ornstein and Huskins, 2012, p. 44).

The concept of Innovationism aligns with Reconstructionists philosophy through advocating a program of education that reflects the flowing Reconstructionism tenets:

- critically examines a society's cultural heritage,
- examines controversial issues unabashedly,
- commits to bringing about constructive social change,

- cultivates a future-oriented attitude that considers school reform, and
- enlists students and teachers to enhance educational opportunities for all children and youth.

The study found that contemporary Reconstructionist educators tend to be more in tune to global issues as part of the world social order and Reconstruction curriculum favors a “world” curriculum with emphasis on truth, brotherhood, and social justice. It is opposed to narrow or parochial curriculum that deals only with local and community ideas and ideals, and like the concept of Innovationism, insists upon multicultural education that must include the actual facts of historical and contemporary life.

The concept of Innovationism is like Reconstructionism in the way it is committed to the analysis, interpretation, and evaluation of social problems and not only discusses methods of change but also to be proactive in encouraging action to bring about constructive change. The curriculum is based on social and economic issues as well as social service and will engage students in critical analysis of the local, national and international community. Once again, this is where the concept of Innovationism promotes the similarities of goals through critical analysis as does Reconstructionism. One of the elements that is presented through the concept of Innovationism is the social goal to educate children towards resolution of injustices and to teach students to collaboratively examine controversial and socially difficult issues and come to a consensus around those solutions.

Since the learning platforms for the concept of Innovationism are digital, curriculum is able to be updated on a daily basis or as needed to address current global affairs and student learning needs. This allows for changes to be made in the curriculum and learning outcomes when changes occur throughout the world or exist within the different students in class. This practice should help students be aware of changing global issues. In general, it is believed that concept of Innovationism like Reconstructionism will emphasize the social sciences (e.g., history, political science, economics, sociology, religion, ethics, poetry, and philosophy) but it is also thought that where the two philosophies vary is that Innovationism is committed to the application of science in the K-12 curriculum whereas Reconstructionism is primarily committed to a curriculum framed within social science.

Taking from Reconstructionism, the concept of Innovationism requires interaction between the local, national and international communities to be fully effective. Students participate in civic activities such as business internships and community service volunteering. Professionals throughout the community come into the school as guest speakers and demonstrators of various business and community activities to form the fabric of a vibrant society.

### **Findings Summary**

It was found that the Data Triangulation methodology of the Review of the Literature, Observation and Interview supported the notion of a balanced and blended approach to the practical application of education philosophy. This method identified and analyzed the positives and negatives for support of the use of balanced and blended objective and subjective elements found in the four education philosophies of Essentialism, Perennialism, Progressivism and Reconstructionism in relation to the concept of Innovationism not only provided a useful tool to be able to identify relevant data elements but also a meaningful method of the analysis found in Appendix B. In the following Conclusions chapter a closer look at the concept of Innovationism’s main tenets will be examined in relationship to the needs of contemporary K-12 education in the United States.

## Chapter V

### Conclusions

The findings of this study showed a number of supporting pedagogical and methodological constructs for the concept of Innovationism. From a description of the dynamics of the problem of contemporary U.S. K-12 education to the analysis of the methodology of Data Triangulation, there is sufficient support for the potential in K-12 education for the balancing and blending of the objective and subjective elements of the four basic education philosophies of Essentialism, Perennialism, Progressivism, and Reconstructivism and their supporting theories. The study has examined the potential for the concepts of Innovationism to guide the continued development of innovative education and learning through the motivational engagement of meaningful K-12 education in a digital world. The study also suggests that it would be useful to further test the efficacy of a curriculum designed based on the concepts of Innovationism for contemporary K-12 education.

Although a complete answer to the researcher's question: *Why is it that with the many education philosophies and theories that have been conceived over the past three hundred years there has not appeared a concise and universally accepted education philosophy to guide the design and development of effective pre/K-12 pedagogical methodologies and curriculums?* - was found to be beyond the scope of this thesis, a partial answer, besides the obvious political and sociological ideological extremes, was summed up by best by Dewey (1938) when he observed in his book *Experience and Education*: "either/or dichotomies are destructive."

It is believed that this study of the concepts of Innovationism provides sufficient support for continuing the study of the concept and its application. It is further believed that the concept of Innovationism should be applied to systematically design and create K-12 curriculum that intentionally avoids the either/or dichotomies currently found in K-12 curricular models.

In the Review of the Literature for this study, it was found that many education philosophers, psychologists, and theorists supported the concept of combining the objective and subjective elements of existing pedagogical methodologies and curriculum. These educators included Dewey (1902; 1916; 1938); Merickel (1999); Kuhn (1962); Derrida (1976); Tyler (1951); James (1909); Kincheloe (2000); Johnson (2005); Durant (1926); and Pinar (1978a). Although based on history and human nature it is unrealistic to think the conservative vs. the liberal debate over education issues will ever end, the belief of this researcher is that by using the concepts of Innovationism to design curricula will defuse the political arguments by combining the objective and subjective elements of both ideologies in order to bring a balanced and blended approach to the development of digital K-12 methodology and curriculum.

All human endeavors are based on a philosophical foundation or, as this study suggests, can be based on a blending and balancing of several objective and subjective philosophies. Because of the rapid digital technological and learning standard changes taking place in today's K-12 public schools, it suggested that a flexible education philosophy and supporting theory for Innovationism be developed and validated to accommodate new discoveries of pedagogies, methodologies, curricula, and digital learning platforms for teaching and learning in the digital age.

