Annotated Bibliography
By Jennifer Rosenthal, Doctoral Student, Curriculum & Instruction, SUNY at Albany, NY

This resource is intended to synthesize a sampling of the current literature available in the area of place-based education. An annotation of each reference has been included along with a full citation in APA format. The resources cited include a compilation of books, original research and journal articles. This list is simply a beginning; it does not encompass all of the current literature available. A final synthesis of the literature is provided at the end of the bibliography along with a list of further readings available in the field.

**Literature was selected based on the following characteristics:**
- Scholarly Excellence
- Peer Reviewed Research
- Contributions within the Field of Place-Based Education
- Examination of important themes within the field of Place-Based Education
- Potential research methodologies to studying Place-Based Education

**This annotated bibliography is separated into the following themes:**
- A definition of place-based education
- Attachment Theory
- Sense of Place Development
- Place Attachment in Young Children and Adolescents
- Aldo Leopold’s influence on Place-Based Education
- Place Attachment and Environmental Actions
- Placelessness
- A Critical Pedagogy of Place
- Place-Based Education School Reform Models
- Qualitative Research Methods for Studying Place-Based Education
**A definition of Place-Based Education (PBE)**


In this short book a formal definition of place-based education (PBE) is given, which is referred to in other place based education literature. The text discusses the roots of PBE in environmental education and describes ways in which PBE can be utilized as a methodology for school reform. This text follows Sobel's previous work studying children's self-identity processes through special places and mapmaking. This text is a valuable overview of the field of place-based education and provides examples of research in the field, although more current literature is available.

*Key Words*: place-based education, education as an integrating context, environmental education, ecological literacy


This book provides an overview of the different types of curriculum. This easy read gives useful information about the roots of progressive education, and the learner-centered, society-centered and knowledge-centered curriculum. The broad overviews provided are good for gaining a general understanding of various curriculum types, although much detail seems to be missing from the book which makes this a complimentary reference rather than a standalone reference on curriculum. Ellis’ own bias appears to be in favor of progressive education as displayed through its heavy emphasis within the book, which also places this book in a category of supplement rather than primary resource.

*Key Words*: curriculum, progressive education, exemplar(s), learner-centered, society-centered and knowledge-centered curriculum

**Attachment Theory**


In this book, the roots of attachment are profoundly theorized through Bowlby's empirical studies. Bowlby's work follows that of Freud and Darwin and looks closely at human and non-human attachment of offspring to mother. Bowlby describes the need for interdisciplinary studies to further the understandings of attachment theory, which he originally discussed in the mid-1940s. This text is a monumental work and provides insight into the natural and instinctive behaviors that lead to attachment.

*Key Words*: attachment, attachment theory, child development

**Sense of Place Development**


This book has been often referred to in other literature surrounding the topic of place studies. A definition of sense of place is offered as being “the pattern of reactions that a setting stimulates for a person.” (p.12) The main emphasis within the book is a look at the relationship between people and place to provide an understanding of how a person’s perceptions, both conscious and subconscious,
shape their relationship to a place. The importance of spirit and its influence upon people and their sense of place is another focal point in the book as well as the long and short term impact of spirit of place. This work provides important insight into the understanding of sense of place and as should be included within a reference list of place-based educational studies.

**Key Words:** sense of place, place attachment


In this study of 437 migrant dwellers within three defined regions of Cape Cod, upper, middle and lower, were studied to discover personal foundations for place identification. Cuba and Hummon defined place identity as “an expression of ‘at-homeness.’” (p.127) Place identity has been generally defined as one component of the sense of place phenomenon. Throughout the study, place identity was found to be enhanced by an attachment to home, the attendance of town meeting, through social involvement within the community and social relationships within the community. This study adds to the present research available on the complexity of place identity and sense of place development. The study concludes with further questions about the difference between “native” and “non-native” place identity development, levels of place identity, regional differences and a general expansion of the definition for place identity.

**Key Words:** sense of place, place identity, at-homeness, migrant dweller

---

**Place Attachment in Young Children and Adolescents**


In this book important links are made between the need for special places in the development of children’s self identities and offers suggestions for integrating opportunities for the development of special places within curriculum. Sobel’s unique perspective on special places comes through his extensive studies on childrens’ mapmaking processes. The influence of Edith Cobb and Louise Chawla’s work on childhood special places are evident and explicated throughout various chapters within the book. The text offers some theoretical perspectives on childhood self-identity models as examples for self-identity and place-identity. This text draws unique conclusions about the process of childhood development and the need for special places within educational curriculum.

**Key Words:** children special places, sense of place, forts, dens, bush houses, childhood development, child place attachment, map making


The book discusses the issue of the appropriate time in which to introduce students to environmental issues. The focus centers around three distinct stages of child development including early years, ages four to seven, where empathy is developed, Sobel calls this phase “Finding Animal Allies”. The second phase of development is exploration, ages seven to eleven, which Sobel calls “Teaching the Landscape”.

---
The final phase of development for children ages twelve to beyond fifteen is social action, which Sobel calls “Saving the Neighborhood”. Various student accounts are presented within the book demonstrating the various phases of development. The main focus of the book is the concept of “ecophobia”, having a fear of the environment. Sobel asks the question of when it is age appropriate to introduce students to environmental issues and how that shapes their future desire to care for and love the environment. He argues within the book that too early of an introduction to heavy environmental concepts and problems leads to a disconnect with the world rather than a love of it. Sobel continues that with age appropriate introductions to the environment through empathy, exploration and social action students gain a deep love for the environment and become motivated at caring for it.

