

AN ABSTRACT FOR THE THESIS OF

Sophia Vosburg Sansone for the degree of Honors Bachelors of Arts in Liberal Studies emphasis in Social Justice and for the degree of Honors Bachelors of Arts in International Studies, presented April 27th, 2007. Title: Empowering Pedagogy: A Case Study of Non-Traditional Teaching Methods and Philosophy at the Centro de Educación Creativa.

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Empowering pedagogy (also known as “transgressive,” “emancipatory,” or “democratic” forms of education) seeks to challenge the historically oppressive tendencies of traditional education. As a student of Social Justice and International Studies, I approach the topic of empowering pedagogy through a case study. My research explored this non-traditional educational philosophy and its implementation as realized at a school in Monteverde, Costa Rica. By reviewing literature on empowering pedagogy, I gained a framework to make meaning of the educational practices I observed. From preschool through high school, the Centro de Educación Creativa provides an example of environmentally and socially conscious teaching methods. I volunteered for five months at the “Creativa” as a classroom assistant and conducted my research interviews. I also observed and recorded the challenges the school faced when implementing their philosophy and methods of education. This thesis is intended to act as a resource to those interested in empowering pedagogy and those who work for the Creativa.

Empowering Pedagogy:
A Case Study of Non-Traditional Teaching Methods and Philosophy
at the
Centro de Educación Creativa

by

Sophia Vosburg Sansone

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I understand that my thesis will become part of the collection of Oregon State University. My signature below authorizes release of my thesis to any reader upon request. I also affirm that the work represented in this thesis is my own.

Sophia Vosburg Sansone, Author

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.....I feel extremely blessed to have earned a place in this community of conscientious rabble rousers....

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Empowering Pedagogy: A Case Study of Non-Traditional Teaching Methods and
Philosophy at the Centro de Educación Creativa

The materialistic doctrine that men [sic] are products of their circumstances and upbringing, and that, therefore, changed men are products of other circumstances and changed upbringing, forgets that it is men that change circumstances and that the educator himself needs educating.

–Karl Marx and Friedrich Engels, (qtd. in Freire 53)

Introduction

I was very young when I started to become aware of social injustice in my community. Though I grew up privileged, white, and middle class in rural Oregon, I remember at age six witnessing acts of bias towards my classmates who were poorer than or darker skinned than I. My early awareness of classism and racism led me to search for reasons behind the biased actions of others. It was in the classroom that I gained the skills to question the character of the world around me. In middle school, I was fortunate enough to attend a private school that valued each student's individual learning process and encouraged my development as a critical thinker. Because of my time spent in an educational institution that valued the input of its students, I reentered the public school system confident that my opinions were worth being listened to by adults in powerful positions. During my high school years, it was the homophobic and heterosexist actions on the part of my peers and high school administrators that led to my first attempts at community building and social action. I do not think that I would have been willing to engage in such action had I not been taught in such an emancipatory way in the non-traditional middle school.

To this day, empowering education continues to guide my personal development. As a college student and young adult, I found several professors during my college career who were a great source of inspiration for me to continue social justice work. Their classrooms have been a training ground from which I gained the capacity to critically examine certain socially accepted norms and reason with those with institutional power within our university's community. One result of my activism projects has been a willingness of university administrators to enact change. Another has been my personal belief that my voice is worth being heard. Classes taught in a democratic, inclusive, student-informed manner have fostered this personal belief in my own ability to reason and to lead. These classes have instilled in me a desire to challenge my own assumptions and the status quo.

Sadly, many professors do not seek to personally empower and challenge their students, but rather prefer to have complete control over the classroom. Their classes are entirely governed by their authority, with little to no room for input from the students or an exchange of dialogue between students in the class. It is in these situations that students who do not agree with the perspective of the teacher are not encouraged to speak. Also, those that may feel threatened by the professor's degrading remarks (about any historically oppressed groups) do not have a means to voice their outrage without dire consequences. Those who are silent and conform to the expectations of the professor are rewarded. It is with this personal insight into how education can be powerful and transformative, or silencing and stagnant, that I approach the topic of emancipatory pedagogy.

That said, I also want to express that the type of pedagogy I have focused my research around is not inherently more capable than other forms of education in creating students who will care about social justice. By this I mean that if the content of a class or the curriculum of a school is aimed at producing students who in fact support systems of oppression, empowering pedagogical methods can still be used towards these unjust ends. For example, say an Evangelical Christian private school wants its students to believe homosexuality is a sin. Such a school can use methods like egalitarian classrooms, dialogue, and critical thinking to help students come to the realizations that the school wants them to have. The fact of that matter is that students are always learning about values, and though an egalitarian classroom may communicate to students the value of their personal involvement in claiming an education, it is the content of the class that will direct the growth of their critical consciousnesses. Educators, even in empowering classrooms, still hold the power over what topics will be discussed and what facts and opinions the students will come in contact with. People with a multitude of opinions can use empowering pedagogical methods so that students of all walks of life can come to believe in their personal capacity to change the world of which they are a part. I mention this in part to highlight how the act of educating is never a value neutral or politically neutral act.

Happily, I was able to study the use of empowering pedagogy at a school whose value system I readily supported. For five months I interned at the Cloud Forest School or El Centro de Educación Creativa in Monteverde, Costa Rica. Known locally as simply “the Creativa,” this school’s philosophy attracted my attention because of its progressive approach to education. Spanning from preschool through the eleventh grade (the final

grade in Costa Rican high schools), the Creativa teaches over two hundred students. The school is located outside the town of Santa Elena in the Monteverde area, which is in the northern central part of Costa Rica. The school owns 106 acres, which were purchased from the Nature Conservancy with the help of private donors and foundations. The property includes 70 acres of pristine cloud forest and 20 acres of decommissioned pastureland, the latter of which is slated for reforestation by the school's students, staff, and volunteers. The Monteverde area is known for having the largest private reserves of forest in Central America. Costa Rica's government has been very proactive in protecting its wildlife resources and fostering a sustainable ethic in its citizens through educational outreach programs. It is in this social and political context that a school like the Creativa could find resources and cultural support for its mission. Today the majority of the economic activity in the area revolves around ecotourism and conservation organizations. Monteverde specifically is a research hot spot for biologists and climatologists, as well as a destination for many European and North American idealists.

The first wave of idealistic foreigners came to Monteverde in the 1950s. Several Quaker men, disillusioned by the acts of the U.S. government in WWII and jailed for refusing to register for the 1948 Universal Military Training Act (because doing so violated their belief of having no part in the support of war), decided to move their families out of the United States. There were multiple factors that made Costa Rica appealing to the Quakers: the nation abolished its army in 1948, had a stable political atmosphere, didn't have strict restrictions on land ownership, and had a climate that suited the interested Quaker families from Iowa and Alabama. The rural town of Monteverde became the decided spot for the new Quaker community because of the

fertile land and removed setting. Around 22 *campesino* or farming families lived in Monteverde at this time, and surely without their help the Quaker community could not have established itself the way it did. In the first wave of immigrating Quakers came around 45 people, from 6 or so families spanning several generations. The Quaker community founded a cheese factory and the Monteverde Friends School in 1951 (“Monteverde Jubilee Family Album” 15).

Like the Monteverde area, the Creativa itself has attracted a lot of international attention from students and scholars of all levels and from an array of different disciplines. Leslie Burlingame, a historian, is currently researching the history of the development of the Creativa. With her permission, I have referenced some of the material she has collected to better tell the history of the Creativa.

The Creativa is a product of grassroots organizing. As the community of people (specifically, mothers) seeking a more environmentally aware and bilingual education for their children grew, the limited space for students at the Monteverde Friends School became a problem. After concerned parents tried to work with the public school system to create new programs within the already existing institutions, it became apparent that an entirely new school was needed. Burlingame writes,

Founded in 1991 by innovative local parents, [the Creativa] represents several important “firsts” in Costa Rica: it is the first school with a curriculum focused around environmental education; the land on which the school is located is protected by one the country’s first conservation easements (the first one in the Monteverde zone); and it is the first private Costa Rican school to be legally recognized by the government for its “Utilidad Pública” (public benefit). [The Creativa] expanded from two grades (Kinder or pre-school and preparatoria or kindergarten) and a total of 30 students in 1991-1992 up through Grade 11 and about 200 students by 2002-2003, generally adding a grade per year. (2)

To date, the school has graduated two eleventh grade classes, and continues to create new administrative positions. There are 24 paid teaching positions, 5 administrative positions, and between 5-15 volunteers and interns working at the school at any one time.

I think it is important to mention here that the people who founded the school were mostly women, and that it is women for the most part that run the Creativa. Women are the sources of institutional knowledge, the fundraiser organizers, the curriculum coordinators, and the vast majority of the educators in preschool classes through sixth grade—which undoubtedly are the most pivotal years in the development of children’s skills with language and mathematics. On the community level, the school is successful because of the energy the mothers of students dedicate to being involved in the lives of their children—very seldom men were involved in the school programs or support activities. Though I volunteered in a fifth grade classroom in my hometown, I had never before seen mothers place such intense value on being involved in their children’s education. This is not surprising considering the value placed on education in Latin America, and since it is much more socially promoted that mothering should be a woman’s primary occupation. And though in many of my students’ families both parents worked outside of the home, it was the mothers who showed a strong sense of pride in the act of supporting the school.

As an intern at the Creativa, I spent the majority of my time working in a fifth grade classroom as a teaching assistant. The Creativa’s volunteer and internship program supplements the efforts of the year-round staff members. Volunteers must visit for at least three weeks. They lend their physical labor to the land stewardship program, which is an active part of the school’s environmental education curriculum. Interns must stay for a

minimum of three months and chose which classroom they would like to be principally responsible for assisting.

Several years after the school was founded, a non-profit support organization was founded in the United States; the school now relies largely on the contributions from donors in the States. The Cloud Forest School Foundation, originally based in Sewanee, Tennessee, is entirely run by volunteers. The Foundation board focuses on raising funds from individual donors for specific building campaigns and tuition scholarships. In Monteverde, the Development Coordinator does all of the grant writing, aiming at grants that would supplement certain parts of the school's programs, such as the following: environmental education, land conservation, special education, reforestation, arts and music. Most of the foundations that the school receives money from are based in the United States. The local fundraising consists of mini-campaigns in Monteverde and Santa Elena, which include sponsored walks, poster sales, and food sales. It is through these efforts that 128 out of the 198 students at the Creativa (numbers correct at the time of my departure in December 2006) are supplied with need-based scholarships so that the students can attend the Creativa. The full tuition for each local child is \$140 a month. After scholarships the lowest sum that each child must pay is \$30 per month. There are also specific donors who sponsor individual families or children, paying for the entire costs of schooling; this is an important part of the financial aid program since \$30 a month is a significant financial undertaking for families with more than one child.

The organization of the Creativa is multi-tiered. In Costa Rica there are certain legal requirements that define the governing structure of non-profit organizations. There is the Board of Directors, which directly governs the actions of the school's Director. The

Board members are also part of the Assembly, which is a larger group of 30 to 40 community members who act as the legal owners of the school and are held accountable for the school's legal actions. On the Board and in the Assembly there is the position of the "*Fiscal*"; this unique position, which is required by Costa Rican law, is dedicated specifically to advising the Assembly and the Board in legal and ethical issues, acting as the conscience of the Creativa's governing body.

In addition to the structural, cultural, and historical aspects of the Creativa, there are the educational practices that are of interest and are the focus of my research. One of several private schools in the Monteverde area, the Creativa is unique in that it tries to accomplish a wide variety of educational goals with a large amount of students. The pillars of its educational approach include the following: a three pronged environmental education program, English as the primary language used with students 3rd grade and up (except in the Spanish language classes), the teaching follows a child-centered philosophy, and the discipline policy follows a restorative rather than punitive philosophy. The result is an academic atmosphere that prioritizes community values, such as sustainable economic development and the affirming of racial and cultural differences.

The emphasis on community is a native concept to the area. There is much love and pride amongst Monteverde citizens for their country, even more specifically for the region that their grandparents settled and farmed. There is a profound sense of place and belonging to something greater than themselves shown by many of the students. Accordingly, there is an emphasis on caring for the land. The Creativa's land stewardship program is successful because the students respect their grandparents' way of life. Also, a care for the greater community is not a forced ethic independently developed by the

school. The population of the Monteverde area is small enough that everyone in town is a friend or neighbor. There are always ties, and with those ties comes the responsibility to look out for, and respect, one another.

There are also some general cultural values of Costa Rica that perhaps helped to foster the success of the Creativa's unique goals. The book *Maximizing Study Abroad*, published by the University of Minnesota, gives some insight into how different cultures vary in their perspectives. For example, my experience in Costa Rica demonstrated to me how very individualistic the U.S. culture is today. In classrooms and in the homes of the families I came to know very well in Monteverde, there was always a deep respect for the welfare of the group and a sense that it was the responsibility of a group of people to support each other. For this reason, relationships are often more important than accomplishing an activity, time is not a rigid thing that defines how people should relate to each other, and a large part of people's identities come from their relationships with their families and social groups (Paige et al. 69). It is in this settling that the non-traditional pedagogy of the Creativa is enacted.

Hopefully, those interested in learning more about the Creativa and those interested in teaching in a participatory or emancipatory way will find this thesis a useful resource. For this reason, I have included original documents generated by the Creativa about itself in the Appendix.

Approaching My Lived Study

The methodology I am using to conduct my research is a case study method, a qualitative research technique. To quote Robert K. Yin's book *Case Study Research*, "In general, case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context" (13). I am studying "how" the Creativa engaged its students in their own education, as well as examining the philosophy or the "why" behind its methods. I also discuss whether these methods were fully enacted, and what logistical barriers the Creativa encountered. I develop the meaning of my data through the application of scholarship in empowering methodology and educational models that aim to create social change.