This researcher believes that to prepare K-12 aged children for lifelong learning in a way that compliments their developmental stages and unique learning styles it is necessary to create autonomous and personalized learning platforms. For example, an innovative approach to teaching and learning can be found in a supporting learning theory of the concept of Innovationism called Andragogy. Although Andragogy, developed by Malcolm Knowles, is a theory created to aid in the development of curricula for adults, a number of useful tenets appear to apply to the concept of Innovationism. Additionally, as a blended objective and subjective learning theory, Andragogy can apply to any form of adult learning and has been used extensively in the design of organizational training programs (e.g. for soft-skill domains such as management development). As Knowles (1984), wrote, "It is instruction for adults so it needs to focus more on the process and less on the content being taught. Strategies such as case studies, role

playing, simulations, and self-evaluation are most useful. Similar to the subjective learning theory of Constructivism, instructors adopt a role of facilitator or resource rather than lecturer or grader.” It is believed, following this study, that using parts of Andragogy in a blended education strategy is the kind of creative methodology that is needed to motivate and engage students in contemporary K-12 education.

It was Dewey (1913) who pointed out, “Education must be re-conceived, not as merely a preparation for maturity, whence our absurd idea that it [education] should stop after adolescence, but as a continuous growth of the mind and a continuous illumination of life” (p. 213).

As Noll (2007) noted, “Historically, institutionalized education has been characteristically rigid” (p. xiv). As a testing ground of ideas, it has often lacked an orientation encouraging innovation and futuristic thinking. Social psychologist Allen Wheelis pointed out in *The Quest for Identity* (1958), “social institutions by definition tend toward solidification and protectionism” (xiv). If we are ever to intrinsically and extrinsically motivate students we have to create innovative and student-friendly learning environments. Noll continued that “The campaign to make schools into more productive and humane places has been relentless including the open classroom/open space experiments, the several curricular variations, and the emergence of schools without walls, charter schools, privatization of management, and home schooling across the country testify to the desire to reform the present system or to build alternatives to it” (xix).

With the introduction of the Every Child Succeeds Act the preverbal pendulum of educational curriculum and standards is now moving in a more liberal direction. Progressive educators are currently dominating the national conversation and therefore the direction of standards in education. With the revival of John Dewey’s concepts of project-based learning (Dewey, 1916) and the education theory of Constructivism brought about by the work of Dewey, Montessori, Piaget, Vygotsky, Bruner and others which values personalized learning as opposed to interdependent standardization instruction is guiding the current pedagogical discourse and curricular changes ([https://en.wikipedia.org/wiki/Constructivism\\_philosophy\\_of\\_education](https://en.wikipedia.org/wiki/Constructivism_philosophy_of_education) retrieved 3/21/2016).

This study has shown support for the concept of Innovationism and the elements of motivation for creative and innovative K-12 learning exist; what now appears to be needed is pedagogical methodologies and curriculum that are developed to create a balance and blending of objective and subjective subject matter and student management. Based on this study’s findings, this researcher believes that this balance of objective and subjective elements is the pedagogical and curricular starting point for curricular design. Ultimately, it is believed that the use of digital learning systems will provide the tools needed to make adjustment to an integrated, balanced and blended Innovation education and learning curricula and lesson-projects based on a number of variables including: learning style, time on task, learning outcome levels, and multiple pathways to learning outcomes based on each student’s predilections, existing knowledge, and needs. It is also important to note, that today digital technology has allowed educators the ability to deliver creative content in both blended and virtual formats. In a recent survey 34% of teachers believe that the use of print and digital materials in the classroom would be about 50/50 within the next three years (CoSN, 2015).

### **Recommendations for Further Study**

It is recommended that following this study, a comprehensive analysis be conducted to examine the intrinsic and implicit pedagogical methodologies and inductive curricula that can be developed using the concept of Innovationism as an educational philosophical foundation and framework. Using a balanced and blended objective and subjective approach, pedagogical elements such as student motivation and engagement; integrated digital content; system design modules; progressive teaching platforms; reflective activities; and Andragological learning methodologies should be further explored and piloted. It is also recommended that this study be used to help facilitate additional work on the concept of Innovationism as a guide for the realization of innovation education and learning’s maximum potential.

## References

- Adler, M. (1982). *The Paideia proposal: An educational manifesto*. New York, NY: Macmillan.
- Adler, M. (1988). *Reforming education: The opening of the American mind*. New York, NY: Macmillan.
- Allan, A. J., & Randy, L. J. (2005). *Writing the winning thesis or dissertation: A step-by-step Guide*. Newberry Park, CA: Corwin Press.
- Appleby, J., Hunt, L., & Jacob, M., (1995) *Telling the truth about history*. New York: Norton & Co.
- Argyris, C. (1976). *Increasing leadership effectiveness*. New York, NY: Wiley.
- Argyris, C., & Schon, D. (1974). *Theory in practice*. San Francisco: Jossey-Bass.
- Armstrong, J. S. (2011). Natural Learning in Higher Education. Retrieved from [http://repository.upenn.edu/marketing\\_papers/140](http://repository.upenn.edu/marketing_papers/140)
- Armstrong, T. (2006). *The best schools: How human development research should inform educational practice*. Virginia; Alexandria: Association for Supervision and Curriculum Development.
- Bagley, W. C. (1940). Just what is the crux of the conflict between the progressives and the essentialists? *Educational Administration and Supervision*, 26, 508-511.
- Becker, E. (1967) *Beyond alienation: A philosophy of education for the crisis of democracy*. New York, NY: George Braziller.
- Bhattacharyya, D. (1996). Curriculum development and education management: Foundations of curriculum. *Reader, department of education, University of Kalyani*. Retrieved from [http://www.kudbhattacharyya.com/pdf/Module\\_1\\_\\_Foundations\\_of\\_Curriculum\\_.pdf](http://www.kudbhattacharyya.com/pdf/Module_1__Foundations_of_Curriculum_.pdf)
- Bloom, A. (1987). *The closing of the American mind*. New York, NY: Simon & Schuster.
- Bogdan, R. C., & Biklen, S. K. (1992). *Qualitative research for education: An introduction to theory and methods* (2<sup>nd</sup> Ed.). Massachusetts: Simon & Schuster, Inc.
- Brown R. B. (2006). *Doing your dissertation in business and management: The reality of research and writing*. Thousand Oaks, Ca: Sage Publications.
- Bruner, J. S. (1957). *Going beyond the information given*. New York, NY: Norton.
- Bruner, J. S. (1973) *Going beyond the information given*. New York, NY: Norton.
- Cartwright, R. L. (1968). Some remarks on essentialism; *The Journal of Philosophy* 65 (20), 615–626.
- Christensen, C., Johnson, C. W., & Horn, M. B. (2010). *Disrupting class: How disruptive innovation will change the way the world learns* (expanded edition). (Kindle Edition). Retrieved from Amazon.com.
- Cohen, L., Manion, L., Morrison, K., & Morrison, R. B., (2007). *Research methods in education*. New York, NY: Routledge.