**Key Words:** children special places, sense of place, childhood development, child place attachment


In this article the concept of place attachment and the developmental stages of child discovery is analyzed. The article describes the responsibility that environmental educators have to providing opportunities for children to experience wild places. The article offers a variety of suggested activities for students in grades K-12 to assist with developing a sense of place; each set of activities is broken down by the development stages of child discovery proposed by David Sobel. Sobel’s stages of discovery are broken down as follows:

**Stage 1:** Young Children (Ages 4-7) Empathy: Finding Animal Allies

**Stage 2:** Pre-Adolescent Children (Ages 7-11) Exploration: Teaching the Landscape

**Stage 3:** Adolescents (Ages 12-15) and Adults Social Action: Saving the Neighborhood

The article ends with the thoughts of David Orr and why teaching through local place is important.

**Key Words:** children sense of place, child development, environmental science curriculum, place-based education, early childhood education, elementary education, science, nature education


In this short article the question of where one acquires a “sense of place” is described within the model of place-based education. Wilson explains that place does not refer simply to a geographic location but also to the opportunities that are available to create meaning within a place. Wilson discusses the ideas of the aesthetic qualities of the school environment and how they attribute to a child’s creation of a sense of place as well as the potential effects of providing students with accessibility to natural areas. Research indicates that one potential predictor of environmental stewardship is the frequent access to natural areas during childhood. (Hart, 1979; Nabhan & Trimble, 1994; Sobel, 1993) A further implication of children’s attachment to special places is that children will become stewards of the land that they learn to love. This theme is ever present as a founding principle of environmental education.

**Key Words:** environmental education, sense of place, place attachment, environmental stewardship


In this study favorite place preferences of a group of Australian adolescents were studied. Abbott-Chapman set out to test the popular myth that adolescents prefer noisy and crowded spaces as compared with places of quiet and solitude. The general findings of the study discovered that
adolescents, overall, preferred intimate places where they could be alone or be with friends, unrestricted and where they could be themselves. Relationships tended to be a popular theme of adolescent sense of place development, drawing on place attachment theory from Bowlby (1969) this is not a monumental finding. Although limited, this study adds to present research in the field and offers qualitative and quantitative data to support the importance that special place has for adolescents.

**Key Words:** children’s favorite places, green retreats, adolescent well being, place attachment, adolescent place attachment, favorite places


A phenomenological approach was used to study a group of sixteen recent graduates from a large urban alternative high school. Students were categorized as at-risk youth and the study aimed to discover, from their perspectives, the effective qualities of the alternative school program in comparison with their previous ineffective schooling experiences. Swaminathan was also interested in discovering how the alternative program environment and social structure generated a sense of place and attachment for students. The findings from the study suggested that the effective qualities of the alternative school included a caring environment, with high academic standards and free spaces where students could find their own sense of place and belonging. Choosing at-risk youth was an important perspective for this study because the voices of at-risk youth are underrepresented within policy change and also educational research.

**Key Words:** at-risk youth, place attachment, sense of place, effective school, reform model

**Aldo Leopold’s Influence on Place-Based Education**


This short article, by Knapp, a renowned environmental educator, provides the perspective of Aldo Leopold’s influence in nature education. One of the premises of environmental education is the attainment of environmentally responsible behavior. Knapp describes the process of personal connection to the environment through Leopold’s perceptions on human attachment to the living environment. Leopold’s influence within the present day field of environmental education and ultimately place-based education is demonstrated through the various references to his major work *A Sand County Almanac and sketches here and there* (1949).

**Key Words:** place-based education, nature awareness, Aldo Leopold, Adventure Programming

**Place Attachment and Environmental Actions**


In this study, five organic farmers and five commercial fishermen in the Northeast were studied utilizing a combined phenomenological and grounded theory methodology. This study attempted to discover
what key aspects of the individuals’ lives studied brought them to their present day professions and how they developed their personal connections to the land or sea. The study also set out to provide empirical evidence for place attachment and examined the assumption that a developed sense of place leads to environmentally responsible behavior. The findings of the study suggested that personal relationships were the most influential factor in sense of place development, as noted in various other studies. In addition individual’s career choices were seen as environmental actions towards environmentally responsible behaviors, although this aspect was not proven. This study provides an interesting perspective because of its subject selection.

**Key Words:** place attachment, ecological knowledge, social knowledge, sense of place, environmental education, environmentally responsible behavior

---

**Placelessness**


This article discusses concerns over the phenomenon of “placelessness.” Kupfer describes the concept through an aesthetic educational lens, questioning what will become of the value of place within our lives, when we can work in any space available to us and talk with others via an interface that transforms space into a non-tangible dimension. Kupfer draws out issues of how current technology is affecting and transforming our own sense of space and with that questions the lack of aesthetic appreciation of traditional spaces such as libraries, workplaces and classrooms. This article offers an interesting view into a recent phenomenon created by current technological advances and poses implications on the importance of place in the future of people’s everyday lives.

**Key Words:** placelessness, mobility, portability, aesthetic education, sense of place, place attachment

---

**A Critical Pedagogy of Place**


In this brief article, Smith provides an overview of the topic of place based education for a public audience. This is monumental piece, because it was the first time that term “place based education” and its conceptual model had been published in a major educational journal. The article concisely synthesizes five themes of place based education and provides examples of schools within the nation that are utilizing the approach. The examples of schools provided demonstrate the themes proposed. This article is a beginning piece that precedes Smith’s most recent collaborative work with D. Gruenewald on the text *Place Based Education in the Global Age (2007)*. In the final chapter of this text, “Creating a Movement to Ground Learning in Place,” Smith argues for using place as a starting point for curricular development and explicated justification for his intention.