As a descriptive case study, my research was mainly conducted by interviewing Creativa staff, and by recording my experiences and observations of the Creativa's educational practices in a field journal. I also include the mission and vision statements of the Creativa, along with other publications offered to the public concerning the Creativa's teaching methods (see Appendix).

My journaling process is informed by LeoNora Cohen's *Writing a Work Sample: A Step-By-Step Guide for Pre-Service and In-Service Teachers K-12*. In this guide there is a section explaining how to effectively journal about teaching experiences and classroom dynamics. I used a formal reflection method that involved journaling about the teaching process. In most of my journal entries on classroom experiences I used the suggested outline of "Description, Analysis, and Reflection" (Cohen 189). In this way I

was better able to record certain engaged teaching experiences and interviews with engaged teachers from a holistic and introspective manner.

Prior to conducting my interviews, I submitted my interview questions to the Institutional Review Board of Oregon State University to be approved. Before conducting any formal interviews with key Creativa personnel, I supplied each person with an informed consent form about my thesis research. My subjects were chosen mostly due to the extensive amount of time they had spent working at the Creativa, as well as their experience with its philosophy and methods. During informal discussions with co-interns and staff concerning the Creativa and its performance, I asked permission to include specific ideas in my thesis that were raised in our conversations. The wishes of my co-interns and the Creativa staff members were always respected; for this reason, a collective voice is at times present in my finished account of what went on at the Creativa. It was in this way that I found I could share all information without spotlighting individuals.

I approached the interviews with an understanding of feminist discussions concerning the act of interviewing and its problematic assumptions. Traditionally, researchers were considered objective data gatherers; the need for professional distance between researchers and the people they interviewed was considered ideal in traditional research design. Assumptions like these are grounded in the traditional, specifically masculine, approach to what an interview “should” look like. Ann Oakley, in her article “Interviewing Women,” expands upon this topic and makes the case for a type of research that accounts for the relationships that researchers form with interviewees:

... ‘Proper’ interviews in the methodology textbooks, owe a great deal more to a masculine social and sociological vantage point than to a feminine

one. For example, the paradigm of the ‘proper’ interview appeals to such values as objectivity, detachment, hierarchy and ‘science’ as an important cultural activity that takes priority over people’s more individualized concerns. (38)

Since I was a volunteer teacher for five months at the Creativa, and truly a part of the Creativa’s small group of dedicated educators, I found it was important for me to first build trust-filled relationships with those I interviewed. This involved a non-traditional approach of sharing with my interviewees my own concerns and curiosities about the Creativa and its own non-traditional approaches to education. Though I saw the development of these relationships as beneficial to my research, this could be a source of one of the possible limitations of my research. Since I planned to share my finished thesis with the Creativa staff, this familiarity with the people I interviewed could potentially bias my research; I came to value their opinions of what my research found. This might have influenced me to value their opinions of my research over my own observations.

Interviews are a unique type of constructed social encounter; for myself and other feminist interviewers, the interview itself cannot be removed from the larger social context it exists within. Often interviewers can find themselves in a more powerful situation than their interviewees. In these cases the interview itself and the information given within interviews must be handled with great respect for the wishes of the interviewee. Jane Ribbens, in her article “Interviewing—An ‘Unnatural Situation’?” expresses how important it is to consider the power dynamics that inform the interview process: “The issues of power in research are not just a question of feminist methodology but of all research as a privileged activity. Outsiders initiate research to translate others’ social lives in terms that are considered relevant by a different audience. And this audience is frequently (though not always) a more powerful one” (588).

In my specific case, as a non-paid teacher working for a non-profit organization, the power dynamic between me and the Creativa staff I interviewed was fairly balanced. Though the administrative staff certainly had the power to ask me to leave my volunteer position, I would receive no financial punishment and only my academic research would suffer if they decided the questions I was asking or the conclusions I was coming to were not appropriate. On the other hand, I, as a researcher, had the power to focus exclusively on the shortcomings of the Creativa and to publish an unbalanced account. It was this second possibility that I spent the most time considering when deciding upon my interview questions. Since the success of the school is very dependent on philanthropic foundations and people donating their time and money, I was very cognizant of how harmful a purely negative account of the school could be. For these reasons, this could be another possible limitation of my study: because I care about the success of the Creativa, my thesis might be potentially biased.

My interviews revolved around these four central questions:

- 1) What is the underlying philosophy and goals of El Centro de Educación Creativa?
- 2) What are the methods used to enact this philosophy and to pursue these goals?
- 3) What are the actual outcomes of using these types of teaching and organizational methods?
- 4) What are the challenges the Creativa faces in implementing its non-traditional pedagogy?

The interviews were conducted at the school campus, in private, and took about an hour each. There was not a drastic range in the demographics of the adults I interviewed. In total I interviewed five people: all were white, from the U.S., and

between 33 and 45. Included in these five were four women and one man; one first/second grade school teacher, two administrative personnel, one fifth grade teacher, and one sixth grade teacher. All interviewees identified as white or Caucasian. As per the Institutional Review Board (IRB) requirements all research material was kept confidential.

I was able to go back and show three of the people I interviewed the sections of my thesis that were informed by my conversations with them. In this way, I double checked the clarity with which I synthesized the information communicated in those interviews. This was not part of my IRB proposal, but rather something that seemed necessary and ethically responsible. During the reading of my thesis sections, my interviewees raised several key points which we then discussed more deeply. As a researcher I am very grateful to these people for the generous sharing of their insights.

Empowering Pedagogy

The focus of my study is the non-traditional, empowering pedagogy enacted at the Creativa. I am studying how the Creativa engages its students in their own education, as well as the philosophy or the “why” behind its methods.

It is important to first expand upon the meaning of the word “pedagogy.” One definition for pedagogy is that it is a manner or method of teaching. However, if someone realizes that the act of teaching is never a neutral act, then pedagogy comes to also mean a type of philosophy or social theory (Freire 24). To impart sanctioned knowledge to a student is a very different thing than inspiring that student to think critically and discover her own understanding of concepts. It is for this reason that pedagogy itself must be

studied not simply as a system of methods, but rather as a holistic philosophy that informs the way our society functions.

In all societies there are established systems of oppression that are instituted as social norms. These systems allow for people who are part of the privileged paradigm (white, rich, heterosexual, able bodied, male) to continue to have power over others on unjust grounds. Many means have been used to maintain systems of inequality, including education. If oppressive means are used in the educational process, then students are not as likely to be empowered individuals capable of challenging and working to change the unsatisfactory conditions of the world around them. Such oppressive teaching methods may include these traits: entirely teacher defined classroom expectations, lack of ability for students to critique or disagree with the opinions or actions of teachers without negative consequences, silencing or dismissing opinions that the minority of the students in a class profess, memorization and repetition based lessons, and the selection of material that doesn't relate to the experiences/problems of students or minimizes their personal capacity to engage in critical thought. Methods like these encourage students to believe in the benefits of not challenging the actions of those who have more power than themselves and encourage students to buy into (and thus maintain) the system. Also in these situations students are led to believe their own criticisms could have little effect on the established norms, in a classroom or outside of it. In this way, education can effectively reinforce social hierarchies and oppression (Frye, Lorde, Collins).

There are many terms used to describe the type of pedagogy I focus my research upon. These terms include "empowering," "engaged," "participatory," "critical," "emancipatory," "democratic," "liberating," and "transformative": each reflecting

important components of this non-oppressive approach and philosophy of teaching. The terms “engaged,” “democratic,” and “participatory” are used because one goal is to create a classroom that involves the students in determining the process of their own education. This does not mean that the teacher’s experience, skill, and insight is not held in high esteem; rather, by respecting the ideas and experiences of the students, a transformative teacher grants them the responsibility of expressing their own thoughts and feelings in a constructive and respectful way. In this way, students are supplied with the means to have shared control over their educational experiences and a voice in an otherwise silencing world.

The terms “empowering,” “critical,” “liberating,” “transformative,” and “transgressive” are used to describe this type of teaching philosophy because it always seeks to challenge the status quo. The fact that students are encouraged to inform the process of their own education, and to actively use their knowledge to enact change (through building community with one another, engaging in activism or service projects, and conflict resolution) is in itself transformative and seeks to transgress the norms of most educational institutions. In addition to the freeing structure of this type of education, it often aims at addressing social ills. Teachers who are concerned with systems of oppression such as racism, classism, sexism, heterosexism, and ablism, often seek to create an educational space that challenges the social system it exists within. By defying a rigid teacher/student hierarchy, transformative teachers can set the stage for critical dialogue about social inequalities to occur.

For Paulo Freire, education that defies the replication of the status quo has the potential to be nothing less than revolutionary. As an educator, Freire worked with and

for oppressed populations seeking to impart not just literacy, but as their ally, to find ways to liberate their creative capacity through dialogue and to inspire a critical consciousness of the world of which they are a part. In *Pedagogy of the Oppressed* he expounds how the very act of teaching can challenge the epistemological understanding of individuals, to teach of possibility, and to bring into question the merits of maintaining the status quo through complacency. Freire writes:

In order for the oppressed to be able to wage the struggle for their liberation, they must perceive the reality of oppression not as a closed world from which there is no exit, but as a limiting situation which they can transform...The oppressed can overcome the contradiction in which they are caught only when this perception enlists them in the struggle to free themselves. (49)

It is in this manner that Freire views education not as a purely cerebral activity, but rather one that involves “praxis: reflection and action upon the world in order to transform it”

(51). The two aspects of praxis exist in a dialectic relationship to one another:

When a word is deprived of its dimension of action, reflection automatically suffers as well; and the word is changed into idle chatter, into verbalism...On the other hand, if action is emphasized exclusively, to the detriment of reflection, the word is converted into activism. The latter—action for action’s sake—negates the true praxis and makes dialogue impossible. (87-88)

To pursue these just ends of furthering a transgressive and liberating pedagogy, a teacher must herself teach through humanizing means. The methods that Freire advocates requires the person in the teacher role to not see himself as the authority, but rather a “teacher-student.” Teachers in this role do not create high power distance situations in their classroom (such as “Do what I say because I am the teacher”), instead there is often a low power distance between teachers and their students. It is in this type of teaching environment a teacher can actively learn from her students by listening to their feedback. The students in such a classroom then become “student-teachers.” Both the teacher-

student and the student-teachers play each others' traditional role as well as their own, creating an educational situation that defies the oppressive methods of traditional pedagogy. For Freire, traditional pedagogy seeks to dehumanize both the teacher and her students in that it confines them within a rigid hierarchy, stifles creative inquiry, and thereby maintains the status quo. If the teacher, the one who has the power to fail or humiliate her students, is deemed to be the only credible source of knowledge, then students learn to quickly conform to her expectations and are encouraged to accept her opinions as paramount. Their own creative inquiries are thereby repressed by their own self-regulation, teaching students the merits of policing their thoughts and actions in relation to situations where they are denied the power to dissent without negative consequences.

Another oppressive aspect of traditional pedagogy is what Freire terms as its "banking system" approach to knowledge. This traditional form of education requires students to passively receive and memorize facts and sanctioned knowledge that the teacher "deposits" in the empty vessels that are his students. This practice effectively removes the act of inquiry from education, and attempts to make "knowledge" a concrete and teacher-based thing that is easily possessed and transferred. Liberating pedagogy emphasizes that there are many ways that knowledge is experienced and realized, and that education is a continual process of coming into awareness. In Freire's words, "Liberating education consists in acts of cognition, not transferals of information" (79).

To Freire, our capacity to imagine things that do not yet exist and our ability to create those things are major sources of our humanity. To minimize and restrict this capacity to imagine and create is to dehumanize individuals. For this reason, Freire

emphasizes that those who come from the oppressor class to work with and for the oppressed to must challenge the ingrained belief that the oppressed just do not have the ability to help themselves. Both the oppressed and oppressor must come to see the oppressed as having the creative capacity to change their situation by themselves, without authority based instruction from those from the oppressor class. This requires a deep challenging of one's assumptions concerning what constitutes "knowledge" and what the learning process "should" look like. Through this questioning, an educator from the oppressor class will continually find himself renewing his solidarity with his students who experience oppression.

Gloria Watkins, who writes under the penname of bell hooks, has been an important student and critic of Freire's work. Through a feminist lens, hooks compares her own approach to pedagogy with that of Freire's and credits him with much of her inspiration as an empowering and transgressive educator. From her perspective as a transformative teacher-student, she wrote *Teaching to Transgress* in which she focuses on the empowering nature of education, if it is approached in the right way.

Much akin to Freire's discussion of the interaction between theory and practice, hooks states that, "Theory is not inherently healing, liberatory, or revolutionary. It fulfills this function only when we ask that it do so and direct our theorizing towards this end" (61). Without an action or purpose, words alone will not enact change. She goes on to discuss how as a child she found herself using theory as a way to challenge the actions of adults in her life and found in theory "a location for healing" (61). Since children are neither completely programmed nor entirely convinced of the "natural[ness]" of systems of oppression and exploitation, hooks asserts that children are well suited to be our

society's leading theorists (hooks 59 qting. Eagleton). It makes sense that since children are not as entrenched in the social norms that protect the status quo as adults, that children can more easily imagine the possibilities for change.

It is in this light that hooks expands on the dialectic relationship that she has tried to foster between herself and her own student-teachers. Part of building such a counter-culture classroom involves an immense amount of trust among students. By respecting individual students during discussions, the teacher sends the message to all her students that they too will be heard and respected. Through such approaches, hooks has observed that there develops "a sense that there is shared commitment and a common good that binds [the class]" (40). It is within this safe and open space that students can feel secure in sharing their realizations concerning the state of the world, along with critiquing the methods used by their teacher: "The exciting aspect of creating a classroom community where there is respect for individual voices is that there is infinitely more feedback because students do feel free to talk—and talk back. And, yes, often this feedback is critical. Moving away from the need for immediate affirmation was crucial to my growth as a teacher" (42).