- Cominsky, L. (2014) Standards focus on how science actually works. *Press Democrat*. Retrieved from <http://www.pressdemocrat.com/opinion/3204004-181/close-to-home-new-standards>
- Consortium for School Networking – CoSN. (2015). *K-12 IT Leadership Survey Report*. Retrieved [http://cosn.org/sites/default/files/pdf/CoSN\\_ITLdrship\\_Report\\_v4IKS\\_SL.pdf?sid=7307](http://cosn.org/sites/default/files/pdf/CoSN_ITLdrship_Report_v4IKS_SL.pdf?sid=7307)
- Core Knowledge Schools. (1988). As cited in Wikipedia [https://en.wikipedia.org/wiki/Educational\\_essentialism](https://en.wikipedia.org/wiki/Educational_essentialism).
- Demiashkevich, M. J. (2007). *An introduction to the philosophy of education*. Retrieved from [https://en.wikipedia.org/wiki/Educational\\_essentialism](https://en.wikipedia.org/wiki/Educational_essentialism).
- Devaney, L. (2014). *10 ways to create engaging schools*. Retrieved from <http://www.eschoolnews.com/2014/11/05/10-engaging-empowering-652/>.
- DeWalt, K. M., & DeWalt, B. R. (2011). *Participant Observation*. Retrieved from [https://en.wikipedia.org/wiki/Field\\_research](https://en.wikipedia.org/wiki/Field_research).
- Dewey, J. (1902). *The child and the curriculum*. Retrieved from <https://books.google.com/books>
- Dewey, J. (1916). *Democracy and Education*. New York, NY: Macmillan.
- Dewey, J. (1917). *Creative Intelligence*, New York, NY: Macmillan.
- Dewey, J., (1936). *The theory of the Chicago experiment, in the Dewey school: The laboratory school of the university of Chicago, 1896-1903*. K. C. Mayhew & A. C. Edwards (Ed.). Reprinted, Piscataway, NJ: Transaction.
- Dewey J. (1938). *Experience and Education*. New York, NY: Macmillan.
- Dewey, J. (1944). Challenges to Liberal Thought. *Fortune*, 30 (2), 156.
- Durant, W. (1926). *The Story of Philosophy*. New York, NY: Simon & Schuster.
- Eisner, E. W. (1998b). *The enlightened eye: Qualitative inquiry and the enchantment of educational practice*. Upper Saddle River, NJ: Prentice-Hall, Inc.
- Eleanor Roosevelt Papers Project, (2000). The Progressive Era 1890 – 1920. *Encyclopedia Britannica (2004)*
- Fox, M. (2006). *The a. w. e. project: Reinventing education; reinventing the human*. Canada, BC: CooperHouse – Wood Lake Publishing.
- Frankena, W. K., Raybeck, N., & Burbules, N (2002). *Philosophy of Education*. As cited in Guthrie, James W. *Encyclopedia of Education* (2nd ed). Reference ISBN 0-02-865594-X. Retrieved from [https://en.wikipedia.org/wiki/Philosophy\\_of\\_education](https://en.wikipedia.org/wiki/Philosophy_of_education).
- Freire, P. (1968) *Pedagogy of the Oppressed*. Rio de Janeiro: Paz e Terra.
- Friedman, T. (2014/23/2). How to get a job at Google. *New York Times*. Retrieved from <http://www.nytimes.com/2014/02/23/opinion/sunday/friedman-how-to-get-job-at-google.html?r=0>.

- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books ISBN 01333306143.
- Gates, B. (2016). Ed tech has underachieved, but better days are ahead. Retrieved from *Education Week*, <https://marketbrief.edweek.org/marketplace-k-12/bill-gates/>.
- Gavin-Loss, C., & Loss, C. P. (2002). Progressive Education. *Encyclopedia of Education (2<sup>nd</sup> ed)*. New York, NY: Macmillan References USA
- Gewertz, C. (2014). Cut-off Scores Set for Common-Core Tests. *Education Week* <http://www.edweek.org/ew/articles/2014/11/17/13sbac.h34.html?cmp=ENL-CM-NEWS2>
- Giroux, H. A. (2004). Critical pedagogy and the postmodern/modern divide: Toward a pedagogy of democratization. *Teacher Education Quarterly*, winter, 31-47.
- Glasser, W. (1997). A new look at school failure and school success. *Phi Delta Kappan*, 78 (8), 596-602.
- Goodrum, D. A., Dorsey, L. T., & Schwen, T. M. (1993, November). Defining and building an enriched learning and information environment. *Educational Technology*, 33 (11), 10-20.
- Groff, J (2013). Technology-rich innovative learning environments. *Organization for Economic Cooperation and Development (OECD) project, Innovative Learning Environments*. Retrieved from <http://www.oecd.org/edu/ceri/TechnologyRich%20Innovative%20Learning%20Environments%20by%20Jennifer%20Groff.pdf>
- Gross, R., (1999). *Peak Learning: How to create your own lifelong education program for personal enlightenment and professional success*. New York, NY: Penguin Putnam, Inc.
- Guest, G., & MacQueen, N., (2012). Introduction to Thematic Analysis. Retrieved from *Applied Thematic Analysis*, as cited in [https://en.wikipedia.org/wiki/Thematic\\_analysis](https://en.wikipedia.org/wiki/Thematic_analysis).
- Herman, J. L. & Linn, R. L. (2013) *On the road to assessing deeper learning: The status of smarter balanced and PARCC assessment consortia*. Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST) No. 823. <http://www.cse.ucla.edu/downloads/files/CRESSTReport823.pdf>.
- Heslep, R. (1997). Philosophical thinking in educational practice. *The study of Educational Philosophy, Chapter 1*. London: Greenwood Publishing.
- Hirsch, E. D. (2010). *The making of Americans: Democracy and our schools*. New Haven, CT: University Press.
- Holland, B., (2016). Empathy, strategy, and edupreneurship: Fostering a culture of innovation. *Education Week – EdTechTeacher*. Retrieved from [http://edweek.org/edweek/edtechresearcher/2016/04/empathy\\_strategy\\_and\\_edupreneurship\\_fostering\\_a\\_culture\\_of\\_innovation.html](http://edweek.org/edweek/edtechresearcher/2016/04/empathy_strategy_and_edupreneurship_fostering_a_culture_of_innovation.html)
- Holt, J. (1964). *How Children Fail*. New York, NY: Pitman Publishing Corp.
- Honer, S. M., Hunt, T. C. & Okholm, D. L. (2002). *Invitation to philosophy: Issues and options*. Belmont, Ca: The Wadsworth Group, Thomson Learning, Inc.