**Key Words:** place-based education, nature education, service learning, local education, education as an integrating context

The convergence of critical pedagogy and place-based education are discussed and argued through a discussion of a “critical pedagogy of place.” This article is a monumental piece of literature, in that it suggests a gap within the field of education and provides the notion that a complimentary relationship between critical pedagogy and place studies exists. Gruenewald justifies the convergence through the relationship between social activism and environmental ethics. The key points to the argument center on the ideas of “decolonization” and “reinhabitation”. Decolonization is seen as a removal from exploitation of the natural surroundings and reinhabitation is viewed as the method of reconnection with the environment. This original construct aims to propose a theoretical framework for place-based education.

**Key Words:** critical pedagogy of place, reinhabitation, decolonization, place-based education, critical pedagogy, environmental education, ecojustice


This article was reprinted from an earlier 1987 version; it remains an important summary of the conflict between present day educational goals and those of environmental education. Stevenson provides a look at the sociopolitical background of the environmental movement utilizing the Belgrade Charter and Tbilisi Declaration as reference points. The main focus of the article centers on the conflicting ideologies of traditional schooling and the environmental education reform model. Stevenson describes traditional schooling through a behavior model that has a need for order that utilizes standard curriculum and individualized competition to create order; whereas a student-centered model, which encourages inquiry, collaboration, critical thinking, is inherently disordered. This article, originally written in 1987, states clearly many of the facets that remain present within school systems today and within the ever present push to integrate environmental education within mainstream curriculum.

**Key Words:** nature education, Belgrade Charter, Tbilisi Declaration, school reform, environmental education


This anthology of essays is broken into four sections: vision, tradition/place, relationship, and action. The text is a compilation of school reform models, inspiring essays, and excerpts to rejuvenate the body, activate the mind and empower the spirit. The text is written for a general audience to introduce the concepts of place-based education through real-world examples. The work is also a promotional piece to introduce the mission and philosophy of the Center for Ecoliteracy. Social justice and activism are present themes within the text and the mission of the Center for Ecoliteracy. The text is representative of the ecojustice movement that is occurring within the greater realm of place-based education as described through Gruenewald’s work on critical pedagogy of place.

**Key Words:** ecological literacy, environmental education, place-based education, literacy, school reform model, sustainability, sustainable practices, Center for Ecoliteracy

This anthology is a compilation of essays about the roots of PBE, where PBE is presently and thoughts on where it is headed in the future. This most recent work of Gruenewald and Smith compliments many of their previous writings on a “critical pedagogy of place” and discusses the implications of how the concepts of “decolonization” and “reinhabitation” may be enacted through educational processes. The text also questions the purpose of education today by offering ideas about the new localism movement. The book is divided into three themes: models for place-based learning, reclaiming broader meanings of education and global visions of the local in higher education. This book also attempts to contribute to the theory and practice within the field of PBE through stories and exemplars.

**Key Words:** place-based education, bioneers, global education, sustainability, nature education, environmental education, ecological literacy


This article speaks to a general audience about many of the facets of PBE, included is a broad definition of PBE and a historical time line of the place-based education movement to the present. Smith uses Robert Stevenson’s identification of behavioural and programmatic regularities as described within the Belgrade Charter and Tbilisi Declaration to identify the disconnect present between the goals of public education and those of environmental education. Smith argues for the integration of educational experiences that allow for “decolonization” in addition to “reinhabitation” (Gruenewald, 2003). Smith represents the difficulties that present day school administrators have with initiating and supporting student involvement within real-world controversial topics and student activism. Smith’s message is calling out for a pedagogical shift towards meaningful student involvement within topics that address, question and call for policy changes. This piece is deliberately pushing the edge to question the future purpose of place-based education.


Link to the Belgrade Charter and Tbilisi Declaration:
http://www.naaee.org/npee/initialprep/vision.html

**Key Words:** place-based education, Belgrade Charter, Tbilisi Declaration, social justice, nature education


This article discusses the topic of environmental literacy drawing on the notion that environmental education has a scientific emphasis and needs to open its focus to the social sciences through environmental justice. Cole’s article focuses on David Gruenewald’s critical pedagogy of place construct and Dana Lanza’s work through Literacy for Environmental Justice as points of departure. Cole’s intention is to bring to light the construct of redefining literacy, as suggested by Paulo Friere to a working literacy and ultimately developing environmentally responsible behaviors through a deep cultural connection to place. Cole was an environmental educator and critiques her own experiences as a demonstration of the potential of environmental literacy. The main entrance point that Cole’s work has into the place-based education field is through a social sciences perspective and through defining a path to environmental literacy; this definition as suggested in the article is reminiscent of E.D. Hirsch’s
Place-Based Education Research and Studies- January 2008

text Cultural Literacy.

**Key Words**: Environmental education theory, environmental literacy, multicultural environmental education

---

**Place-Based Education School Reform Models**


This article is written as an introduction to the Place-Based Education Evaluation Consortium (PEEC) mission and philosophy. Powers summarizes a study that was done on four place-based educational programs in practice focusing on the strengths and weaknesses of each model as well as teacher reflections in practice across the programs. Powers is currently working as a director of PEEC along with Michael Duffin. The creation of a working theory behind place-based education is another important mission of PEEC, this study provides a beginning for future research to be added upon. The importance of this article is to provide a basis for understanding the research efforts of the place-based education community, their mission and goals for the future.

**Key Words**: place-based education evaluation consortium, collaboration, environmental education, place-based education, professional development, program evaluation, school improvement


This article provides a rural studies perspective into the adoption of place-based standards in state educational policy and teacher perception and use of such standards. The developmental process of Vermont’s framework of standards was described from their inception to their integration of two place-based educational standards in 2000. An interesting assertion identified from the study was the tension between policy makers and place-based educational methods. As described in various other studies, in attempts to standardize curriculum, disregards the context of place where the curriculum is being learned. Gruenewald (2003) clearly described this phenomenon as the need for “reinhabitation” of place. The findings of this study make the work important in the quest for place-based educational reform within other states. Although teachers did not agree on a distinctive definition of place-based education, they did describe the methodologies associated with it and also discussed that the addition of place standards justified their present teaching practices.