For hooks, teachers and students are inescapably involved in the learning process together. In this dialectic relationship it is important to take into account the experiences of the students; otherwise the teacher fails to connect with their reality and encourage critical thought. For this reason, hooks sees education as severely lacking if it fails to address and consider the social reality of students' lives, as well as their classroom experience. In this way, in an English class or when teaching Algebra, a teacher can connect her lesson to her students' experiences, their concerns, and the possibility of

enacting change. It is through these efforts that a relationship of mutual respect can develop between teachers and students.

This mutual respect is further fostered by the shared leadership between all involved in the learning process. In *Empowering Education: Critical Teaching for Social Change*, Ira Shor expands on what this educational situation may look like:

Empowerment here does not mean students can do whatever they like in the classroom. Neither can the teacher do whatever she or he likes. The learning process is negotiated, requiring leadership by the teacher and mutual teacher-student authority. In addition, empowerment as I describe it here is not individualistic. The empowering class does not teach students to seek self-centered gain while ignoring public welfare. (16)

This discussion of active citizenry and negotiated leadership between students and teachers directly relates to a tenet of transformative pedagogy: problem posing. Instead of a teacher dictating what opinions students should have, or the ways they should go about solving problems, the teacher presents specific questions for the students to explore in their own way. Though the posed problems may be framed and presented by the teacher, students are able to draw their own conclusions. Like hooks and Freire, Shor discusses the usefulness of this approach to not only engage students in considering issues that face their community, but as a way to create a democratic space where dialogue between students can occur. Shor emphasizes how students in a democratic classroom should have the ability to generate their own topics for discussion, as well as critique the teacher's chosen subject material. He differentiates between generative or student created topics, and topical or teacher chosen topics.

Critical-democratic pedagogy situates curriculum in issues and language of everyday life. Generative themes make up the primary subject matter; they grow out of student culture and express problematic conditions in daily that are useful for generating critical discussion....[A] topical theme is a social question of key

importance locally, nationally, or globally that is not generated directly from the students' conversation. (55)

In the act of posing a problem to students (e.g. "What can be done to prevent deforestation in the Monteverde area?") a teacher is giving students an opportunity to discuss a dilemma and confront their own ability to take action.

In addition, the act of dialogue within a classroom reinforces the idea that different voices need to be listened to and respected. Through dynamic discussions, classmates learn to learn from each other, acknowledging that there is not necessarily just one sanctioned truth provided by teachers to students. In this way dialogue becomes a way of knowing, of co-exploration of possible truths and reality itself (Freire 17).

By defying student/teacher hierarchy, by creating a democratic space for dialogue, by embracing the fact that teaching is a political act, and by involving students in their own educational process, empowering pedagogy has a lot to offer both its students and teachers. It is through these methods that new generations can educate themselves to be conscientious, determined, and involved in the bettering of their societies.

The fifth (my students) and sixth grade Creativa classes, 2006-7, outside the entrance to the school's cloud forest.



Praxis of the Creativa

One administrator I interviewed was Karen Gordon, the Creativa's Interim Assistant Director. Her past involvement at the Creative includes coordinating the school's environmental education curriculum. When we were discussing the public perception of the school and its goals, she had this to say: "It is really a misnomer to call us an 'environmental school.' We are so much more than that. When we value academic excellence, peace education, and social responsibility it separates us from being solely an environmental education school." True to her word, the Creativa is so much more. Its vision and mission statements alone attest to this fact:

Our vision is a sustainable future for the Earth through educating individuals to love, respect and protect the natural environment, to strive for justice and peace as well as academic excellence and to work towards conserving biodiversity and enriching community life.

Our mission is to nurture generations of ecologically aware, academically well-rounded bilingual individuals. We will work to provide students with the knowledge, values and skills needed to make environmentally and socially conscious decisions on a local, national and global scale. (Cloud Forest School Materials)

From these statements it is clear the emphasis the Creativa places on developing an ethic of active citizenship in its students. From this vision and mission the Creativa created three main objectives:

- To discover and address the intellectual, emotional, physical and spiritual needs of each child in order to stimulate their creativity, natural love for learning, and sense of wonder about the world around them.
- To provide a strong interdisciplinary curriculum that incorporates environmental education in every way possible.
- To inspire and educate students to be caring, develop a strong sense of community and take an active interest in conservation and sustainability with a desire to contribute from local to global levels. (Cloud Forest School Materials)

The school also has a list of their institutional commitments; these include eleven aspects of school life ranging from teaching students to be academically proficient in English, to continuing fundraising and scholarship efforts, to combating racism and classism in the school environment. If you wish to read the Creativa's objectives and commitments in their entirety, they are included in the Appendix.

In this section of my thesis I will explain the unique approach that the Creativa has to offer those interested in methods of transgressive and participatory learning. My involvement with the school led me to focus on three aspects concerning the school's curriculum and how it is implemented. These are the Creativa's environmental education program, the child-centered teaching methods, and the challenges the Creativa faces in implementing its curriculum.

The environmental education program is included largely because it challenges students to critically examine the world around them and centers on problem-posing teaching methods. Of particular interest is the fact that the curriculum is taught in a non-traditional, empowering, child-centered way. Child-centered learning, as it is realized at the Creativa, has many emancipatory and democratic aspects that are seen in empowering pedagogy. Included under the child-centered learning is the school's positive discipline policy. This is of interest because it aims at addressing misbehaviors in a humanizing way. In closing, I explore several challenges that kept the Creativa from fully implementing its unique philosophy and environmental/child-centered curriculum.

I. Environmental Education

The school's approach to environmental education manifests simultaneously in three different ways: nature appreciation, curriculum integration, and land stewardship.

The underpinning philosophies of these three approaches have been informed by multiple authors and generations of environmental educators; several of these authors' works I will mention. In the Monteverde community there is also an immense amount of resources available to the school to develop the students' understanding and appreciation of conservation efforts. The school does its part by acting as a collection sight for recyclable material. The paper collected at the recycling center at the school is brought down to a women's cooperative in the neighboring valley community of San Luis. In San Luis many of the families are land rich, but cash poor. The majority of work available in the area is not cash producing and revolves around producing food, maintaining livestock, and the family farms. The recycled paper from the Creativa is made into an array of handmade paper crafts by the women. The proceeds go toward supporting the women's group and their families.

Fueling the environmentally conscious actions of the Creativa are several key thinkers. In part, the Creativa's environmental educational philosophy comes from the works of David Sobel. In his work *Beyond Ecophobia: Reclaiming the Heart in Nature Education*, he discusses the unintentional effects of teaching children about environmental degradation:

The currently popular term is "empowerment." But what really happens when we lay the weight of the world's environmental problems on eight and nine year olds already haunted with too many concerns and not enough contact with nature?... My fear is that our environmentally correct curriculum will end up distancing children from, rather than connecting them with, the natural world. The natural world is being abused and they just don't want to have to deal with it.
(1-2)

For this very good reason the emphasis of the curriculum below seventh grade revolves around fostering an ethic of care and personal contact with the forest that surrounds the

Creativa. Only in the upper-grades, after years of fostering joyful experiences with nature, do students begin to study the problems that face the environment. When it comes to consciousness-raising, the Creativa does it at a deliberately steady pace. The environmental education program purposefully postpones the discussion of the problems the environment faces until the later grades. The kids have time to develop a real sense of connection and care towards the natural world, and to enjoy the outdoors. It is from this established ethic of care that the students later gain an understanding of their personal responsibility towards the environment and each other.

This is especially important because of the possible negative outcomes that non-participatory environmental education can create. It is not effective to educate students about the environment without giving them a way to connect to the natural world. If students learn about the issues the world faces, with no outlet for action or personal experience with the natural world, then their entire awareness raising process is confined to the classroom. In Freire's words, there is no "praxis," no balance of action and reflection. Without action, thinking about the wellbeing of the environment can easily lead to feelings of guilt. By exploring issues (such as caring for the environment) in a grounded, hands-on way, the impulse towards guilt can become a realization of personal responsibility. Especially in younger children, who have little power in their everyday lives (let alone the world), it is very important not to put the weight of the world on their shoulders. It is better to foster the children's belief that their actions can produce amazing results. This is the challenge of consciousness raising; first individuals must believe in their own ability to change the world they exist in.

A way to foster this belief is through experiencing the natural world first hand. This topic is explored in Clare Walker Leslie's *Into the Field: A Guide to Locally Focused Learning*. Much of this text deals with making the cognitive connections between the classroom experience and the natural world. By journaling, making scientific and artist observations about their immediate environment, children learn that they can learn lessons from their natural surroundings. This method of education, of fostering a sense of discovery and wonder, is one of the Creativa's core objectives.

As an intern, I saw the joy the students had for the natural world expressed in a spectrum of ways. The students were forever asking to hold class outside in the woods, and some of the most successful lessons took place in this setting. Not only is the forest a place to learn from, but it often seems to students like the ideal place to learn in—mostly because sitting in desks and being indoors takes up the majority of their school day. Also, the forest acts as a unique playground for the students; in the Monteverde area there is a wealth of private and public nature reserves, yet there are barely any open spaces for children to play safely. Being able to interact, learn, and play with nature provides a rare and wonderful experience that acts as the basis for the environmental education program at the Creativa.

Throughout the curriculum there is a strong emphasis on conceptual and personalized understanding. One book that many of the teachers involved in the environmental educational program at the Creativa have used as a reference and source for their philosophical structure has been *Earth Education: A New Beginning* by Steve Van Matre. One telling section discusses just how necessary conceptual understanding (instead of abstract facts) is to environmental or “earth” education. Matre exclaims,

...I am still amazed at how many so-called environmental education programs don't focus on basic ecological concepts. They stress the parts of life (water, soil, plants, etc.) and neglect the processes. They emphasize the methods of gaining knowledge...and minimize the understandings.... They insist that outdoor education and environmental education are the same, then do nothing to make sure the kids really understand what supports their lives here and what that means for their future. (64)

The Creativa successfully emphasizes holistic and personal conceptual realizations in its students by approaching environmental education in three different ways: nature appreciation, curriculum integration, and land stewardship. Through these approaches, the students of the Creativa end up with a very personally grounded understanding of their relationship with their environment.

a. Nature appreciation

For the students of the Creativa, nature appreciation begins in preschool and continues through eleventh grade, the last year of Costa Rican *colegio* or upper school. The goal with nature appreciation exercises is to nurture in students “a true connection with the earth,” said Karen Gordon. She explained to me how this is not done in an explicit way; rather students are simply encouraged to enjoy, explore and play in the cloud forest behind the school. The activities for the youngest grades include building fairy houses out of forest debris, guided walks, and each child choosing her or his own special place to go to during class time set aside for nature appreciation.

At the beginning of the school year, when I was still trying to decide what class I would be an intern for, I worked a week or so with a combined first and second grade classroom. Every Wednesday the class got to have extensive nature appreciation time. One day this consisted of an hour long hike in the woods and then a game where the kids had to sneak by me, the blindfolded intern, as silently as possible. Whenever I heard a

twig snap or their breathing, I signaled and they had to stop until I only heard the forest sounds again. The best part of the exercise was that all the students had some time in the forest in complete silence, a very hard thing to accomplish with a group of a dozen six- and seven-year-olds.

Each teacher decides how often to incorporate nature appreciation into his or her class schedule. The higher the grade level the less often students participate in this type of activity. This is largely due to the government standardized tests for which students must prepare. Accordingly, one of the largest challenges the teachers in the higher grades experience is trying to balance class time among the school's multiple goals for the students, including academic excellence.

In high school the students are asked to reflect on the experiences they had with nature when they were younger. Overwhelmingly, this is when students come to explicitly understand the caring relationship they have developed with the forest and the natural world in general. In this way, the gradual building of a nurturing relationship with the natural world results in personal realizations in adolescence. It is after this moment of cognition that students are ready to take a more active role concerning their responsibility to advocate on the environment's behalf.

b. Curriculum integration

The second approach the school takes concerning environmental education focuses on conceptual understanding and knowledge of the natural world. From preschool and up, students learn about the relationship between the natural world and themselves; for example, "How do we take care of animals?" In first and second grade, students learn about how they, as individuals, relate to their habitat in Monteverde.

Themes in these classes include “Respecting Life” and “Cycles and Change.” In third and fourth grade the students are ready to learn about the natural world in detail, such as the dynamic interdependency of a cloud forest ecosystem, pollination or “Where do seeds come from?”, and the water cycle. The curriculum is centered around using the Creativa’s backyard cloud forest as a source of hands-on exploration and discovery. In addition to this experience-based form of life science education, the curriculum uses a lot of problem posing to engage the students in finding their own answers.

In fifth and sixth grade, the students are ready to study more abstract, less tangible concepts. This includes studying the biological kingdoms, the universe and history of the earth, the atmosphere, energy, matter, and electricity. The lessons at this age level continue to be as experience based as possible, including experiments and data collection. Previous to fall 2006, the eighth through eleventh grades took part in a multidisciplinary course called the Environmental Leadership Program. Through this activity, students interviewed community members who used to live or work on the land the Creativa now owns. Through this research, they would create a time lapse account of how this land was managed, mapping out what different parts of the 106 acres experienced. Students also practiced public speaking and presentation skills, along with expanding their ecological knowledge by leading guided walks around the Creativa forest.

Today the entire *colegio*, seventh through eleventh grade, takes part in what is called the Challenge 20/20. Challenge 20/20 was started and is organized by the National Association on Independent Schools (NAIS). Through this program two schools are paired up, one in the United States and one in another country, to learn simultaneously about important problems that face today’s world. Throughout the fall 2006 semester,

students and teachers from both schools worked together to identify local solutions to a global problem.