- Howick, W. (1971). *Philosophies of Western Education*. Retrieved from [https://en.wikipedia.org/wiki/Educational\\_essentialism](https://en.wikipedia.org/wiki/Educational_essentialism)
- Hutchins, R. M. (1953). *The Conflict in Education*. New York, NY: Harper & Row.
- Illich, I. (1971). *Deschooling Society*. New York, NY: Harper & Row.
- IEP, (1996). Aristotle. *Internet Encyclopedia of Philosophy*. Retrieved from <http://www.utm.edu/research/iep/a/aristotl.htm>.
- Jackson, S. L. (2011). *Research Methods and Statistics: A Critical Approach*, 4th edition San Francisco, Ca: Cengage Learning
- James, W., (1909). *A Pluralistic Universe*. New York, NY: Longmans, Green, and Co.
- James, W., (1920). *The Letters of William James, vol. 1*. New York, NY: Atlantic Monthly Press.
- Jenkins, H., et al, (2006). *Confronting the challenges of participatory culture: Education for the 21st century*. Chicago, IL: The John D. and Catherine T. MacArthur Foundation. Retrieved from <http://digitalllearning.macfound.org>
- Johnson, A. S. (1893). The year of 1892. *The Quarterly Register of Current History*, 2. Detroit: Current History Publishing Company.
- Johnson, G. M. (1993). Conceptual resolution of the educational research paradigm dichotomy: Q-continuum. *Teacher Education Quarterly*, 20 (2), 91-103. Retrieved from <http://files.eric.ed.gov/fulltext/ED490726.pdf>
- Johnson, G. M. (2004). Constructivist Remediation: Correction in Context. *International Journal of Special Education*, 19 (1). Grant MacEwan College. Retrieved from <http://files.eric.ed.gov/fulltext/ED490727.pdf>
- Johnson, G. M. (2009). Instructionism and Constructivism: Reconciling Two Very Good Ideas. *International Journal of Special Education*, 24 (3). Grant MacEwan College. Retrieved from <http://files.eric.ed.gov/fulltext/EJ877941.pdf>
- Johnson, B., & Christensen, L. (2008). *Educational Research: Quantitative, Qualitative, and Mixed Approaches (3<sup>rd</sup> ed.)*. Thousand Oaks, CA: Sage Publishing
- Johnson, T., & Reed F., (2008). *Philosophical documents in education*. Boston, Ma: Pearson Education.
- Jonas, B. S., Gu, Q., & Albertorio-Diaz (2013). *Psychotropic medication use among adolescents: United States, 2005–2010*. Retried from <http://www.cdc.gov/nchs/data/databriefs/db135.htm>
- Khan, S. (2012). *The one world schoolhouse: Education reimaged.*( Kindle DX version). Retrieved from Amazon.com.
- Kincheloe J., Slattery P., & Steinberg, S. (2000). *Contextualizing teaching; Introduction to education and educational foundations*. New York, NY: Addison Wesley Longman, Inc.

- Kneller, G. F., (1971). *Introduction to the philosophy of education*. San Francisco, Ca: John Wiley & Sons.
- Knowles, M. (1984). *The adult learner: A neglected species* (3rd Ed.). Houston, TX: Gulf Publishing.
- Kramer, P. D. (1993). *Listening to Prozac: A psychiatrist explores antidepressant drugs and the remaking of the self*. New York, NY: Penguin Books Ltd.
- Kuhn, T. S. (1970). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.
- Larson, E. J., (2003). *Trial and error: the American controversy over creation and evolution* (3, revised ed.). London: Oxford University Press.
- Lavoie, R. (2007). *The motivation breakthrough: 6 secrets to turning on the tuned out child*. New York, NY: Simon & Schuster, New York
- Lenhardt & Madden, (2015). *Teens, social media & technology overview 2015*. Pew Research Center. Washington, DC. Retrieved from (<http://www.pewinternet.org/2015/04/09teens-socialmedia-technology-2015/>).
- Leshan, L., & Margeneu, H. (1982). *Einstein's space and Van Gogh's sky: Physical reality and beyond*. New York, NY: Macmillan
- Mah, H., (2003). *Enlightenment phantasies: Cultural identity in France and Germany, 1750-1914*. Ithaca, NY: Cornell University Press.
- Martinez, M. A., Sauleda, N., & Huber, G. L. (2001). Metaphors as blueprints of thinking about teaching and learning. *Teaching and Teacher Education*, 17 (8), 965-977.
- Merickel, M. (1999). *ED555 Integration of the disciplines: A web course offered by Oregon State University School of Education*. Retrieved from [merickem@orst.edu](mailto:merickem@orst.edu)
- Merriam Webster's Collegiate Dictionary, 2004
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.
- Miron, G. & Gulosino, C. (2016). *Virtual schools report 2016: Directory and performance review*. Boulder, CO: National Education Policy Center. Retrieved from <http://nepc.colorado.edu/publication/virtual-schools-annual-2016>.
- Montessori, M (1924). *A critical consideration of the new pedagogy: Montessori elementary material*. Cambridge, MA: Bentley Publishers.
- Mutah University. (2010). Curriculum Overview. *Humanities and Social Science Series, Mutah.edu.jo*. 2010-03-07. Retrieved from <https://www.mutah.edu.jo/userhomepages/drmajali/t1.html> Retrieved 2016-03-09
- National Center for Education Statistics (2015a). High school dropouts: 1970 through 2013. Retrieved from [https://nces.ed.gov/programs/digest/d13/tables/dt13\\_219.71.asp](https://nces.ed.gov/programs/digest/d13/tables/dt13_219.71.asp)
- National Center for Education Statistics (2015b). National Assessment of Educational Progress. Retrieved from [http://blogs.edweek.org/edweek/curriculum/2016/04/12th\\_grade\\_naep\\_2015.html](http://blogs.edweek.org/edweek/curriculum/2016/04/12th_grade_naep_2015.html)