**Key Words**: place-based education, school reform, standards-based education, educational reform


In this case study of a rural school district along the Northwestern coast, Budge (2006) attempted to explore the influence of rurality and place on school and community leaders’ beliefs about the purpose(s) of local public schooling and how leaders’ beliefs affected local policy; with an ultimate focus on the understanding of how policy influences the well being of communities. Specific questions were asked to gauge the place identity of the subjects and also to attempt to discover how attachment is related to having a sense of community, which ultimately has implications for community dependence. Place, as discovered by leaders’ perspectives, was found to suggest problem, privilege, paradox and
possibility. The use of the “critical pedagogy of place” model presented by Gruenewald (2003) was suggested as a process of reformed educational policy.

Key Words: rural studies, rural education, policy, educational reform, sense of place, place attachment, critical pedagogy

Qualitative Research Methods for Studying Place-Based Education


In this review of qualitative research studies focused on discovering the significant lived experiences leading to environmental action and/or attitudes, Chawla explicates various positive aspects and provides suggestions for studies mentioned. Louise Chawla’s name is synonymous with children’s rights and has published widely on topics covering the development of environmental concern and responsibility, cultural interpretations of nature and home and children's environmental experience. This article provides an important critique of available research through the lived experiences of Chawla and her extensive research background. Explicit suggestions are made for those who wish to pursue this style of research based in current studies and practice in the field of environmental education.

Key Words: lived experience, phenomenology, research methodologies for lived experience, qualitative research, significant life experience, environmental attitudes, environmental action


Although not exhaustive, this book provides an overview of some theoretical frameworks used in qualitative research. The book is useful for understanding the need for using theory within research and also provides examples in context that demonstrate the use of theory in practice. The book is a good reference for gaining an introductory understanding of theory when coupled with additional resources.

Key Words: qualitative research methods, theoretical frameworks


This book provides a general understanding of the narrative inquiry research methodology. The book is written from the well known authors in the field and provides a fresh look at narrative inquiry through chapters of storied examples. The book takes you from the roots of narrative inquiry to the going into the field with a researcher and ends with a look at concerns with the approach. The book is a valuable resource for learning more about the approach into narrative inquiry.

Key Words: narrative inquiry, qualitative research methods


This recent text is a practical guide that takes you through the process of grounded theory. Charmaz clearly states her own standpoint of grounded theory and discusses in detail the foundations from which
it has been derived. The book is user-friendly and gives wonderful examples into gathering rich data, coding, memo-writing, theoretical sampling, saturation and sorting as well as writing a draft and your final research. The book is an invaluable reference for a place-based education resource bank.

**Key Words:** qualitative research methods, grounded research methods


This thick reference by the well known researcher, Creswell, provides a general look at the various qualitative research methods used in practice today. The book is designed as a reference text for beginning researchers and is useful in providing everything from background information about qualitative research in general, to specific “checklists” while performing qualitative research.

**Key Words:** qualitative research methods, phenomenology, narrative inquiry, grounded theory, ethnography, case study


This short book on interpretive interactionism provides a brief look at researching lived experience. Denzin is a prominent researcher in the field of interpretive interactionism which makes this work a good addition to other selections on the topic of phenomenology. Explanations are provided throughout the book on what interpretive interactionism is, how to research using the approach, criticisms and concerns of the approach and recommendations for use. Due to the length of the book it provides a brief overview rather than extensive information on various topics about interpretive interactionism, which is a main criticism of the book.

**Key Words:** interpretive interaction, qualitative research methods, phenomenology, lived experience, researching lived experience


This book is divided into two main components the history and theory and practice of collaborative ethnography. Lassiter describes how the history of ethnography, rooted in anthropology, has evolved from the approach of “reading over the shoulders of natives” to “reading alongside natives”. Collaborative ethnography speaks from the voice of the participant(s) being researched and displays an intimate portrait of the relationship between the researcher and the participant through the approach. Lassiter describes the issues surrounding issues of validity, ethics and moral responsibility throughout the text. The book is clearly written and adds to the understanding of an ethnographic research approach.

**Key Words:** collaborative ethnography, qualitative research methods, ethnography, lived experience


This classic text by Van Manen presents phenomenology as a research approach “for the people” with the purpose of helping people to gain a greater understanding on their “lived experiences” through the lens of an intimate researcher. This research approach could be utilized to learn more about the aspects
of sense of place. Van Manen clearly described the philosophical origins of phenomenology and the book progresses from theory into practice in the second half. Phenomenological research is an approach that has heart at its center it is through the researcher’s own love, feelings and passion for the lived experiences that they study, that the underlying essence(s) emerge. The concepts of researcher intimacy, subjectivity and objectivity were greatly discussed throughout the book. Researching lived experience is a powerful concept, because it surrounds us and encompasses us daily, what better fabric to begin our studies than with those that we are a part of?