By pairing up hundreds of schools around the world, and helping them choose which topics the students will focus on, the NAIS hopes to build educational partnerships between schools and encourage students to learn first-hand about cross-cultural communication. Together, the different schools take action locally to address a real problem and then share their experiences. Challenge 20/20 is based on Jean-Francois Rischard's book *High Noon: 20 Global Problems, 20 Years to Solve Them*. In the book, he discusses 20 global problems:

Sharing our planet: Issues involving the global commons

1. Global warming
2. Biodiversity and ecosystem losses
3. Fisheries depletion
4. Deforestation
5. Water deficits

Sharing our humanity: Issues requiring global commitment

6. Maritime safety and pollution
7. Massive step-up in the fight against poverty
8. Peacekeeping, conflict prevention, combating terrorism
9. Education for all
10. Global infectious diseases
11. Digital divide
12. Natural disaster prevention and mitigation

Sharing our rule book: Issues needing a global regulatory approach

13. Reinventing taxation for the 21st Century
14. Biotechnology rules
15. Global financial architecture
16. Illegal drugs
17. Trade, investment, and competition rules
18. Intellectual property rights
19. E-commerce rules
20. International labor and migration rules. (Rischards)

The school teams first chose several of these problems which they were interested in. Then, out of these narrowed topics, the NAIS assigned each team one specific

problem to work on. By December, after a semester of working on local solutions to global problems, they reported back to the NAIS on their joint work. Their work is incorporated as part of the school curriculum, and should involve plans that seek to enact change in their communities. At the Creativa, the *colegio* students were split into three groups, and each group was given a problem that they started researching and trying to find local solutions. For example, the eleventh grade class worked with the topic of global warming. The dozen or so students in this class decided to put their efforts towards making the Creativa school buses run on biofuel, and manufacturing the biofuel on the school campus.

The rest of the *colegio* classes, the seventh through tenth graders, were split up into two groups. One group started researching deforestation; they visited a sustainable coffee farm near Monteverde, learned about sustainable land use policies that are encouraged in Costa Rica, and learned about the bird migration patterns of Monteverde and how they have been affected by deforestation. They also mapped the different areas of the school's land and learned about the different ecosystems within reforested, deforested, and primary forested lands. At the time of my departure, they were planning to create a park on a unused lot belonging to a local public elementary school. The other group of seventh through tenth graders studied migration regulation, which has been a huge issue for Costa Rica since it is one of the most affluent countries in Central America. The antagonistic dynamic that many conservative Americans have towards Mexican immigrants is very similar to the attitudes that many Costa Ricans have towards Nicaraguan and Panamanian immigrants. Not only is there a xenophobic tone, but also racist rationalizations for Costa Ricans' prejudice against poor immigrants.

Lisa, a fellow intern, and I went to Nicaragua during our first week of vacation between the six-week long school terms. In Managua we visited a women's clinic that is located outside and serves the little town inside Managua's city dump where over 1000 people live. Then, outside the city of Granada we visited two houses for Los Quichos—kids that used to be living on the streets. From the time we spent at these organizations, which were funded by NGOs mostly based out of the United States, Lisa put together a wealth of information about the people and history of Nicaragua. With my pictures and our scribbled notes from the interviews and conversations we had with all the people who welcomed our curiosity, Lisa made a PowerPoint presentation for the 20/20 group to reference in their own research on the topic of immigration. This was done in part to dispel the stereotypes the students had about their northern neighbors, to show the humanity of Nicaraguans. It is not surprising that many of the Creativa's students are prejudiced against Nicaraguans; over a year ago, several Nicaraguans robbed the main bank in Monteverde, killing nine community members in the process. Since the community is so small, every student at the Creativa had a friend or family member who was directly affected by the shooting.

This is the first year that the Creativa has taken part in Challenge 20/20. So far the noticeable benefits have included the student-led research projects, practice with reading and speaking in more academic English, public speaking opportunities, activism projects designed and implemented by the students, and a general raised consciousness concerning issues that directly relate to their community. A lot of the lessons have involved the 20/20 teachers acting more in a facilitator role as the students discuss what they want to pursue. Overall, the students do a lot of their own research, and in effect

inform the process of their own education. Also the multigrade classrooms are more dynamic and allow for a lot more interaction between age groups. In such a small school, where many classmates have been together since pre-school, it is important that students in different grades relate and mentor each other.

What I liked about the high school's 20/20 projects was that the students were asked to create action plans and enact them in order to address the needs of their local and global community. These projects acted as capstones to the years of implicit development of an environmental ethic of care in the students. It is through the gradual development of connection, actions of care, and then advocacy, that students become fully conscious of their personal commitment to the environment. The fact that the seeds of the process are planted in preschool coincides with bell hooks' belief that children have the creative imaginations that are less restrained by social norms and have the potential to be our best theorists.

c. Land stewardship

Finally, the third approach to environmental education at the Creativa is land stewardship. All grades, preschool through high school, lend a hand in maintaining and improving the Creativa's land. When the Creativa was first started almost 14 years ago, none of the founding mothers imagined that there would ever be a high school. They started the land stewardship program mostly to have their five- and six- year-olds helping in the farm's garden. They wanted the kids to have the skills to grow their own food, and also to have an ethic of care concerning the well being of the school's grounds. The activities for students today include collecting and propagating seeds, clearing wind damage, tending the organic vegetable garden, caring for the compost and worm house,

watering the native plants in the greenhouse, caring for the native tree nursery, planting trees in the reforestation area, maintaining trails, and moving around earth and materials.

As mentioned earlier, before students are exposed to the immense problems the environment faces, the students learn hands-on how they can personally care for the world. This learning takes place in the simple acts of practicing recycling and caring for a compost pile, a garden, and a forest. These experiences that the students have as part of the school's land stewardship program lay the foundation for their future activism work.

During my time as an intern, I noticed that land stewardship was one of the most fun classes for the students. Every week every student looked forward to land stewardship the same way they looked forward to recess or physical education. By having every student pitch in around the school property to help make everything run smoothly, the children are able to have an interaction with the land that most Monteverde kids will never have. Though almost all the students' grandparents lived their whole lives on a farm, the younger generations of Monteverde grew up entirely surrounded by roads, cars, and houses. Although Monteverde is itself a rural area, the majority of the population lives on very small plots of land in the semi-urban setting of Santa Elena. Just two generations ago the majority of the population lived on dairy or meat farms, but now it is very unlikely that more than a few of the Creativa students will be large property owners. By attending the Creativa, the students get to take part in maintaining a large piece of land, like their older family members, and in doing so reconnect with a piece of their cultural heritage.

In addition to the school's three-pronged approach to environmental education, the Monteverde community offers an array of environmental education opportunities of

which the school can take advantage. Just one example is August 24 of every year, the day nationally dedicated to appreciating and raising awareness of Costa Rica's national parks. Throughout the week there are events in Monteverde and the neighboring town of Santa Elena concerning the parks' role in preserving biodiversity/natural resources, and generating tourism to create sustainable economic growth. On this particular day when I was there, there was an information fair which over half the Creativa's students attended to gather information.

One assignment given that day asked the fifth and sixth grade students to interview the park representatives at the park information tables about their opinions on tourism in Costa Rica. The answers the students received included pragmatic explanations of how tourism provided jobs, how it was a necessary evil to sustain the economy, and how tourism caused more environmental damage than good. The responses also ranged to how tourism allowed for more preservation projects to be funded, and how it gave government leaders and communities the monetary incentive to care for the environment. We discussed these responses later in class; it was during this discussion that the students engaged in critically questioning what happens in their town and country in relation to tourism.

The Monteverde area is an ecotourism hot spot; almost all the students' families earn a living through tourism-related work. English fluency is a requisite for many of the better jobs, and downtown Santa Elena is always teeming with folks with a profound lack of melanin. As students get older, they will become more aware of what it means to live in a place that is dependent on the money of travelers, the majority of whom are white and wealthy. Through critical questioning and dialogue about what is happening in their

country and hometown, the students had the opportunity that day to learn how to practice thinking as conscious and involved citizens. Referring back to Friere's work, it is this type of critical questioning that should drive education. Through the shared act of inquiry, the classroom becomes a meaningful place that directly relates to everyday life.

As also discussed in the literature review section, one aspect of empowering education is that it does not rely on a model that dictates to students what is *real* knowledge and what isn't. Traditionally speaking, sanctioned knowledge was solely information that the teacher said mattered. This information might be informed by the leading scientists, political leaders, and religious icons whose experiences differ greatly from the experiences of a teacher's students. In this way the information taught is removed from the everyday lives of the students, making it abstract and seemingly fact. But when students are encouraged to draw conclusions from their own perspectives and experiences, then each student's mind becomes a source of real and important knowledge. Through real life interaction with the material they are studying, students gain a firm, personal understanding of concepts and feel more passionately about their understanding of the world around them. If the locus of a classroom is the individual and her experiences, then the student cannot help but believe in the worth and validity of her own thoughts.

Although much of the learning that takes place at the Creativa is done in an experiential way, it is in the environmental education program alone that the students are asked to enact change. This is a manifestation of the praxis that Freire prizes: "reflection and action upon the world in order to transform it" (51). It begins with nature appreciation in preschool, continues through to the 20/20 activism and research projects

the high school students create, and is at work in the land stewardship program. Students' understanding of pollination, water conservation, bird migration (and in later grades deforestation and erosion) come from the students' interaction with these phenomena. In the youngest grades, an ethic of care towards the environment develops out of daily interaction and familiarity with the school's forest. There develops in the students a very personal understanding and responsibility in relation to the non-human world, it is then that they are asked to enact change. When it comes to encouraging social action and consciousness of environmental degradation, the Creativa approaches these things in a very conscientious way.

II. Child-Centered Education

At the Creativa there is a strong tradition of child-centered education. Their individual approach to this type of education has evolved over the years. At this point in time much of the curriculum is child centered, including the Creativa's approaches to teaching mathematics and writing and reading skills in English and Spanish. The Creativa describes its child-centered education as: "developmental, hands-on, and relevant to children. The learning environment is organized to meet the emotional, academic, and physical needs of the children." This quote and the following points come from the Curriculum Coordinator's resources on child-centered education philosophy:

Fundamentals of Child Centered Education at the Creativa:

- Children learn by doing. Projects and hands-on experiences are essential.
- Helping children learn to think is as important as teaching any specific subject matter.
- Learning occurs in ways unique to each child.
- Children's curiosity and initiative are integral to their education.
- Working with others enhances children's growth in every domain.
- Independence is a vital part of every child's development.
- Every person is a thinker, creator, and contributor.

- The natural world is a place to learn. Childhood should be fun, and children should find joy in learning.
- The term “child directed” is also important at the Creativa. It describes a classroom where children have a lot of authentic say in what goes on in the classroom, such as making rules, deciding policy in class meetings, and effecting curriculum decisions, either directly through voting or indirectly by the teacher “listening” and being aware of students need and interests.

Examples of Child-Centered and Child-Directed Education at the Creativa:

- Multi-level teaching through grouping.
- Giving space for students to express their emotions.
- Using conflict resolution strategies (peace table).
- Class meetings.
- Flexibility to change a class activity based on the needs or interests of the students.
- Constructivist mathematics, students develop mathematics strategies.
- Guided Reading and Literature Groups.
- Child generated project ideas.
- Allowing personal stories and experiences to shape understanding of a text.
- Drawing upon the students themselves to create meaning when exploring new concepts.
- Students are encouraged, and expected, to speak, write, and share with respect to their own experiences.
- Students learn to compare new ideas in relations to themselves and their experiences.
- Students form caring, nurturing relationships with their teachers.
- Classroom activities accommodate a variety of learning styles and multiple intelligences.
- Students work cooperatively in small groups.
- Students are given choices.
- Classes take advantage of spontaneous learning opportunities.
- Instruction can be individualized to meet a student’s special needs. (Cloud Forest School Materials)

It is important to note how these points correlate with the ideas offered by hooks and Freire; the Creativa successfully emphasizes experienced-based knowledge through its child-centered curriculum. As mentioned earlier in the literature review, liberating pedagogy emphasizes that there are many ways that knowledge is experienced and realized, and that education is a continual process of coming into awareness.

One question that arose in my interview with Amy Cherwin, the Creativa's Curriculum Coordinator, was how teachers can act as facilitators in a classroom. She discussed how lesson plans can be structured to meet the projected needs of the students and goals of the lesson, but in the act of facilitating the teacher should adapt the curriculum. Facilitating means encouraging active participation by the students; in doing this teachers may often find that their students create a different set of questions than anticipated. Students bring with them an amazing amount of background information from their lives which adds to the classroom experience. The job of the teacher is to try to watch, listen, and actively assess the situation. It is really about being present and in touch with what is going on with each student's process, and helping them learn from one another through generating dialogue. All this is done within the framework of goals that the teacher has decided upon, to help guide students to a more personal understanding of the material.

The child-centered curriculum effectively makes students the focus of the Creativa's teaching philosophy; in this way it is their experiences and learning processes that inform the classroom. Epistemologically speaking, the child-centered approach relies on and furthers the belief that students have the ability to imagine and create a world different than the one we currently have. Children and students of all ages come equipped with the imaginative tools to think outside of the current ways of operating. bell hooks, speaking from her own experience, offers that children do in fact have the most potential to be our best social theorists since they have yet to be deeply involved in perpetuating the status quo (59). The child-directed nature of the curriculum also successfully gives students a voice. Though the amount of opportunities given to students to speak their

minds depends on the age level and the individual teaching style of the teacher, there is a well understood tradition at the Creativa that provides students with the ability to govern their own learning environment.

This topic of student-informed classrooms is tied to the idea of the negotiated power between teachers and students. Traditionally, the educators should have complete control over their students. In this setting, to speak against the actions of a teacher is an act of disrespect. To criticize the content or structure of a class is considered an act of purposeful disruption. Within an egalitarian classroom, on the other hand, a different scenario takes place. Students are often asked to inform their learning process by generating topics for class discussion or the theme of their subjects. And even when topics are generated by the teacher, students are actively involved in the learning process as a whole, meaning that by working in teams or as a group they help each other to understand the material. Through this dialogue, facilitated by the teacher, students learn to learn from each other, and, in doing so, place a higher value on the opinions that come from their peers and themselves. In this way, the free exchange of ideas relates not only to class material, but also to a sense of active citizenship within a classroom environment.