- Nisbet, R. (1980). *History of the Idea of Progress*. New York, NY: Basic Books.
- Noll, J. W. (2007). *Taking sides: Clashing views on educational issues (14<sup>th</sup> ed.)*. Dubuque, IA: McGraw-Hill Contemporary Learning Series.
- Ornstein, A. C. (1993). School consolidation vs. decentralization: Trends, issues, and questions. *Urban Review*, 25 (2), 167-174.
- Ornstein, A. C. & Hunkins, F. P. (2012). *Curriculum: Foundations, principles, and issues (6<sup>th</sup> Edition)*. (Kindle DX version). Retrieved from Amazon.com
- Parker, J., et al. (2010), *Teaching tech-savvy kids: Bringing digital media into the classroom, grades 5-12*. (Kindle DX version). Retrieved from Amazon.com
- Piaget, J. (1950) *The psychology of intelligence*. New York, NY: Routledge
- Pinar, W. F. (1978a). The reconceptualization of curricular studies. *Journal of Curriculum Studies*, 10 (3), 205-214.
- Powell, A. (2007). How sputnik changed U.S. education. *Harvard Gazette*. Retrieved from <http://news.harvard.edu/gazette/story/2007/10/how-sputnik-changed-u-s-education>
- Prawat, R. S. (1996). Constructiveisms, modern and post-modern. *Education Psychologist*, 3 (4), 215-225.
- Prensky, M. (2006) *Don't bother me, mom—I'm learning!* St. Paul, MN: Paragon House.
- Prince, M., & Felder, R. M. (2006) Inductive teaching and learning methods: Definitions, comparisons, and research base. *Journal of Engineering Education* 95 (2), 123–38.
- Robinson, K. (2006). Do schools kill creativity? *TED Conference*. Retrieved from <https://www.youtube.com/watch?v=iG9CE55wbtY>
- Robson, M. (2002). *Brainstorming: Problem-solving in groups (3rd ed.)*. Burlington, VT: Gower.
- Rosenstock, L. (2009). High Tech High. Retrieved from <http://www.edutopia.org/high-tech-high-collaboration-age-video>
- Russell, B. (1991). *A history of western philosophy*. London: Routledge.
- Sadker, D. M. (2005). *Teacher-centered philosophies, teachers, schools, and society: A brief introduction to education*. Retrieved from <http://www.education.com/> as cited in Wikipedia <https://en.wikipedia.org/wiki/Educational>
- Sakai-Miller, S. (2015). *Teach students to communicate effectively in the Innovation Age*. Retrieved from <http://www.eschoolnews.com/2016/01/25/teach-students-to-communicate-effectively-in-the-innovation-age/>
- Siegel, D. J. (2012). *Developing mind: How relationships and the brain interact to shape who we are (2<sup>nd</sup> ed.)*. (Kindle DX version) Retrieved from Amazon.com
- Skinner, B. F. (1968). *The technology of teaching*. New York, NY: Appleton-Century-Crofts.

- Smith, K. (2009). *Innovation in public education: Problems and opportunities*. Retrieved from <http://www.newschools.org/files/innovation-in-education.pdf>.
- Spencer, H. (1884). *What knowledge is of most worth*. New York, NY: John B. Alden.
- Spring, J. H., (2012). *American Education*. New York, NY: McGraw-Hill.
- Steffe, L. & Gale, J. (Eds.), (1995). *Constructivism in education*. Hillsdale, NJ: Lawrence Erlbaum.
- Tolley J. (2015). Why the Factory Model of Schools Persists, and How We Can Change It. Center for Teaching Quality, International School of Beijing. *Education Week*. Retrieved from <http://www.edweek.org/tm/articles/2015/10/30/why-the-factory-model-of-schools-persists.html>.
- Tomassini, J. (2012). Blended Learning Models Win Gates Funding," as cited in *Education Week*. Retrieved from [https://marketbrief.edweek.org/marketplace/12/blended\\_learning\\_models\\_win\\_gates\\_funding](https://marketbrief.edweek.org/marketplace/12/blended_learning_models_win_gates_funding)
- Trostli, R. (1998). *Rhythms of learning: Selected lectures by Rudolf Steiner*. New York, NY: Anthroposophic Press.
- Tyler, R. W. (1951). *Basic Principals of Curriculum and Instruction*. Chicago, IL: University of Chicago Press
- United States Department of Education. (1983) A nation at risk: The imperative for education reform. National Commission on the Excellence in Education. Retrieved from <http://www2.ed.gov/pubs/NatAtRisk/index.htm>
- von Bertalanffy, L. (1968). *General system theory: Foundations development, applications*. New York, NY: George Braziller.
- von Glasersfeld, E. (1995a). *A constructivist approach to teaching*. In L. Steffe & J. Gale (Eds.), *Constructivism in education*. Hillsdale, NJ: Lawrence Erlbaum.
- von Glasersfeld, E. (1995b). *Radical constructivism: A way of knowing and learning*. London: Falmer Press.
- Vygotsky, L. S. (1962). *Thought and Language*; Cambridge, MA: MIT Press.
- Vygotsky, L. S. (1978). *Mind in Society*. Cambridge, MA: Harvard University Press.
- Walliman, N. S. & Walliman N. (2011). *Research methods: the basics*. Retrieved from Taylor and Francis, e-library.
- Whitehead, A. N. (1933). *Adventures of ideas*. New York, NY: Free Press.
- William, N. (2005). *Your research project*, (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publishers.
- Wilson, B. (1997). *The postmodern paradigm*. In C. R. Dills & A. Romiszowski (Eds.), *Instructional development paradigms* (pp. 297-309). Englewood Cliffs NJ: Educational Technology Publications.
- Wolcott, H. F. (2001). *The art of fieldwork*. Walnut Creek, CA: Altamira