**Key Words:** qualitative research methods, phenomenology, lived experience, researching lived experience

**Thematic Keywords Synthesized**

**Place-Based Education**
Bioneers, ecological literacy, education as an integrating context, environmental education, global education, nature education, place-based education, sustainability

**Synonyms noted to place-based education:** community-based learning, contextual teaching and learning, cultural journalism, environment in context, environment as an integrating context (EIC), expeditionary learning, local education, problem-based learning, project-based learning, service-learning, sustainability education

**Attachment Theory**
attachment, attachment theory, child development

**Sense of Place Development**
developmental context, place attachment, sense of place, topopilia, insidedness, and community sentiment

**Place Attachment in Young Children and Adolescents**
adolescent place attachment, adolescent well being, attachment, at-risk youth, bush houses, childhood development, children’s favorite places, child place attachment, children sense of place, children special places, dens, early childhood education, ecological knowledge, effective school, elementary education, environmental education, environmental green retreats, environmentally responsible behavior, environmental science curriculum, favorite places, forts, map making, nature education, place attachment, place-based education, science, sense of place, sense of place reform model, social knowledge, stewardship

**Aldo Leopold’s influence on Place-Based Education**
place-based education, nature awareness, Aldo Leopold, Adventure Programming

**Place Attachment and Environmental Actions**
place attachment, ecological knowledge, social knowledge, sense of place, environmental education, environmentally responsible behavior
Placelessness
placelessness, mobility, portability, aesthetic education, sense of place, place attachment

A Critical Pedagogy of Place
Belgrade Charter, bioneers, Center for Ecoliteracy, critical pedagogy, critical pedagogy of place, decolonization, Ecojustice, ecological literacy, education as an integrating context, environmental education, Environmental education theory, environmental literacy, global education, literacy, multicultural environmental education, local education, nature education, place-based education, reinhabitation, school reform, school reform model, service learning, social justice, sustainability, sustainable practices, Tbilisi Declaration

Place-Based Education School Reform Models
place-based education evaluation consortium, collaboration, environmental education, place-based education, professional development, program evaluation, school improvement place-based education, school reform, standards-based education, educational reform rural studies, rural education, policy, educational reform, sense of place, place attachment, critical pedagogy

Qualitative Research Methods for Studying Place-Based Education
lived experience, phenomenology, research methodologies for lived experience, qualitative research, significant life experience, environmental attitudes, environmental action
Final Synthesis of the Compiled Literature

A definition of place-based education
Place-based education (PBE) involves interdisciplinary studies that draw from the local community. As defined by Sobel (2004) place-based education is “the process of using the local community and environment as a starting point to teach concepts in language arts, mathematics, social studies, science and other subjects across the curriculum. Emphasizing hands-on, real-world learning experiences, this approach to education increases academic achievement, helps students develop stronger ties to the community, enhances students’ appreciation for the natural world, and creates a heightened commitment to serving as active, contributing citizens. Community vitality and environmental quality are improved through the active engagement of local citizens, community organizations, and environmental resources in the life of the school.” (p. 7) PBE utilizes the local surroundings, human and non-human, as the context for integrating curriculum into a multidisciplinary approach. Complimentary to the practice of interdisciplinary studies in PBE, students are engaged in real-world project based learning in the local community. PBE is most popular at the preschool through middle school grade levels, although it has been successful at the high school level and also into the college level.

Although the term “place-based education” is relatively new, it has its roots in over thirty years of environmental and progressive education. PBE is an example of society-centered curriculum. In society-centered curriculum, the goal structure “is to explore and solve societal issues. . .the orientation is toward problems of living: life problems, community affairs, and real world problems.”(Ellis, 2004, p. 71) PBE also integrates components from the learner-centered curriculum, including that the curriculum should be one of “discovery” and that the curriculum should be “non-linear, emergent, seemingly unstructured, and often unpredictable.” (Ellis, 2004, p. 51)

In the early 18th and 19th centuries, visionaries such as Rousseau, Pestalozzi and Froebel looked to “child-centered learning” as a valid approach to teaching and learning, still today these beliefs remain ever present as a way to teach and reach the entire child. (Ellis, 2004, p. 29) Throughout the work of John Dewey, a refined vision of education as “democracy, community involvement in learning, student empowerment, and applied problem solving,” became the progressive focus. (Ellis, 2004, p. 30) The main premise of the new progressive movement following John Dewey’s work was that school should “accurately reflect ‘real life.’”(Ellis, 2004, p.30) This too has become a vision of the place-based educational movement. Although some of the key terms have changed over the years, progressive education remains true to its ideals that “a progressive curriculum emphasizes the quality of experience and processes of growth and development over content and skill mastery . . .[and that] the curriculum, [and] the learning experience, [should be] purposeful, appealing, and motivating.”(Ellis, 2004, p. 33)

Attachment Theory & Sense of Place Development
The use of the term “place” within the context of the PBE instructional model, suggests a direct influence of its importance on learning. Place attachment is derived from attachment theory which focuses on the bond between mother and child as was proclaimed in John Bowlby’s 1958 paper “The
Nature of a Child’s Tie to His Mother.” Bowlby built his theory of attachment on four principles: psychoanalysis, systems control, ethology, and information processing. Neurobiological origins of attachment were theorized by Ainsworth, stating that attachment is more than overt behavior; it is internal, “being built into the nervous system, in the course and as a result of the infant’s experience of his transactions with the mother.” (Schore, 1982, p.xii) Following this monumental research on the physical and psychological aspects of attachment, as Bowlby envisioned, interdisciplinary research was conducted to further explain the phenomenon within various fields such as biology, anthropology, psychology and education. In much of the current literature on place attachment, concise definitions are elusive. Much of the research available focuses on various components of the overarching phenomenon, such as self-identity, place identity, sense of community and place dependence to draw greater understanding. The meanings of “place” also are varied, as stated by Steele (1981) “it is used variously as a physical location (what placed did you visit?), a psychological state (I’m not in a very good place right now), social status (people should know their place), the location of something in one’s mind (I can’t quite place it), a standard for evaluation (there’s a time and place for everything), and on and on.” (p.5) Identity to place has been present throughout history for centuries and has been the cause of “wars, conquests and other dramatic events.” (Steele, 1981, p.6) The power of place in one’s life should not be dismissed but rather should be embraced and understood as an important influence on learning.