During my time at the Creativa, I witnessed a very strong example of how central an egalitarian teaching approach is at the Creativa. At the Creativa there was a new teacher who had come from a teaching environment that valued a very strict discipline and a high-power distance between students and teachers. This teacher, along with relocating his life to another country, faced the fact that the level of respect and obedience between teachers and students evolves out of the relationships teachers are able to build with their students. He learned that respect was not based purely on his

position as an educator. After three months of trying to align his idea of how a classroom should be run with the different—and not explicitly communicated—expectations of the Creativa, he found that this teaching environment was not receptive to how he functioned as an educator. When trying to enact the school’s discipline policy as he understood it, he met criticism from the school’s administrators. Because of this experience, along with a multitude of other difficulties such as an illness in his family in the States, he resigned from his teaching position and returned home. This showed me that the Creativa (in the form it exists now) really demands a lot out of the educators. The teachers often find themselves having to adapt to a new environment and a new type of pedagogy, with a lack of institutional transparency and support during their transition process.

a. Language arts

One book that has informed the Creativa’s approach to teaching writing in a child-centered way has been *The Art of Teaching Writing* by Lucy McCormick Calkins. For Calkins the true work of learning how to teach writing begins when the teachers realize how powerful the act of listening to students can be. In Calkins experience, it is not about thinking up creative prompts for students to practice their self-expression and writing skills, but rather the encouragement of them as storytellers; it is empowering them to be the narrators of their own experiences. She writes, “When we help children know that their lives do matter, we are teaching them writing” (Calkins 16).

The telling of personal stories and the opportunity for introspection is what makes writing powerful and meaningful to writers young and old. A teacher needs to really listen to her students’ stories, and in doing so show them the value of their own voices and experiences. This involves facilitating classroom situations that show students how

much others can learn from their stories. Calkins uses the example of how a drawing and some scrawled letters from a six-year-old girl were used to tell the class that child's story. The classmates replied to the child's story with curiosity and respect, wanting to hear more. It is these types of interactions at any age level that give students the confidence they need to pursue writing, even if they have yet to master the act of writing itself.

At the Creativa, in writers' workshops, students are encouraged to express themselves to the rest of the class, and the class is encouraged to practice respectful active listening. In this way, writing and reading soon become a very dynamic part of class interaction and often results in dialogue about each other's work. A large part of this process could not take place if the teacher began imposing his opinion on the quality of the child's creative writing. The goal is for students to become capable of reflecting on what parts of their narratives need work without teacher intervention, or what parts they should be proud of without a teacher's approval. Grammar and spelling corrections are necessary, but the actual creative process of the child should not to be scrutinized. By reading their students' work, teachers can gauge how to adjust the curriculum to better suit the needs and interests of their students. These adjustments often take the form of mini-lessons. For example, in the fifth grade class I helped in, the students read folktales like *The Fisherman and his Wife* and *The Elephant's Child* and then wrote their own stories. One mini-lesson during this theme focused on what makes an interesting beginning since many of the students were not thinking deeper than "Once upon a time..." formula type beginnings.

By using a child-centered approach to the language arts, the school firmly grounds its lessons in each child's experience. There is an emphasis on storytelling and

practiced group listening. These activities foster a child's belief in the worth of telling her or his own stories and the worth of listening to the stories of others. With the constructivist math curriculum it is much the same: there is strong emphasis on conceptual and experiential understanding along with appreciating multiple methods of solving problems, as I will discuss below.

As for reading, the teachers at the Creativa are very conscious of choosing material appropriate for students with different reading levels within classes. The instructional level of teacher-guided readings is slightly above the level that students are able to read at independently. For more in-depth reading, the class is divided into literature groups of different reading levels, so that each student is sufficiently challenged, but not overwhelmed. In literature groups, and together as a class, the intern or teacher will read aloud to the students. After hearing a story, the students as a group practice analytical and comprehension skills that they then can use when reading independently. In literature groups students are asked to read independently and to come to their literature group with discussion topics, questions, and comments. In this way, students choose the things they found most interesting in the story, rather than the teacher or intern choosing the topics for the students. Students come to decide for themselves what the most important parts of a story are and learn how to find those parts and focus on them without adult direction.

Interns are often asked to lead literature groups in order to give personal attention to all students; I led some of the more advanced reading groups in my classroom. Some of the students in my groups had enough English fluency to learn words like "nuisance" and to discuss examples of irony in our reading. One group especially had an emotionally

rough time when several students found they had a lot in common with the story's main character whose parents were divorced. Discussion topics often ranged from very personal reflections from the students, to about how crazy English grammar can be. For example, how can an alarm "go off" and then need to be "turned off"? Within the literature groups and during guided reading, mini-lessons such as these take place concerning personal connections, pronunciation, grammar, and punctuation. It is through these methods that include independent and group work, meeting multiple levels of ability, along with grounding lessons in the experiences of the students, that the language arts curriculum is successfully child centered.

This year, to better meet the goals the Creativa has developed concerning "academically well-rounded bilingual individuals," the Curriculum Coordinator, Amy Cherwin, focused on reevaluating benchmarks for the English language arts program. This was done in order to better enact the school's philosophy; with clearer and more specific goals for teachers and students in each grade, it is easier to make sure that the goals of the school are being fulfilled, and that the curriculum is being applied consistently and appropriately across different grade levels. Since no part of the *ministerio* exams test above the most basic level of English (or French) comprehension, there is less pressure upon the school to teach students in a more traditional way. The process of renewing the curriculum and creating the language arts benchmarks was led by Cherwin, but actively involved all the English teachers in the both the grade school and in the high school. The input of the teachers is what caused this process to be begun, at the time the English curriculum had the greatest need of clearer direction.

b. Constructivist math

“...[C]onstructivism is a theory about how knowledge is elaborated both by the human species over many centuries and by each child” (Kamii vii).

The theory of constructivist math as it is understood at the Creativa comes from the research and theory of Jean Piaget. His research in developmental psychology and epistemology revolved around the question, how does knowledge grow? Piaget's work influenced the fields of psychology, sociology, education, epistemology, economics and law. Piaget, working in the field of child developmental physiology, researched how children come to understand logical and mathematical concepts. His work produced an epistemological and psychological theory concerning how knowledge is learned and shared:

Piaget’s constructivism...denies that logico-mathematical knowledge can simply be transmitted to the child like a neatly packaged parcel; it holds that this knowledge has to be constructed by children themselves—but obviously in interactions with and with the help of educators and others in their environment. In this sense, constructivism goes against traditional educational practice. (Kamii vii)

Young Children Continue to Reinvent Arithmetic, by Constance Kamii, discusses concrete teaching methods that seek to enact the theory of Piaget. The Creativa has used Kamii’s work as a resource when creating its math curriculum. The above quote shares the same philosophical underpinnings as Freire’s ideas on the “banking system” form of education. For both Piaget and Freire, there is more to the educational process than the passive receiving of information. The process of claiming an education, of creating understanding through participation with the concepts, is an active one. The underlying philosophy of the more active and involved type of learning is that a human mind must be pushed in order to grow. To simply “transmit” or “deposit” information, without the

opportunity of inquiry or critical thought, does nothing to expand the mind of an individual. So the question becomes, how do you help students to teach themselves? Kamii continues to say, “A key to constructivist teaching is the posing of the right question at the right time so that children will think” (156). Problem posing is a certain tenant in Freire’s non-traditional pedagogy as well. The constructivist approach and the forms of empowering education already mentioned seem to aim at the same goal: to have knowledge and the learning process be grounded in the experiences and voice of the student, rather than sanctioned or institutionalized ways of thinking. For constructivists this means that the knowledge is more epistemologically true; for those interested in social change it means that education can liberate minds. In both these educational camps individual processes are honored and shared, and trust in a classroom is vital. Respect is expected when other students share and engage in a dialogue concerning his or her personal approaches to solving problems.

The school emphasizes several tenets of constructivist math that it considers most important in helping each student develop his or her personal mathematical conceptual processes:

- 1) Social interaction about math is important.
- 2) Constructivist math works to build confidence in situations involving problem solving abilities.
- 3) Constructivist math puts a high priority on mental math. The goal is that the student can solve problems accurately and efficiently.
- 4) Constructivist math helps students develop better number sense and understanding of place value.

- 5) Constructivist math appreciates the variety of ways that different students use to find solutions.
- 6) Constructivist math moves the teacher into the role of a facilitator position; this role involves the teacher thinking ahead about how to challenge and include children of different ability levels, and to support their own conceptual processes.
- 7) Constructivist math believes that teaching algorithms is harmful. This means that there is not one set procedure; rather each student has a way of solving problems that is the most natural to him or her.

This constructivist approach to pedagogy asserts that every student has his or her own way of doing things, and by following his or her own way the student learns in a more grounded and personalized manner. The trick as an educator is to foster each individual's approach and not force a student to conform to one standard way of solving problems. Following this philosophy, teaching algorithms is to be avoided at all costs. In this approach to teaching there is not one set procedure, but rather a variety of ways to solve a problem. Also, the emphasis on social interaction concerning math is very non-traditional. Just as reading and writing are usually a social and dynamic exercise in most classrooms, math is often a more individualized and isolated practice. By placing a value on analyzing a variety of methods to find solutions as a class, and working toward common goals, students learn the skills of listening and valuing different approaches their classmates take to solve equations. Just as in reading groups, where discussions are held concerning the possible different meanings of literature, math class should include a respectful sharing and discussion of students' different approaches to problems.

The methods used in the fifth grade classroom to make math class more social were quite fun to take part in. One activity was singing multiplication tables and the students had a part in creating how the songs went. They sang the 7's multiplication series to the tune of "Happy Birthday." Another activity included a game that had the students move from the floor, to their seat, to standing on their desk each time they answered multiplication problems correctly. Also, in every math class there is the Problem of the Day, which students have to solve independently, but then work through the problem together as a group. Out of these three examples, the Problem of the Day has the most pronounced trappings of constructivist math; there is practical problem posing and solving, group interaction and discussion, as well as independent work time where students can practice their own unique way of finding solutions.

Starting in preschool and continuing through fourth grade, constructivist math is the most utilized by the teachers. Students—when sharing their problem-solving techniques—may present algorithms as the method they found their answer, but teachers do not emphasize one child's method over another's. From fifth grade and onward algorithms are used and constructivist math is not as strongly emphasized at the Creative for two practical reasons. First, the complexity of the material increases: it is easier for a child to find 5 different ways to find the sum of 136 plus 128, but it is much more difficult to find 5 different ways of dividing 1457 by 7. With complexity, certain algorithms become more efficient once a conceptual understanding is established. Nevertheless, the encouragement of different student's processes at solving problems continues, along with multiple social teaching methods, such as rotating math stations,

and small group work. This helps to ensure that students learn the concepts rather than simply learning how to repeat a certain mathematical processes.

The second reason for a less strict use of constructivist math techniques in fifth grade is that at the end of sixth grade the Costa Rican government administers exams that determine whether students can progress to the next grade level. Created by the Ministerio de Educación, the “*ministerios*” exams take place at the end of sixth, ninth, and eleventh grade. Each test covers an array of topics and can be taken up to three times by each student. If a student fails three times or does not choose to retake the test, he is required to repeat his previous year of school. For this reason, the *ministerios* are an important part of a student’s academic and personal development at the Creativa. The exams are administered to all accredited Costa Rican schools, public and private, and are written entirely in Spanish. Accordingly, during fifth and sixth grade there is a stronger focus on math vocabulary in Spanish. There is also more time spent on solidifying students basic skills with addition, subtraction, multiplication, division, rounding, decimals, fractions, angles, finding area and perimeter, and using formulas. Because the tests have time limits, it is very important that students have enough practice with their own individual processes of finding solutions that they can easily come to an answer quickly.

In this case, the challenge the Creativa faces is preparing its students for a larger educational system that does not place value on individual processes, while still trying to encourage their conceptual understanding on a personal level. The *ministerios* are truly standardized tests. Much of the material revolves around fact regurgitation, and memorization. In this way it is nearly impossible for the Creativa to enact a purely

constructivist approach to math, as well as grammar and social studies. But they successfully maintain a child-centered curriculum on all fronts.

Heidi Spradlin, the fifth and sixth grade math teacher who has been working at the school for year and a half, told me this about her teaching method:

I teach in a constructivist way because I teach for conceptual understanding, and having the students construct their own understanding of concepts. After students have constructed their own knowledge of the concept, then algorithms can be used as useful tools to solve problems quickly and efficiently. (Spradlin)

There is a consistent constructivist understanding and approach in the way the school teaches math, but in the higher grades it is not a purely or devotedly constructivist approach. It seems unlikely that the Creativa's math curriculum could be rigidly constructivist and be successful; because all students must succeed on standardized government tests, the Creativa is not the best teaching environment for a purely constructivist approach to teaching math to be enacted.