## APPENDICES

### Appendix A

#### Definition of Terms

**Academic Philosophy** – an education philosophy which is based on an epistemological conceptualization that promotes a specific type or vision of education without a specific pedagogy, curriculum and learning theory.

**Analytical thinking** - a critical component of visual thinking that gives one the ability to solve problems quickly and effectively.

**Andragogy Theory** – a theory specifically designed for adult learning.

**AYP** - Adequate yearly progress.

**Balanced Education** – Any aspect of K-12 education that blends the various objective and subjective element of administration and/or pedagogical methodology and curriculum.

**Blended Learning** - combination of traditional textbook and online teaching and learning.

**Common Core State Standards** - a set of high-quality academic standards in mathematics and English language arts/literacy (ELA).

**Competency-based Learning** - systems of instruction, assessment, grading, and academic reporting that are based on students demonstrating that they have learned the knowledge and skills they are expected to learn.

**Constructivism** – an education theory, based on observation and scientific study, which holds that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences.

**Critical pedagogy** – Marxist inspired theory that encourages students to question and challenge posited "domination," and to undermine the beliefs and practices that are alleged to dominate.

**Critical philosophy** – an exercise of critical thinking skills to clarify problems, issues and concepts.

**Data triangulation** - technique that facilitates validation of data analysis through cross verification from two or more sources.

**Deductive education** - a teacher-centered approach to teaching where students are taken as blank slate and which creates dependency in students thinking ability.

**Design thinking** – a process for problem-solving which includes the "building up" of ideas, with few, or no, limits on breadth during the "brainstorming" phase.

**Detailed field notes proper** – Second phase of processing research fieldwork notes.

**Digital curriculum** - digital media that teachers and students use for learning.

**Digital technology** - a base two process in which digitized information is recorded in binary code of combinations of the digits 0 and 1, also called bits, which represent words and images

**Disruptive Innovation Theory** – the creation of a new market and value network that eventually disrupts an existing market and value network, displacing established market leaders and alliances.

**Double Loop Learning** - a theory where students change underlying values and assumptions by solving problems which are complex and ill-structured and that change as problem-solving advances.

**Dumbing-down** – a technique in education where student assessment is made less rigorous and challenging in order to increase student test scores.

**EMO's** - Education Management Organizations are a private organization or company that manages public schools including district schools, charter schools and virtual schools.

**Epistemology** – a theory of knowledge that is the investigation of what distinguishes justified belief from opinion.

**Essentialism** – is a belief that things have a set of characteristics that make them what they are, accordingly it holds that all children should be taught on traditional lines the ideas and methods regarded as essential to the prevalent culture.

**Experimentalism** - the practice of conducting studies, or a love for new experiences.

**Fieldwork** – a practical work conducted by a researcher in the natural environment, rather than in a laboratory or office.

**Habits of Mind** - is an expression that means knowing how to behave intelligently when all the answers are not known and having a disposition toward behaving intelligently when confronted with problems.

**Inductive education** – a strategy for helping students deepen their understanding of content and develop their inference and evidence-gathering skills.

**Information Age** – a concept that knowledge is power so students are accordingly taught to access, gather, analyze, and report information.

**Innovation** - to introduce something new; the introduction of new things or methods; or to make changes.

**Innovation Age** – an era where students are empowered by learning agency discovery, defining their purpose, and being open to fresh perspectives.

**Innovationism Concept** - a normative education concept that unifies pedagogy, curriculum and learning theory which is grounded in established epistemological assumptions that support education to specifically foster dynamic learning, critical thinking, intellectual flexibility, collaboration, and other skills needed for in the digital age; and holds that all education philosophies have merit and no existing education philosophy or theory should be ignored simply because one aspect of a philosophy or theory conflicts with, or is denied by, that of another philosophy or theory's conceptual framework.

**Innovative education** – a creative K-12 pedagogical system of instruction designed to accommodate teaching and learning in a digital world.

**Integrated balance** – a systems method that incorporates both upstream and downstream **integration**, to control the cost and quality of production.

**Interdependent standardization** –the current U. S. public school system’s model of application which has been in place since the Industrial Revolution of the late 19<sup>th</sup> century.

**Iteration** – discovery through the repetition of trial and error.

**Jotted notes** – original, unedited fieldwork notes.

**Knowledge is of most worth** – The continual debate over what knowledge should be taught in the U. S. public school system.

**MMO** – Massively multiplayer online game.

**Normative Philosophy** – an education philosophy that unifies pedagogy, curriculum and learning theory while incorporating any epistemological philosophy or theory that promotes a specific type or vision of education.

**Objectivism** – is the belief that certain things, especially moral truths, exist independently of human knowledge or perception of them.

**Paradigm shift** - a fundamental change in approach or underlying assumptions.

**Participatory Culture** – As described by Henry Jenkins Participatory Culture includes a youth movement defined by: relatively low barriers to artistic expression and civic engagement; strong support for creating and sharing one’s creations with others; some type of informal mentorship whereby what is known by the most experienced is passed along to novices; participants believe that their contributions matter; and participants feel some degree of social connection with one another by caring what other people think about what they have created.