Place Attachment in Young Children and Adolescents

Place attachment in young children and adolescents has been studied extensively by researchers such as Edith Cobb and Louise Chawla, both who were influential on the recent writings of David Sobel. In addition to providing a comprehensive definition of place-based education, Sobel has contributed to the field most through his extensive studies of childhood mapmaking and special places. Sobel’s unique studies of childhood mapmaking have taken him around the United States and into various other countries to look at how young children perceive their world. In Sobel’s book Children’s Special Places: Exploring the role of forts, dens, and bush houses in middle childhood (1993), important links are made between the need for special places in the development of children’s self identities and the opportunities available for the integration of special places within school curriculum. Sobel describes a study that he conducted of children in Carriacou and Great Britain, throughout his study children were asked to draw maps that included their home and any favorite places. Sobel’s research suggested that children conclusively “expressed a need for privacy, independence, and self-sufficiency. Through making their own places, children start to carve out a place for themselves in the world.” (Sobel, 1993, p. 47) Sobel also noticed that children made it clear through their commentary that they needed a place that was separate from the world and their families. (1993, p. 47) Through extensive interviews and observations, Sobel (1996), has revealed three stages of childhood discovery that are broken down as follows:

**Stage 1:** Young Children (Ages 4-7) Empathy: Finding Animal Allies

**Stage 2:** Pre-Adolescent Children (Ages 7-11) Exploration: Teaching the Landscape

**Stage 3:** Adolescents (Ages 12-15) and Adults Social Action: Saving the Neighborhood
Vickers and Matthews were highly influenced by Sobel’s childhood discovery stages and in their 2002 article “Children and Place, Science Activities” described practical applications to integrating environmental topics in age appropriate ways. They assert that “children need wild places. Both the world of imagination and the natural world beckon children to explore secret places to make profound connections with plants and animals of the earth.” (Vickers and Matthews, 2002, p.16)

In the article by Ruth Wilson, “A Sense of Place”, the question of how children acquire a “sense of place” is expanded. The term place does not refer simply to a geographic location; rather it refers to “opportunities for seclusion and quiet (such as are offered in nestlike refuges), opportunities for exploring and opportunities to effect change. Other factors contributing to a ‘sense of place’ experience include complexity, diversity, opportunities for immersion or immediate encounters with the natural world, and opportunities for the experience of magic or memorable moments.” (Wilson, 1997, p. 191)

Wilson includes the concept of place being necessary for children’s self formation and the idea that our beings are interwoven with our place, in that “landscape, in other words, shapes mindscapes.” (1997, p. 191) Wilson discusses the ideas of the aesthetic qualities of the school environment and how they attribute to a child’s creation of a sense of place as well as the potential effects of providing students with accessibility to natural areas. Research indicates that one potential predictor of environmental stewardship is the frequent access to natural areas during childhood. (Wilson, 1997, p. 192) Research (Hart, 1979; Nabhan & Trimble, 1994; Sobel, 1993) also indicates that children “seek out places where they can spend time alone and that they enjoy intimate, enclosed, and hidden places as well as exciting and dangerous places... for seclusion and quiet.” (Wilson, 1997, p. 192) Children’s interest in a place has much to do with the attractiveness of the place and their perceptions of what they can do in the place. (Wilson, 1997, p. 193) Nature provides some of the most rich and diverse experiences to children because of the way that it provides “‘difference-within-sameness,’ or variety within a framework of predictability.” (Wilson, 1997, p. 193) By providing students with rich, natural experiences within school settings, a “sense of place” and place attachment can become a natural occurrence that can foster future connections to environmental stewardship.

Aldo Leopold’s influence on Place-Based Education

Environmental ethics have been a central focus of environmental education over the past thirty years beginning with Aldo Leopold’s major work A Sand County Almanac and sketches here and there (1949). Clifford Knapp, who has made numerous contributions to the field of environmental education, has been highly influenced by Leopold and in his recent 2005 article “The ‘I-Thou’ Relationship, Place-Based Education, and Aldo Leopold” has described his own interpretation of how Leopold related to the land through his personal connection with place. Knapp identifies ten principles that were integrated within Leopold’s writings as “ten ways of knowing nature” (p.281). The list includes: wondering and questioning, knowing local history, observing seasonal changes, listening intently, counting and measuring, empathizing with and personifying nature, connecting elements in cycles, finding beauty, seeking solitude for reflection and improving land health.” (Knapp, 2005, pgs. 281-283)
Another sustained influence from Leopold to the field of environmental education is the concept of land ethics and environmentally responsible behavior. The quest to discover how environmentally responsible behavior can be cultivated through educational models, such as PBE, continue today. The Belgrade Charter (UNESCO-UNEP, 1976) and the Tbilisi Declaration (UNESCO, 1978) are the foundational principles for environmental education. The Belgrade Charter was first adopted by the United Nations and its principles still remain influential in the most recent environmental education goals stated within the Tbilisi Declaration. The Belgrade Charter (UNESCO-UNEP, 1976) states:

*The goal of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations, and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones.*

The Tbilisi Declaration (UNESCO, 1978) includes three broad goal statements for environmental education based on the Belgrade Charter. The goals are stated below:

- **To foster clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas;**
- **To provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment;**
- **To create new patterns of behavior of individuals, groups and society as a whole towards the environment.**

**Place Attachment and Environmental Actions**

In a 2005 study by Worster and Abrams, “Sense of Place among New England commercial fishermen and organic farmers: implications for socially constructed environmental education” they set out to provide empirical evidence for place attachment and examined the assumption that a developed sense of place leads to environmentally responsible behavior. The study also attempted to discover what key aspects of the participants’ lives brought them to their present day professions and how they developed their personal connections to the land or sea. The findings of the study suggested the importance of relationships to place attachment and that a spiritual component of place attachment can be displayed for individuals deeply connected to a place. The study also discussed potential environmental education implications for the development of curriculum with a place focus, maintaining the ultimate goal of creating environmentally responsible adult behaviors.