The math curriculum, like the language arts curriculum that was being examined by the curriculum coordinator, was reviewed and restructured several years ago. The focus of this assessment and restructuring was to create set goals and curriculum continuity across the range of class levels. By solidifying and clarifying curriculum, the school assures that students stay on a logical progression throughout their education, and helps lead new teachers in the direction the school has chosen to take. The role of the Curriculum Coordinator in directing these reviews and conversations is vital; before the 2006-7 school year the work that is now specifically delegated of the Curriculum Coordinator was included in the Assistant Director's responsibilities.

c. Positive discipline

In general the adherence to institutionalized rules is a potentially disempowering topic. “Discipline” too often means the use of force to make someone conform and obey. Yet, the Creativa has made a conscious and applied effort to use a philosophy of *positive discipline* with its students. Conflicts or disruptive conduct are used as opportunities to practice community building, problem-solving skills, and to consider the reasons behind the conflict or misbehavior of a students. The Creativa’s discipline philosophy centers on creating solutions in conflict situations rather than doling out punishments. In this way, students are encouraged to practice resolution skills with each other, skills that many adults often lack. The school’s positive discipline philosophy revolves around students reflecting on their experiences concerning the choices and the results of those choices on their classmates. Through this different avenue, education takes place through experiential learning via social interactions. The standards the Creativa has concerning its students’ behavior are not simply abstract rules, but lessons that students learn first hand through the positive discipline process.

The title of “positive discipline” can be somewhat misleading. Sometimes teachers and interns feel like they are unable to be negative and say, “No, you need to stop hitting your classmate.” To the contrary, positive discipline emphasizes that the choices students make concerning their behavior are to be made clear to them. One example would be telling a student who is not doing her own class work and distracting others that she could either “do her class work now or during recess.” Also, positive discipline does not take away from adults’ ability to intervene in disruptive situations. With positive discipline there is a strong emphasis on asking students to take

responsibility and to deeply consider the effects of their actions. The Creativa's approach to positive discipline is informed by the book *Positive Discipline in the Classroom* and is mainly realized through four methods:

1) Focus on Creating Community

One way the Creativa creates a cohesive learning community is by having a peace circle, where the entire school gathers and greets each other at the beginning of almost every week. Also, as mentioned in an earlier section, all students take part in land stewardship, where they contribute to maintaining and improving the school grounds. This allows them to feel responsible for the well-being of their surroundings and to have a sense of pride concerning the school's property.

There are frequent classroom meetings where students can raise concerns, share, and discuss current events. In these meetings, that usually happen every day in the younger grades, students have a chance to comment on how the class is being conducted. Though it depends on the teaching style of each teacher, class meetings are designed to be informed by the concerns and questions of the students. In this way students learn that they have a voice in how their classroom is managed. With this chance to speak comes a certain amount responsibility and accountability concerning their comments. With this tradition there is the underlying philosophy that students will learn through their experiences as classroom leaders.

It is also a time for teachers to congratulate and acknowledge the hard work of their students, and for students to publicly appreciate kind actions of their classmates. At the beginning of the year, each class creates a mission statement. This usually involves the students choosing the rules of conduct that will govern their classmates and their own

behavior for the year. In this way students are involved in creating and governing their own actions. This gives students a chance to participate in the structure of the class, and a sense of ownership in the manner in which discipline decisions are made. Teacher led experiences do not often succeed in creating a sense of community within a classroom as student directed experiences do.

In addition to these things, in all public and many private Costa Rican schools students wear required formal school uniforms. Unlike at the public schools in Monteverde, you won't see Creativa students in pressed pants, button-up starched shirts, or polished shoes. The school uniforms consist only of blue and green comfortable T-shirts with the school logo on them. In Costa Rican culture, appearance and personal presentation are taken very seriously. If someone is shabbily dressed it is often taken to mean something about that person's family, or his or her own personal motivation or self-respect. Since students at the Creativa come from an array of socio-economic positions, this helps to minimize class motivated student conflicts. This more relaxed uniform also avoids the troublesome implications of forcing students' to conform their self-expression and presentation to sanctioned norms.

2) Develop Problem Solving Skills in Students

There are several methods that the Creativa utilizes to teach its students how to creatively resolve conflicts. One is the "peace table" or "peace bench," which exists in all of the classrooms below fifth grade. At the peace table or bench, there are tools the students can use to solve their conflicts, such as the "conflict resolution wheel" or "wheel of choice." Like a twister board with an arrow in the middle, one child can spin the arrow and do the exercise it describes. Such as "Count to 10 to Cool Off" or "Shake Hands and

Take Turns.” In this way, and through role playing conflict situations, students learn processes they can turn to when conflicts arise. In the higher grades students still practice the resolution skills, but without a designated space for it in their classrooms. Also, in class meetings problems or conflicts can be raised and discussed as a group, often students create agenda items to discuss. So if the classroom is not being taken care of, the teacher has an opportunity to ask the students what could be done differently, and for the students to discuss it and solve the problem together as a group. The extent that these methods are enacted depends on the teacher and his or her experience with positive discipline methods.

3) Look for the Reason Behind Misbehavior

At the Creativa new interns and teachers are encouraged to look for the reasons behind the misbehaviors they encounter in students and to try to address those reasons. Also, the Creativa encourages its staff to make the distinction between the child’s behavior and the character of the child; the behavior is bad, not the child him or herself. It is not the job of the teacher or intern to make children feel bad, but it is important for the children to go through a process that teaches them to more carefully consider the choices they make concerning misbehaving. The logic in this is that when there is not an authority figure present the child will go through that process on her or his own.

4) Solutions, Not Punishments

The Creativa strives to enact a humanizing approach towards students who misbehave. This means that they find resolving problems much more productive than handing out non-related punishments, such as cleaning the school’s bathrooms. Students are encouraged to find solutions; often students create or are provided with different

scenarios to choose from. For example, after a fight between two soccer players during recess, some of the options raised by the students or offered by teachers could include writing a letter of apology to one another, neither student participating in the next soccer match, or spending time working with each other on a project.

Though I am not an expert on elementary education, I have learned from my multiple volunteer experiences in classrooms with children younger than ten years old that much of what takes place is the socialization of children. It is not so much about imparting abstract facts and algorithms and grammar rules, as it is about creating the ethic of care between children. For this reason, the preschool through fourth grade classrooms have a slightly higher power distance between the teachers and their students. In order to create a safe learning environment where all children can participate, respecting the teacher's authority and the teacher's behavior expectations becomes a more central part of the classroom experience. Without respect for the teacher, many younger children would not be able to develop their basic cooperation skills to the full extent of their ability. At the Creativa there is also strong emphasis on developing this ethic of responsibility and care towards the environment. Much of the typical school day in preschool through fourth grade revolves around teaching cooperation skills, conflict resolution skills, what it means have a responsibility such as a classroom chore or homework, and the idea of land stewardship.

As for my experiences with the class I taught at the Creativa, there was definitely a strong emphasis on community building skills between the fifth and sixth graders. During physical education time the teachers used games that revolved around the students knowing each others' names and working together. One example is how pre-chosen

teams of both fifth and sixth graders worked together to lower a stick without taking their fingers off it. The same teams also did relay activities with plates and balls that require patience and team encouragement.

Concerning the student-created class mission statements, I was impressed that the students were given the autonomy to decide how their classrooms should be run, and what rules everyone should follow. With the guidance of the teacher, students are given the ability to decide for themselves what acceptable behavior is; in doing so they make a personal investment in upholding the rules they decided upon. Because students make these decisions there is more personal ownership concerning school regulations and so there is less of a need to explain to younger children why certain behaviors should not be repeated. Along with building a sense of community in the classroom, class mission statements also actively involve students in their own educational process.

The net goal of positive discipline is to make the act of disciplining children less hierarchical, and to give students the opportunity to practice life skills that they will then be able to implement independently. By empowering students to try to solve their conflicts with different mediation skills, the kids get to learn necessary tools to living peacefully with others. In summary, the Creativa's approach to discipline demonstrates and enhances the school's commitment to experience-based, student-led education. Students are given the responsibility in creating solutions and actively learning from what otherwise could be negative experiences. In situations where punishments could simply be dealt out with little to no discussion of personal growth, instead there is a wealth of time put towards using misbehaviors as educational moments.

III. The Challenges of Implementing Empowering Pedagogy

Though my research mainly concerns the non-traditional, emancipatory methods of education used at the school, it also concerns itself with how those philosophies are put into practice. Like Freire's discussion of praxis, if educators speak of ideals without the "dimension of action... the word is changed into idle chatter" (Freire 87-88). For this reason, I found it necessary to not only look at how the Creativa's unique pedagogy was implemented, but also the multiple logistical factors that keep the Creativa from enacting their philosophies with as much consistency as they would like.

I visited the school at a time that has been considered a situation of financial crisis, as well as a time when there was a heavy loss of administrative and institutional knowledge due to staff turnover. It is my understanding from speaking with my homestay family, past volunteers, long time community members and teachers, and even my own students, that the Creativa has seen better days. There were times when teachers were better able to implement the ideals of the school, and when there were more human and financial resources to help make that happen.

In the past the challenges the Creativa has faced had a lot to do with establishing an institution. In its infancy the Creativa mostly dealt with issues of physical necessity. During my interview with Jean Godar (who has worked at the school for 13 years, in both administrative and teaching positions), she recounted how at one point the Assembly and Board did not even know if they would be able to buy the land from the Nature Conservancy on which they had started the school. In recent years, the physical resources of the school have grown tremendously. Thanks to the fundraising efforts of the Cloud Forest School Foundation, two buildings have been built in the last three years that

are home to five different classrooms, a computer lab, and five offices for administrators and special education tutoring. In contrast, years ago there was a time when several grades had to be taught outside in large plastic tents (in the pouring tropical rain and mountain winds) simply because the school kept growing and the construction fund did not. Today the school has three functioning buses and a well maintained road to the school. In the past there was only one barely functioning bus; at times to get up the hill to the school students were asked to jump up and down to get the bus out of the deep muddy ruts. The school library has continued to grow, and the school now has more books than ever before. There are also more administrative staff and two special education teachers (one teaches in English and the other in Spanish). Part of the structural growth and success of the Creativa in serving a large number of local students is due to the growth of economic activity in the Monteverde area in the last ten years, mostly thanks to an increase in ecotourism. Parents can afford to pay for private school and English fluency is a requisite for most of the better jobs in the tourism business. Also, with the economic growth there have been structural improvements such as consistent phone service and power, and improved roads.

Concerning the current challenges that the Creativa faces, one reoccurring topic that surfaced during my interviews was the high rate of staff and faculty turnover that the Creativa experiences. This has been a big challenge that has impeded the Creativa's consistent implementation of their empowering pedagogy.

Making a smooth transition between leaders in any organization is a challenge, one that I have first hand experience with. During my time spent as an activist for the OSU Queer/LGBTQQIA community, the issue of how to preserve institutional

knowledge was raised again and again. The creation of the OSU Pride Center as a safe space for queer individuals and their allies was a long and hard fought for accomplishment. Many of the student activists who worked extremely hard to make it a reality have graduated or are soon to graduate from OSU. With them they take their leadership experiences, and the oral histories of how their grassroots action originated. They also leave with their personal knowledge of how to run and organize a cultural center and its staff, how to recruit and organize volunteers for events, how to plan events, how to deal with reluctant administrators, hate language and hate crimes, and the dreaded OSU Student Fees Committee.

Now consider that the queer activist community of OSU changes leadership about once every four years. At the Creativa the turnover happens nearly every two years. Out of the 35 or so paid administrators and teachers at the Creativa, only six people have been working at the school for over eight years. Everyone else at the Creativa has only been teaching at the school for less than three years. A year or two is barely enough time to get a concrete understanding of how to teach in a non-traditional way and to start to grow as an emancipatory educator. Not many of the teachers who come to the Creativa have previous experience with this type of pedagogy, let alone teaching at an environmentally conscious school, or teaching in English to Spanish-speaking students. It is a lot to ask new teachers to learn and to implement this type of pedagogy in order to meet the Creativa's goals.

Part of the reason many teachers can not stay longer is the salary. The price of renting property and buying groceries in Monteverde is surprisingly similar to those expenses in Corvallis, Oregon; Monteverde is a very expensive part of Costa Rica to live

in if you are Costa Rican. The beginning wage for new teachers this year was \$380 a month and increased on a slightly inclining scale; one teacher, after 13 years of teaching at the Creativa, is earning \$580 a month. Though public health insurance is included while you are a teacher, the public medical system has notoriously long waiting lists. If you need any type of medical care, a private doctor is the only realistic option. Many of the teachers working at the Creativa are relying on personal savings to make it from paycheck to paycheck, to pay for flights home once a year, and to pay for the needs of their children. Realistically, unless a teacher marries a Costa Rican or buys property in Monteverde, it is very hard to survive on a teacher's salary for more than a couple years.

Monetary issues aside, it would still be very challenging to retain teachers from the United States for very long. Turnover will always be a problem because teachers want to go back to their home country and families. In fact, it is often hard for the Creativa to find teachers from the United States or Europe who are ready to commit for even a year or two of teaching in a foreign country. I visited the school during a year when very few qualified teachers—meaning certified teachers with several years of teaching experience—applied to work at the Creativa. Some of the teachers who were hired this year and in past years, had never been entirely responsible for a classroom before. Their first year at the Creativa was their first year of truly teaching. In addition to the trials of their first year of teaching, there were the added pressures of teaching in a foreign culture, teaching Spanish-speaking students, and learning how to teach in a non-traditional way. In these cases fatigue set in rapidly. More experienced teachers, who are generally older and have more responsibilities and obligations in their home countries, are not as often drawn to relocating their lives and families to Costa Rica for several

years. It has been suggested that the Creativa try to recruit local Costa Ricans who are fluent in English in order to create a more stable teacher and administrative base. However, generally, native English speakers are the ideal type of teachers and administrators that the Creativa wants to employ.

Another suggestion has been to recruit educators from those who have decided to make Monteverde their home, for there is a wealth of English speaking folks from all walks of life who have permanently established themselves up in the clouds. Yet another suggestion to attract educators that might stay for more than a few years is to advertise teaching at the school not so much as an “experience,” but as a serious career furthering pursuit. The Creativa tends to market itself as a place where ideals are realized in a type of summer camp atmosphere, when the reality is that the work is often rewarding, but also is extremely difficult and at times overwhelming. For this reason perhaps a more transparent account of the challenges the school grapples with will better prepare interested teachers. With a realistic understanding of the school’s challenges a reaction of disillusionment or disappointment might be avoided, and teacher turnover reduced.