**Pedagogical methodologies** - education instructional methods; the function or work of a teacher; the art or science of teaching; the discipline that deals with the theory and practice of education; it thus concerns the study and practice of how best to teach.

**Peer-based Learning** - student learning with and from each other as fellow learners without any implied authority to any individual, based on the tenet that “Students learn a great deal by explaining their ideas to others and by participating in activities in which they can learn from their peers.”

**Perennialism** – the oldest of education philosophies it holds that education should be the ideas that have lasted over centuries to ensure that students acquire understandings about the great ideas of Western civilization.

**Pluralism** - a condition or system in which two or more states, groups, principles, sources of authority, etc., coexist.

**Progressivism** - a broad educational philosophy based on the Idea of progress, which asserts that advancement in science, technology, economic development, and social organization are vital to improve the human condition.

**Reconceptualism** - a reaction to traditional ways of looking at curriculum whereas traditional curriculum scholarship focused on design, implementation, and evaluation of curricular materials, reconceptualism is more theoretical and focused on the understanding of context.

**Reconstructionism** – an educational philosophy that emphasizes the addressing of social questions to create a better society and worldwide democracy which focuses on a curriculum that highlights social reform as the aim of education.

**Scientific realism** – is a positive epistemic attitude towards the content of our best theories and models, recommending belief in both observable and unobservable aspects of the world described by the sciences in which objects of scientific knowledge exist independently of the minds or acts of scientists and that scientific theories are true of that objective (mind-independent) world.

**Socratic Method** – a pedagogical technique in which a teacher does not give information directly but instead asks a series of questions, with the results that the student comes either to the desire of knowledge by answering the questions or to a deeper awareness of the limits of knowledge.

**Soft skills** - personal attributes that enable someone to interact effectively and harmoniously with other people.

**Speculative philosophy** – a philosophy that embodying beliefs insusceptible of proof and attempting to gain insight into the nature of the ultimate by intuitive or a priori means.

**Strategic innovation** – the implementation of an innovation cycle where new ideas are generated, tested and disseminated by changing programs from receiving knowledge to creating knowledge through inquiry and research.

**Subjectivism** - a doctrine that knowledge is merely subjective and that there is no external or objective truth.

**Systems training** – an engineering training concept that is defined by a group or family of coursework that will achieve a stated series of training objectives which typically employs a syllabus or similar document that specifies and outlines the coursework to be followed.

**Theoretical Structure** - a structure that can hold or support a theory of a research study which introduces and describes the theoretical framework that explains why the research problem under study exists.

**Traditionalist** - teacher-centered delivery of instruction to students who are the receivers of information that is defined by basic educational practices which expects mastery of academic learning in the core subjects of mathematics, reading, writing, science and social studies.

**Transformative Learning Theory** - task-oriented problem solving to determine cause and effect relationships.

## APPENDIX B

FINDINGS TABLE				
ELEMENTS	PHILOSOPHY	REVIEW OF THE LITERATURE	FIELDWORK (INTERVIEW)	FIELDWORK (OBSERVATION)
<b>OBJECTIVE Measurable Facts</b>	<b>Essentialism</b>	The individual focuses on informing the mind using stimuli from the world around them and as an educational philosophy, Essentialism advocates instilling in students with the essentials or basics of academic knowledge and character development (Ornstein and Hunkins, 2012).	The interview was reflective when she stated that most of her work is objectively extrinsic meaning that she has to follow guidelines that are dictated at the state and district level.	Essentialists believe that teachers should instill traditional virtues such as respect for authority, fidelity to duty, consideration for others and practicality (Howick, 1971).
		Essentialists stress the moral responsibility of man for his actions and looked toward permanent principles of behavior (Ornstein & Hunkins, 2012).	Right now she has to take a mandated objective evaluation approach and if one of the criteria is not met she has to devalue that teacher's assessment.	The teacher must control the students with distributions of rewards and penalties (Howick, 1971).
		Central aim of establishing a common knowledge base for all citizens (Hirsh, 1988).	NOT FOUND	One couldn't get more Essentialist than by starting a count down from 20 every time the students are instructed to do an activity that requires physical movement.
		Essentialists should transmit traditional moral values and intellectual knowledge that students need to become model citizens. (Sadker, 2005)	NOT FOUND	This was the only summative drill aspect observed by the researcher. As Adler (1982) noted (Essentialism's) main focus is on achievement test scores as a means of evaluating progress.

FINDINGS TABLE				
ELEMENTS	PHILOSOPHY	REVIEW OF THE LITERATURE	FIELDWORK (INTERVIEW)	FIELDWORK (OBSERVATION)
		Discipline is necessary for learning and students are taught to respect authority in both school and society (Sadker, 2005).	NOT FOUND	Honoring student scholarship with rewards (certificates) is favored by the Essentialist and is grounded in the Essentialism support theory of Behaviorism (Skinner, 1968).
	<i>Perennialism</i>	As the oldest and most conservative educational philosophy, Perennialism finds its roots in both the realism of Aristotle and the idealism of Plato (Heslep, 1997)	NOT FOUND	The teacher guided the students through an analysis of a video about a football team comprised of incarcerated teenagers using the objective Perennialist Socratic Method of discussion
		Hutchins favored a great books curriculum with students' reading and engaging the great minds of the Western world as they struggled with the perennial philosophical questions of humankind (Johnson & Reed, 2008).	NOT FOUND	Grouping by abilities also has elements of Perennialism as Adler (1982) writes, "They are academically rigorous, for both slow and fast learners, but how much is to be learned is adjusted according to student ability."