**Placelessness**

Many researchers have recognized and questioned the influence of place on personal identity and place identity. Over the past two decades, with the rapid growth in technological advances, many have begun to question the influence of such advances on the phenomenon of placelessness, in a recent article by Kupfer (2007) “Mobility, Portability and Placelessness” this question continues. Kupfer states that “when the environment becomes irrelevant to what we are doing, they will lose meaning, for us and we will cease to inhabit them in any meaningful way. Anywhere is nowhere.” (2007, p.39) The article goes on to question what will happen to people’s aesthetic appreciation of place and its influence upon how we
perceive our surroundings and who we are. Kupfer also questions the diminishing lines between personal and private spaces through our continued dulling of our “awareness of space as public because wherever we are feels the same, with the same phenomenological texture.” (2007, p. 49) The final points made within the article add to the ongoing dilemma of the importance of personal attachment to place and the ultimate potential demise of it through the personal alienation supported through technological advances and the increasing loss of the necessity for physical space connections. What then can we do as educators to help the children growing up in a fast-paced technological world to preserve their sense of attachment to their surroundings and foster their self-identities? How does place-based education fit into the present world and what meaning does it and can it potentially have to better the state of education today? These are questions that many in the field have begun to seek answers for.

**A Critical Pedagogy of Place**

In 2002, the term “place-based education” was brought to wide-recognition through the article by Smith entitled “Place-Based Education: Learning To Be Where We Are.” This article was influential in the field as a starting point for public recognition of the place-based educational movement. Smith directly addressed questions surrounding local education through this statement “although members of middle and upper-middle classes in the U.S. often decry the anti-intellectualism of American popular culture, this stance may be as much a political statement as it is a rejection of the life of the mind. What cultural studies that focus on the local demonstrate is that the ability to analyze and synthesize can be cultivated at least as well from materials that are directly experienced or investigated by students. Teaching in this way does not require the elimination of nonlocal knowledge so much as the simple inclusion of the local. From this vantage point, teachers can then direct their students to the regional, national, or international.” (2002, p. 588) This statement directly counters any claims that local education may propagate only local thinking and non-cultivated minds. At the conclusion of the article Smith poses critical questions about the future of education and discusses the strengths that PBE has to “adapt to the unique characteristics of particular places, and in this way it can help overcome the disjuncture between school and children’s lives that is found in too many classrooms.” (2002, p.593) The potential influence of PBE continues to gain strength as a movement of educational change.

Gruenewald proposed a radical type of change that PBE has to offer through social and environmental reform labeled “eco-justice.” In a monumental article by Gruenwald (2003) “The Best of Both Worlds: A Critical Pedagogy of Place,” the convergence of critical pedagogy and place-based education are proposed as a theoretical construct for PBE. Gruenewald describes the Friidian roots of critical pedagogy and its focus on social action and change; he goes on to describe the influences of environmental ethics and justice in place-based education. The merger of critical pedagogy and place, as seen from Gruenewald’s perspective, is a natural compliment. The concepts of “decolonization” and “reinhabitation” as methods to converge critical pedagogy with place are then discussed. Arguing that a critical pedagogy of place aims to “(a) identify, recover, and create material spaces and places that teach us how to live well in our total environments (reinhabitation); and (b) identify and change ways of thinking that injure and exploit other people and places (decolonization).” (p.9) Lastly, a discussion of
current educational trends and implications of a critical pedagogy of place were offered. “In short, it [pedagogy of place] means making a place for the cultural, political, economic and ecological dynamics of places whenever we talk about the purpose and practice of learning.” (p.11)

Focusing on present day educational goals, Stevenson (2007, reprinted from 1987) discusses conflicts between the political nature of environmental education and the goals of traditional schooling. Stevenson’s contention focuses on the need to expose students to “the plurality of environmental ideologies, and that through a process of inquiry, critique and reflection they can be assisted to develop and defend their own set of environmental beliefs and values.” (2007, p. 143) Stevenson continues that only with exposure to political processes and beliefs will students be able to make informed choices and decisions. Final thoughts about the purpose of schooling are proposed which leads to deeper meanings for PBE in traditional school curriculum and the potential resistance of its integration.

In a 2007 article by Smith “Place-based education: breaking through the constraining regularities of Public school,” the focus was the resistance from integration within mainstream curriculum. Smith further discusses the issues brought out in Stevenson’s (2007) article surrounding the political nature of environmental education. Smith also describes the main goals of traditional schooling and the dislike by school administrators to engage in issues of conflict. Smith contends that “all of these educational experiences are aimed at developing in young people a sense of affiliation with the places where they live. Absent this affiliation, there is little chance that the forms of care essential to environmental and social stewardship will emerge.” (2007, p. 192) The difficulties school administrators have with sources of conflict and controversial issues is one of the main reasons for the lack of adoption of the social justice aspect of PBE. Smith ends with an open question of “whether the benefits to students and communities of curricular approaches grounded in place will be enough to lead to a more widespread adoption of this innovation.” (2007, p. 202)