There are other challenges that the school has faced and will continue to face. A problem that is currently being addressed by the school’s administrators is maintaining the financial base that is needed to support the school. The Director is working even now to secure the structural base, making sure the income to the school is stable. Also, there is a demand to set up a distinct and clear understanding of operational procedures, which have not been solidified because of frequent administrative turnover.

Jean Godar is the only teacher who has been with the school since almost its inception. The school was started in July, 1992, and Godar started teaching in July, 1993.

During her career she has taught second, third and fourth grade, was the Assistant Director, the Director, a special education teacher, and then went back to teaching first and second grades as a combined level classroom. In the last ten years of the school there has been a new director an average of every two years. Godar herself did not stay director more than two years, and many other directors move on largely because of the reactionary and chaotic nature of that administrative position. The turnover within the other administrative posts, as well as the director burnout, has caused a lack of established operational procedures. Without these, the new administrative staff is left to re-figure methods of staff management, payroll, school evaluation, hiring, etc. After nearly 14 years of existing, the Creativa has yet to establish a stable financial and operational institutional base. This reality greatly diminishes the amount of support and energy administrators can give to the teachers through class visits and guiding younger educators towards more empowering teaching methods.

The effect of these challenges is that the atmosphere of the school is often disorganized and energy levels are low; the staff and teachers often feel overworked. Also, because of the amount of new staff members each year, the students of the Creativa often remain the one constant in the school culture. They become the ones who carry the institutional knowledge of how things should run, how the philosophies have been enacted in the past, and how the new teachers should act. It has been suggested that in the future the Creativa could involve its students more with helping new teachers learn how to excel in their new environment. High school students could advise grade school teachers about how the curriculum was taught in the past. Also, there used to be a student government, and some teachers at the Creativa are considering reviving that tradition.

Through the student government, the older students would be able to take a larger part in managing their school (staff hiring, fundraising, construction projects)—a school that many of them have attended since preschool. All these ideas would help to further the mutual exchange of respect between teachers and students, as well as help meet the need for academic continuity within the school community.

The Creativa has recognized the need to address issues of institutional knowledge and to help new teachers teach consistently with the curriculum and philosophy of the Creativa. This year a new position was created to meet the specific need of helping new teachers enact the philosophies that the Creativa embodies; the position of Curriculum Coordinator is held by Amy Cherwin, who has been working at the Creativa for over eight years. Previously, the responsibilities involved with coordinating curriculum were taken on by the Assistant Director. By supporting the teachers and their growing understanding of how to apply the teaching philosophies of the Creativa, the Curriculum Coordinator acts as a stable bridge between the generations of teachers. Cherwin plans teacher conferences and staff training days, along with observing teachers in their own classes and advising on teaching methods. She also acts as a facilitator for the processes of curriculum evaluation, helping create specific benchmarks and academic consistency throughout the school. Her work so far as the Curriculum Coordinator has been indispensable, but at the time of my departure she was expecting to give birth to her first child later in winter of 2007. Though the school was looking for someone to fill her position, it would be impossible to replace her extended experience at the Creativa and her institutional knowledge. This is an example of how important human resources and institutional knowledge is to the Creativa. The school experiences ups and downs

depending on the people who are able to commit their time. Because the school is so removed from large pools of English speaking like-minded volunteers, young teachers, and people with administrative experience—the folks that universities in Oregon often team with—there is seemingly a scarcity of people with similar goals and philosophies to draw from.

For this reason, in recent years the volunteer and internship program has grown, and this has helped relieve the stress placed on the overworked full-time staff. The school's efforts are supplemented by the volunteered time, energy, and money contributed by interns and volunteers. To be an intern, one must commit to working at the school in a classroom as a teaching assistant for at least three months. To be a volunteer, one must commit to working with the land stewardship program for at least three weeks; this involves mostly outside manual labor. Without year-round interns and volunteers it is unlikely that the Creativa would be able to do as much as it does with its students and with its property. As an intern, it astounded me how much of the more child-centered activities simply could not be done without a classroom assistant. With so many goals and objectives it is impossible for the teachers at the Creativa to do everything on their own.

The atmosphere of the school is affected by the constant staff turnover in several ways. According to Godar, who has seen the school go through many ups and downs, "There is always a feeling of starting over at the beginning again." The teachers come in expecting to be listened to by their students, but really, why should a six- or eight- or 14-year-old listen to someone who has been in their town for only two weeks? Also, consider that generations of their adult mentors with whom they formed important

relationships have simply disappeared from their lives. My own students put me through a bit of a hazing period (I was on their turf, and I was made to realize that fact), but by the second month things were phenomenal; several students brought me into their confidence concerning important or troubling things in their lives. By the last month, when I started to prepare them for me leaving once their winter vacation started, many of them became very upset over the thought. I reassured them about how incredible my time with them was and that each of them had a place in my heart. From what I saw, the kids were exhausted from having to adjust and relearn expectation and styles of new educators, and to say goodbye to their past teachers and then just as suddenly say hello to new ones. With the type of curriculum the school wants to implement, it is very important to have a lot of trust in a classroom. When the students form bonds with teachers the classroom can truly become a stable learning community. The same is true with the connections between different teachers and different classrooms. The support that teachers give one another and the trust students have in their school is vital when trying to create a stable and connected educational institution.

As any young school, the Creativa is a work in progress. After almost 14 years of growing there is still much to accomplish and much future potential. One of the main reasons the Creativa is preferred over public education or other private schools in Monteverde is the extensive and intensive practice that students have with the English language. Also, because of the scholarship program, an education at the Creativa is a privilege that few other poor or middle class Costa Rican children can access. In the end, El Centro de Educación Creativa attempts to do more than any other school in the area; its environmental education program is unparalleled by local public and private schools.

Conclusion

My five months spent working for the Creativa gave me ample opportunities to see how the praxis of empowering pedagogy can be realized. By working in the fifth grade classroom, interviewing teachers and administrators, and reading about the philosophy of the school, I had a multifaceted research experience. The school and the Monteverde area are unique in that they both have been lucky to have passionate people devoted to preserving them. The educators of the Creativa do their part by trying to create environmentally and socially conscious, bilingual individuals who believe in their ability to enact change. For this reason, the lives of the students and teachers become very closely connected. There is something about the character of the area that lends itself to this familiarity. Perhaps this is due to Monteverde's remote setting and the fact that gossip is a major form of entertainment. Also, I could not help but get to know my neighbors and my students' families because I saw them everywhere I went. I am grateful for the privilege of being part of such a community, even though it was for only a short while.

What remains to be said is simply how hard this type of educational work can be. It is a process of deconstructing negative habitual ways of thinking and acting, as well as replacing them with sustaining and humanizing ones. This statement applies to both the students and teachers: teachers are asked to give some of their power over to their students, and students are asked to examine their lives and the real life implications of their actions. To ask both students and teachers to engage in empowering forms of education is to ask them to commit on a personal level to what happens in their

classroom. At its core, this approach to pedagogy is an approach to morality; by giving students the opportunity to be informed, through learning facts firsthand and practicing engaged behavior, they become prepared to make better choices. Through a conceptual and visceral understanding of what is just and right and good for themselves and their community, they become prepared to create change and live fulfilling lives. Naturally, this is a complex task.

In the case of the Creativa, I at first thought that its environmental education program would not have been so successful in an area less environmentally conscious than Monteverde. After further reflection, I think that the core goal of the Creativa can be shifted to fit any setting. It is not necessary to have broader cultural and institutional support for this type of transformative education to take place. In fact, since this type of pedagogy aims at challenging social norms, then it is in areas that need change the most that empowering pedagogy might be able to thrive. What does seem to be a requisite is a sense of community within such an educational setting. Without trust and respect between teachers and students, it is almost impossible for a truly empowering form of education to be realized.

Other settings where I have seen empowering pedagogy enacted were safe spaces created by educators within otherwise racist and sexist environments. These have included diversity camps, college classrooms, and trainings that taught students how to facilitate discussions that explore the “isms.” The success of these examples and the Creativa depended on the amount of trust and respect participants had for the process and one another. For this reason, there seems to always be a need to emphasize the role of community in this educational process. Additionally, it is important that the educators

who enact this type of pedagogy have a support system of other educators; at times it can be overwhelming teaching in this way. Through feedback and input from others, educators can better their approaches and deepen their insight about the process of conscientious education using empowering pedagogy.

One hope for this thesis started to develop while I was conducting my research: there seemed to be a need for more extensive communication of the priorities and philosophy of the Creativa to its staff. My research will be shared with the Creativa in the hopes that the administration can use it to introduce new teachers to the Creativa's unique pedagogy before arriving. I also hope that this thesis might serve as a resource for teachers at the Creativa who are interested in the philosophical underpinnings of the Creativa's approach to education. The explicit discussion of the school's philosophy and methods of implementation may also be useful to other educators interested in a real life example of empowering pedagogy and an educational non-profit in action.

If further research at the Creativa on the topic of empowering pedagogy were to take place (or if another school with an empowering pedagogy was to be researched), it would be interesting to interview students who had been part of the school since a young age. Over the course of my research, I came to see the students as having a wealth of information about the educational process of which they are a part. It would be worthwhile to ask students about the methods and philosophy the school pursues, and what effects they think the educational process they are part of has had on them.

Each student's perspective is important because of the inclusive nature of empowering pedagogy. If students feel pessimistic or overwhelmed because of their problem-posing/consciousness-raising education, then the school has not done right by

them. Conversely, if students still are not making the connections between the experiences they have at school and their everyday lives, then the process is failing them in another way. It is a tenuous balance between these extremes, but an achievable one, which can only be determined by the student's personal experience.

Trying to honor each student's creative and conceptual process, foster an ethic of care towards the environment, and teach students in their second language is a lot to try to accomplish. For the Creativa to try to do this without firmly established operational procedures, a stable team of skilled educators and administrators, and secure financial support is indeed a task for the brave. For an educator, trying to learn to teach in a different culture, with a non-traditional approach to education, and at a school that is grappling with multiple challenges, is no small feat. But, it has been for this very reason—this sense of adventure and service—that hundreds and hundreds of volunteers, interns, and teachers have been drawn to the Creativa to work with its students among the clouds.



(From left to right) Yasdani, Juan Luis, Marlon, Neeshmy, Scarleth, and I, their teacher in the Creativa's greenhouse.

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Appendix

Cloud Forest School Vision and Mission

Vision

Our vision is a sustainable future for the Earth through educating individuals to love, respect and protect the natural environment, to strive for justice and peace as well as academic excellence and to work towards conserving biodiversity and enriching community life.

Mission

Our mission is to nurture generations of ecologically aware, academically well-rounded bilingual individuals. We will work to provide students with the knowledge, values and skills needed to make environmentally and socially conscious decisions on a local, national and global scale.

Objectives of the CFS

- To discover and address the intellectual, emotional, physical and spiritual needs of each child in order to stimulate their creativity, natural love for learning, and sense of wonder about the world around them.
- To provide a strong interdisciplinary curriculum that incorporates environmental education in every way possible.
- To inspire and educate students to be caring, develop a strong sense of community and take an active interest in conservation and sustainability with a desire to contribute from local to global levels.

Our commitment is to:

- Provide well qualified staff and volunteers who model mutual respect and have the ability and desire to involve students in the maintenance of a rich and nurturing learning experience.
- Incorporate progressive teaching methodology using programs, techniques and materials that promote child centered learning.
- Remain flexible, keeping class-size small with each child learning at his/her own pace and in his/her own manner. Teachers will select materials and structure learning activities that support and extend students' active, hands on learning.
- Develop students proficiency in English and Spanish, giving them experiences that help them to understand other cultures and gain a perspective of local and global interdependence.

- Ensure that the fully integrated environmental education curriculum focuses on major ecological concepts and connects these processes to the daily lives of the students and their community.
- Provide a holistic program which includes – the arts, physical education and vocational studies.
- Involve student sin all aspects of caring the CEC property engaging them in the decision making and practice of land stewardship through study, work, play, reflection and relaxation.
- Ensure that the CECD works against discrimination in terms of race, color, religion, gender, sexual orientation, political preference, economic status or national, ethnic or social origin.
- Raise funds to guarantee the availability of scholarships and the optimal operation of the school as a non-profit organization.
- Provide educational opportunities for as many children and youth as possible while still maintaining the CFS mission and objectives.
- Share our resources and offer activities and workshops with other schools and organizations, in order to promote the mission of our school.

Overview

The Cloud Forest School, locally known as the Centro de Educación Creativa, is a bilingual school located in the tropical cloud forest of Monteverde, Costa Rica.

Over 90 percent of the students at our school are Costa Rican. Well over half of the students receive significant scholarships since their families' incomes are often less than \$500 per month. The school welcomes students from the community regardless of race, religion, national origin, ethnicity or economic status.

At the core of our goals is the need to provide the children of the region the necessary skills to negotiate the delicate balance between thoughtful economic development and environmental protection.

Cloud Forest School students feel a keen sense of responsibility as stewards of the forest. They are aware of the fragility as well as the biological significance of the cloud forest. In school, they study landscape, biodiversity, and conservation in many different ways and teachers incorporate the physical surroundings into every facet of the bilingual curriculum from science to art to math.

The campus is located on 106 acres of cloud forest, which was purchased from the Nature Conservancy, with the help of donations from friends and foundations. The

property consists of pristine forest and pastureland, the latter of which is slated for reforestation by our students, staff and volunteers. The living laboratory of the land surrounding the school is as vital an educational environment as its classroom buildings.

In garden plots maintained by each grade and on trails that wind through the forest, classes embark on journeys of exploration and discovery. There are few school settings where children so completely integrate experience, observation and formal learning into their lives.