FINDINGS TABLE				
ELEMENTS	PHILOSOPHY	REVIEW OF THE LITERATURE	FIELDWORK (INTERVIEW)	FIELDWORK (OBSERVATION)
		Perennialists believe one should teach the things that are of everlasting pertinence to all people everywhere, and that the emphasis should be on principles, not facts (Ornstein and Hunkins, 2012)	The rules now state that a teacher needs to be evaluated for tenure after 18 months which the interviewee felt was way too short and it was Adler (1982), from a Perennialist point of view, who stated that teachers should be well trained before being allowed in the classroom.	In engaging the students in critical thinking about the Zoo article the teacher was coming from a Perennialist point of view because the philosophy holds that, as Ornstein and Hunkins (2012) write, "students must learn to recognize controversy and disagreement in literature because they reflect real disagreements between persons.
		Perennialist believe that since people are human, one should teach first about humans, rather than machines or techniques and follow a liberal curriculum rather than vocational topics (Ornstein and Hunkins, 2012)	NOT FOUND	Perennialism was reflected in the number of words each student has read since the beginning of the school year.
		There is one curriculum for all students, with little room for elective subjects or vocational or technical subject matter and (Ornstein and Hunkins; 2002)	NOT FOUND	At the student assembly one Perennialist notion was found in the awards for reading 100k; 500k; and 1,000k words from a recommended book list.

FINDINGS TABLE				
ELEMENTS	PHILOSOPHY	REVIEW OF THE LITERATURE	FIELDWORK (INTERVIEW)	FIELDWORK (OBSERVATION)
<b>SUBJECTIVE Interpretations &amp; Beliefs</b>	<i>Progressivism</i>	<p>Progressivism, also known as Experimentalism, is based on the concept of progress that holds the tenets that science, technology, economic development and social advancements are vital to improve the human condition and reality is what is experienced, truth is what presently happens, and what is perceived as good changes according to situational needs (as cited in Wikipedia: progressive education)</p>	<p>When asked if she would find looking at her work through an objective or subjective lens useful she was taking a Progressivist position when she replied that the objective extrinsic part of her work is following the rules to keep her job but the intrinsic value of her job such as making progressive rule changes and job satisfaction are often at odds.</p>	<p>The teacher groups the students by a range of abilities according to the subject matter which is reflective of Progressivism as "Progressivism argues that learning must be based on the fact that humans are social creatures and by nature learn best in real-life activities with other people (Vygotsky, 1978).</p>
		<p>Five crucial premises of the Idea of Progress: value of the past; nobility of Western civilization; worth of economic/technological growth; reason over faith; and the intrinsic importance and worth of life (Nesbit, 1980).</p>	<p>The final question was an inquiry to see if she was looking to install progressive pedagogical methodologies and curriculum.</p>	<p>This peer-based learning is also progressive and is reflected in Dewey's (1920) remark, "Learners should learn to work with others because learning in isolation separates the mind from action and certain abilities and skills can only be learned in a group setting.</p>

FINDINGS TABLE				
ELEMENTS	PHILOSOPHY	REVIEW OF THE LITERATURE	FIELDWORK (INTERVIEW)	FIELDWORK (OBSERVATION)
		Progressivism, which is a subjective normative education philosophy, is grounded in Plato's concept of idealism in which knowledge is gained from the inside out and looked at education as a kind of birthing process (Johnson and Reed, 2008).	NOT FOUND	Dewey (1916) would see peer collaboration as progressive when he states, "Students are encouraged to interact with one another and develop social virtues such as cooperation and tolerance for different points of view."
		Progressivism argues that learning must be based on the fact that humans are social creatures and by nature learn best in real-life activities with other people (Vygotsky, 1978).	NOT FOUND	Integrated pedagogical methodology is definitely a Progressivism tenet as Dewey and other progressivists held that the curriculum should be interdisciplinary and teachers should guide students in problem solving exercises and scientific projects (Dewey, 1916).
		Believing that people learn best from what they consider most relevant to their lives, the curriculum centers on the experiences, interests, and abilities of students (Dewey, 1920).	NOT FOUND	This lesson pedagogy used subjective Progressivism by utilizing the familiar and comfortable symbol of a cake which, as a comfort food, relaxes people and makes the mind more susceptible to stimuli.

FINDINGS TABLE				
ELEMENTS	PHILOSOPHY	REVIEW OF THE LITERATURE	FIELDWORK (INTERVIEW)	FIELDWORK (OBSERVATION)
	<i>Reconstructivism</i>	Reconstructionism is a subjective normative education philosophy that is rather radical in that it attempts to challenge students to study social problems and to think of ways to improve society (Kincheloe, et al., 2000).	NOT FOUND	The teacher guided the students through an analysis of a video about a football team comprised of incarcerated teenagers using the subjective philosophical tenets of Reconstructionism with a look at the video's theme of social justice.
		Reconstructionists look for education to "reconstruct society by addressing current events and social problems" (Kincheloe, et al., 2000).	NOT FOUND	The teacher tells the students that it's time for a break and she puts on a Rap dance video that shows people dancing around the world. Even this activity has roots in Reconstructionism Garter (1987).
		Reconstructionists believe that "the teacher should guide students in projects and activities that will improve society rather than simply teach lessons that conform to the status quo Kincheloe, et al., (2000).	NOT FOUND	Reconstruction curriculum favors a "world" curriculum with emphasis on truth, brotherhood and social justice (Hill, 1989).

FINDINGS TABLE				
ELEMENTS	PHILOSOPHY	REVIEW OF THE LITERATURE	FIELDWORK (INTERVIEW)	FIELDWORK (OBSERVATION)
		Related to Reconstructionism is another belief called <i>critical pedagogy</i> which focuses on the use of revolutionary literature aimed at liberation which calls for teachers to be responsible public intellectuals and agents of change (Giroux, 2004).	NOT FOUND	The researcher saw no obvious links to Reconstructionism posted in the classroom as this particular education philosophy was found mostly in lessons on history and sociology.
		Reconstructionist educators believe an international component in U.S. curricula would require students to acquire knowledge and skills essential for global peace, better conditions for the poor and an awareness of global events and worldwide systems (Ornstein & Hunkins, 2012).	NOT FOUND	Reconstructionists insist upon multicultural education and it must include the actual facts of historical and contemporary life. Reconstructionist want teaching to be internationally oriented and humanitarian in their outlook (Ornstein, 2012).