**Place-Based Education School Reform Models**

To continue discovering answers to the question of the potential influence that PBE holds in the field of education, Amy Powers, a co-founder of and evaluation co-director for Program Evaluation and Educational Research Associates, has worked to create a public research network for PBE. This research network, known by many in the field by the acronym, **PEEC**, Place-Based Education Evaluation Consortium has at its mission the goal of rigorous evaluation of current PBE research. Through this evaluation network, researchers are attempting to discover links to theories behind the instructional approach. One of the main goals of the network is to work with an evolving theoretical model to add support to the integration of PBE into general curricular models. A present theory contends that “when one has developed an attachment to one’s place, and one has the skills to proceed, an individual will become a more active participant in his or her community. When this civic engagement increases in a community, social capital- the invisible web of relationship- broadens and deepens. Social capital refers to features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit (Putnam, 2001). The improvement of a community’s social capital
leads, in the long run, to a healthier community, both natural and social. This construct is an essential part of the theory of change behind each of the PEEC programs’ endeavors.” (Powers, 2004, p.19)

Following an introduction into PEEC’s mission and purpose, in the 2004 article by Powers “An Evaluation of Four Place-Based Education Programs,” four program models are described in detail. The four models include: The CO-SEED Project through Antioch New England Graduate School, The Sustainable Schools Project and A Forest for Every Classroom through Shelburne Farms and The Community Mapping Program through Vermont Institute of Natural Science. A study of the effectiveness of these programs was described within the article and a list of strengths and weaknesses of each program was given. The main strengths gathered from the study include the “use of community partners provides teachers and students with diverse viewpoints, access to resources, facilities, and financial support as well as broader base of skills and knowledge” and the training staff of the programs was noted to be of high quality. (Powers, 2004, p.21-22) Three of the four models evaluated in the study were based in Vermont. Vermont has taken the lead in PBE through the integration of two educational standards focused on place and sustainability.

These standards adoptions are the main focus of a 2005 study by Jennings, Swindler and Koliba. The study “Place-Based Education in the Standards-Based Reform Era--Conflict or Complement?” presents the process of standards-based reform in Vermont and the influence it has on teaching practice. The history of Vermont’s standards reform is long and complex. The following quote presents a clear picture of Vermont and describes quite nicely the reasons that standards-reform did work in the state. “Vermont has a rich tradition linking its people and rural communities to its working lands. Our history of family farms and our strong commitment to natural resource protection, linked with our participatory, town meeting style democracy, are signs of Vermonters’ deep-rooted sense of independence. At the same time we share a profound understanding of our interdependence with each other and with our natural resources. Vermont’s state motto, ‘Freedom and Unity’ epitomizes this ethic.” (Camp, 1997, 1 as cited in Jennings, Swindler and Koliba, 2005, p.52) The study described the conflict that developed at the state policy level in terms of standards-reform with environmental language. Once the language was changed to reflect less environmental emphasis towards a local ‘place’ connotation and a broad definition of sustainability the standards were adopted. This case study of Vermont standards reform serves as an example to other locations and states of creative ways to initiate place-based reform in a way that avoids the potential conflicts that environmental connotations may bring. The study also described that although general consensus by teachers of what place-based education is, may not be clear, the idea of utilizing it within the curriculum appears to be prevalent within various locations throughout the state. One criticism of the standards reform model is the placement of the two standards within the Vital Results section of the State Framework, through their placement here many teachers have noted their own overlooking of the standards and lack of knowledge of them. Future discussion was based around the consideration of better placement of standards and more training and publicity of the standards to promote greater understanding and usage.
Qualitative Research Methods for Studying Place-Based Education

Where do we go from here one might say? In promoting the integration of PBE into mainstream curriculum there must also be methods for studying its effectiveness. As Chawla stated in a 2006 article entitled “Research Methods to Investigate Significant Life Experiences: Review and Recommendations,” the field of “environmental education has always contained two sides: one that emphasizes scientific knowledge and technical or managerial solutions to environmental problems; and another that seeks to instill a sense of care and responsibility for the earth among the general population.” (p. 359) In order to focus both on the scientific technical side and the personal aspects of place-based education combinations of quantitative and qualitative approaches can be used. The benefits to using qualitative research include the ability to clarify quantitative findings by putting voice to statistics and to reflect closely upon the fine details of how place influences students and their learning. Chawla describes issues surrounding environmental education research being plagued with low funding and institutional commitment which leads to lifespan learning as a primary source of documentation. Chawla states “under these conditions, memories about significant life experiences provide the longest range glimpse into lifespan learning that the field of environmental education currently enjoys.” (2006, p. 361) Chawla contends that this type of research is valid and that although “memories may often confuse the precise details of what happened during a specific event, they are usually accurate about a general course of events.” (Neisser, 1981; Linton, 1982; Wagenaar, 1986, as cited in Chawla, 2006, p.363)

The use of memory as a source to uncovering lifespan learning to study the effects of environmental education on students is a notable approach, although other approaches could be utilized to research lived experience. I conclude this synthesis with thoughts on hermeneutic interpretation, phenomenology and grounded theory and case study. I see the strengths of hermeneutic interpretation and phenomenology as processes to studying the essence of place attachment as described through the lived experiences of the participants studied. Also, with the addition of grounded theory to a phenomenological or ethnographic approach an organic element would allow themes to emerge naturally. I could also see the potential use of phenomenological case study as a useful approach to discovering aspects of sense of place within specific individuals.

Lastly, for my own research interest of the effects of natural spaces and school and community relationships on adolescent place attachment in rural high school settings, I feel inclined to utilize a phenomenological approach to uncover personal lived experiences and how they create a sense of attachment within youth. Ultimately, I would like to uncover how place attachment can be proven as strength to rural curricular models.
*Additional References:


Emekauwa, Dr. Emeka. (2004). They remember what they touch...the impact of place-based learning in East Feliciana Parish, Rural Trust White Paper on Place-Based Education.


Palmer, J. (1993). Development of concern for the environment and formative experiences of