School History

In the late 1980's in the mountaintop community of Monteverde, a group of Costa Rican and North American parents recognized a critical and immediate need for an academically sound, bilingual, environmentally-focused school for local children.

To meet this need, the Cloud Forest School was founded in 1991 with 30 students and since then has grown to its current enrollment of over 200 students in preschool through grade eleven.

A Brief Background

The Centro de Education Creativa/ Cloud Forest School is an innovative, private, bilingual, non-sectarian K-11 school serving rural children of Monteverde, Costa Rica. Founded in 1991 by local parents responding to a need to increase educational opportunities to a growing population of school-age children in the area, the CFS offers creative, experiential instruction to its students with an emphasis on integrating environmental education into all facets of the curriculum. Our mission is to encourage a new generation of ecologically aware, bilingual individuals with the skills and motivation to make environmentally and socially conscious decisions on a local, national, and global scale.

In its eleven year history, the CFS has grown from 30 students to a current enrollment of 200 in preschool through eleventh grade. The CFS model has been to add a grade each year. 94% of the students are Costa Rican and 6% foreign. The CEC welcomes students from the community regardless of race, religion, national origin, ethnicity or economic status.

The campus is located on 106 acres of virgin cloud forest, pristine forest and pasture land slated for reforestation. The land surrounding the school is as vital an educational environment as its classroom building. In 1992, the land was leased to the CEC on a buy-back basis by The Nature Conservancy. In June of 2000, the CEC finalized purchase of the land with the help of the Cloud Forest School Foundation, based in the USA. A conservation easement was built into the deed, permanently protecting this area containing virgin cloud forest.

The Monteverde area is composed of a small and interesting, multicultural group of Costa Ricans, foreign residents, and tourists drawn together by a magnificent tropical ecosystem. This community started out with five pioneering Costa Rican farming families who settled in this unbroken forest in the late 1940's. A decade later, a group of about 50 Quakers from the United States arrived in the area. These Quakers were drawn to Costa Rica because of the country's recent dissolution of its national army. The Quakers started dairy farming – and continue to run dairy farms and a cheese factory – and initiated the region's earliest conservation efforts by eternally protecting the headwaters of the river which runs through the community. The 1,300 acres protected by the Quakers is now the heart of the 26,000 acre Monteverde Cloud Forest Reserve, which in turn, is surrounded by the 40,000-acre international children's rainforest.

In the following years, tropical biologists and other conservationists joined the original families. In 1973, 200 people visited the, now famous, Monteverde Reserve. In 2000, over 50,000 tourists came to visit the cloud forest. As a result, our community has many new services and facilities for eco-tourists and scientists. The area has also become popular with Costa Ricans who are seeking greater economic opportunities and stronger educational possibilities for their children.

At the core of the CFS is a need to provide the children of the region with the necessary skills to negotiate the delicate balance between responsible economic development and environmental protection. In a local economy that is still quite rural, but increasingly dependent on eco-tourism, CFS students regularly interact with visitors from abroad as well as internationally renowned biologists and conservationists who study the regions.

Environmental Education at the CEC

“Must we always teach our children with books? Let them look at the mountains and the stars up above. Let them look at the beauty of the waters and the trees and flowers on earth. They will then begin to think, and to think is the beginning of a real education.” -David Polis

At the Cloud Forest School (CEC), we are dedicated to the spirit of the above quote. With 106 acres of classroom space at our fingertips, we strive to offer our students the opportunity to become immersed in the natural world. We seek to inform, inspire, and empower them to build positive relationships, make responsible decisions, and act for a better world in their present and future lives.

Environmental education at the CEC is firmly grounded in place-based education. Using our back yard as a springboard for investigating the social and natural communities that surround us, our students become more intricately connected to the land they call home. As a child-centered school, we believe in educating the whole person. Our environmental education program mirrors that philosophy; whether they are in the classroom or in the field, we consciously provide space for students to explore their thoughts and feelings, to develop their skills, and to expand their knowledge.

Goals of Environmental Education at the Cloud Forest School

1) Nurture a personal connection with, and respect for, the natural world. (K-3) (4-7) (8-11)

- Focus on local surroundings
- Spend time in nature: exploring, adventure, quiet time, class time
- Cultivate respect and appreciation for living and non-living things
- Learn basic components which make up biosphere and that support life
- Explore interconnectedness of all life and environments: human and natural

2) Build a solid base of knowledge about the processes, systems, and interactions that make up the natural world. (4-7) (8-11)

- Focus on local and national communities and ecosystems
- Investigate ecosystems and their unique natural processes and interactions
- Examine natural and human-caused changes to the environment
- Consider human behavior and nurture actions of personal responsibility
- Develop desire and provide opportunity to work for positive change via school and/or community projects

3) Increase awareness of past, present, and future issues of environmental and community sustainability. (8 – 11)

- Focus on local, national and global issues
- Identify similarities and differences in issues in Costa Rica and around the world
- Investigate and analyze causes and effects of human behaviors in a context of sustainable living

Cultivate the attitudes, values, and skills necessary to objectively identify and meet the challenges of today's world and work towards the creation and maintenance of an ecologically sustainable society.

Land Stewardship

Skills and Actions

The Cloud Forest School campus is a 42 hectare (106 acre) mosaic of decommissioned pasture land, primary and secondary tropical cloud forest, gardens and buildings – all of which serve to provide our students with the most distinctive learning environment in the Monteverde area. Unique not only to Monteverde, the CEC was the first private organization in the history of Costa Rica to receive a conservation easement (also known as a land trust), which protects our lands in perpetuity. The National Wildlife Federation designated the CEC as the first Schoolyard Habitat in Central America, and we are the only school that has membership in the Costa Rican Private Reserve Network.

As the caretakers of our precious property, all CEC students participate in quarterly land stewardship projects of their choice led by the land manager and/or the environmental education coordinator. The goal of these projects is to give students weekly hands-on, practical experiences with conservation actions such as reforestation, native plant propagation and landscaping, organic vegetable gardening, and trail maintenance. Our teachers play a vital role connecting the student's "outside" work with what happens within the classroom's four walls. Reducing solid waste, recycling, and composting become topics of class meetings as we strive to understand and improve our relationship with, and actions towards, the natural world.

Environmental Leadership Program

All CFS high school students participate in the Environmental Leadership Program, which aims to develop thoughtful citizens whose scientific understandings and personal values commit them to creating a better world. The four pillars of the program are:

1. Ethics and Identity

Students develop a personal moral vision which is the foundation for their actions and beliefs. Provided with a space for introspection, sharing and exploring ideas and values, students will acquire a unique mindfulness about growth, development, change and the human-nature interaction.

2. Ecological Literacy

Students investigate life-sustaining systems to develop profound understandings of the natural world. As scientific scholars and investigators, students will grow to be accomplished systems-thinkers.

3. Citizenship and Policy

Students learn how human systems of governance manage and impact the local, national and global communities, and develop the skills to advocate for intelligent decision-making. Through this process, students will mature into exceptional communicators, facilitators, and visionaries.

4. Service Learning

Students develop essential skills through effecting change in their community. Granted with opportunities to participate in positive actions, students will emerge as leaders who know how to make observations, ask questions, take initiative, work as a team, look for solutions, and solve problems.

ELP Course - All students are enrolled in the interdisciplinary ELP course.

Minicourses - Students are offered a variety of elective courses that aim to develop leadership skills. For example, all CFS high school students participate in a 6-week course on public speaking.

Internships – Our high school students choose quarter-long internships within the Cloud Forest School. Some of our students work directly with younger students in tutoring positions, while others work as general classroom aides. Other ELP students choose to work “behind the scenes” and spend an hour per week working on conservation projects, in the library; in the various administrative offices, etc.

Math Philosophy

Although knowing basic facts is a component to becoming a successful mathematician, the memorization of such facts and algorithms can limit the ability to see other options.

The Constructivist Philosophy works to incorporate the variety of skills needed to be an effective problem solver. Its pillars include:

1. Gaining confidence as a problem solver
2. Students creating their own understanding of mathematics at their developmental level
3. Looking for a variety of options to solve a problem
4. Analyzing strategies to find the one most accurate and effective for the problem/individual
5. Discussing strategies with other peers helps students grow and learn

The implementation of this philosophy can be seen in our classes through real life problem solving, students creating their own strategies to solve the problems, providing opportunities for students to talk with peers about the process used to solve the problem, and encouraging students to try a variety of strategies to solve the same problem.

We are currently using the program Investigations created by TERC to compliment our curriculum.

Special Education

The Cloud Forest School's special education program offers our students with special needs a unique opportunity to receive the individualized support that they need. Currently the school employs 2 special educators. Jennifer Lillis and Thelma Valencia work with 20 students with a wide range of disabilities. We also currently have one intern working one on one and in small groups with students.

Our special educators work closely with classroom teachers to develop a support plan that meets the needs of each child. They create individualized education plans which are used as a guide for developing instruction and measuring progress. Students receive support in reading, writing, mathematics, and vocational training in both Spanish and English. Thelma and Jenn work with students in their classrooms or in a separate location free from disruption. Both teachers have small classrooms of their own where they can meet with students individually or in small groups. As students with more severe special needs are getting older we are developing plans that will help them transition successfully out of school and into the community.

Elementary School Thematic Units

Our primary grade curriculum is designed around six socially or ecologically based units per grade level. In the classrooms, teachers creatively integrate themes of study into language learning, math, science, social studies and art.

First/Second Grade Cycle A

1. Myself, My Family, My Community
2. We are the Same, We are Different
3. World Cultures & the Environment: Nigeria
4. Respecting Living Things
5. The Interrelating of Life
6. Growth and Change

First/Second Second Grade Cycle B

1. Our Classroom Community
2. My Neighborhood, My Town
3. World Cultures & the Environment: Australia
4. Exploring the Earth: Soil and Plants
5. Exploring the Earth: Insects and Arachnids
6. Exploring the Earth: Amphibians and Reptiles

Third/Fourth Grade Cycle A

1. Caring for Aquatic Systems I
2. Caring for Aquatic Systems II
3. World Cultures & the Environment: Japan
4. The Cloud Forest Ecosystem I
5. The Cloud Forest ecosystem II
6. Mammals of Costa Rica

Third/Fourth Grade Cycle B

1. Exploring our Home: Mapmaking
2. Geography of Costa Rica
3. World Cultures & the Environment: Maya
4. Ecosystems of Costa Rica
5. Costa Rica's National Parks
6. Biomes of the World

Fifth Grade

1. Human Body Systems I
2. Human Body Systems II
3. Living Things & Their Environment
4. Conserving Natural Resources
5. Matter
6. Energy and Electricity

Sixth Grade

1. The Universe
2. History of the Earth
3. Atmosphere and Weather
4. Relationships in Nature
5. Human Body Review / Reproduction
6. Rites of Passage (test review)

Language Arts at the CEC

The Cloud Forest School has adopted the Workshop philosophy described by Lucy McCormick Calkins in her books The Art of Teaching Reading and The Art of Teaching Writing. It complements the mission of our school through working toward instilling a love of reading in each child, helping students to progress at their own rate, and requiring the students to analyze their reading and writing.

Reading and Writing Workshop

Daily Read Aloud is an important component to our Reading Program. It is used not only as an opportunity to expose students to a variety of literature, but also as a forum in which to practice reading skills. Skills such as prediction, making connections, and character analysis once practiced with the group can then be transferred to independent reading.

Mini-Lessons are another integral aspect of our Workshop time. These five to ten minute lessons model skills and provide time for students to practice them. Lessons range from topics such as classroom management; for example, how to check a book out of the library, what we do in buddy reading time, what should I do when I finish my book, etc. Lessons also support skill acquisition, such as making connections with your own experiences, using syllables to take apart a word, making and confirming predictions, etc.

While students read independently, teachers facilitate leveled groups in Guided Reading or Literature Groups. These groups meet from two to five times a week and work on reading skills in relation to the book the group is reading.

At the CEC we are all authors. We encourage our student authors to create their own topics for writing. Students begin by writing about what they know best: themselves. Through mini-lessons students learn about what makes a beginning that grabs interest, what details are important, and how to organize information so that it makes sense to the reader. Students learn to analyze their pieces and share quality criticism with others who ask. Students work through the editing process, improving weak spots, and publish pieces at least once a theme. During their primary school experience the students will pass through many genre studies including poetry, memoir, non-fiction, and short story.

Cloud Forest Conservation and the Cloud Forest School

Neotropical cloud forests are situated atop mountains where unusual climatic conditions interact to produce frequent mist and cloud cover. Year-round precipitation makes exuberant and diverse plant life possible, which, in turn, creates habitat for other unique organisms. One hundred years ago, the mountain ranges forming the “backbone” of Costa Rica were abundantly covered in evergreen forest, draped in the clouds. Since the construction of the Panamerican highway in the 1940’s, deforestation has eaten away at these habitats as people expanded agricultural areas and exploited forests for lumber. Luckily, Costa Rica’s present national park system and thriving ecotourist industry provide incentives and protection mechanisms for the remaining cloud forest.

In Monteverde, the economic as well as the intrinsic value of biodiversity are manifest; their importance is rarely questioned. Virtually every resident is in some way connected to the land, to ecotourism, to the forest. Monteverde is no utopia and there are some immense hurdles ahead for conservation and education. However, there are tangible signs of growing environmental appreciation, and of concern for people’s economic and spiritual well being. The Cloud Forest School is one such sign. The Cloud Forest School is privileged to own 106 acres of pristine cloud forest, legally protected by the first-ever conservation easement in Costa Rica.

Forest types

The two principal types of forest on the CEC property are known as Pacific slope premontane wet forest and lower montane wet forest (a type of cloud forest), both of which are endangered habitat types in Costa Rica. Premontane wet forest is relatively rare, having been lost to cattle and coffee farming. Lower montane wet forest occurs in isolated patches over various mountain ranges, and is threatened by climate change. On the CEC property, the building sites, regenerating areas, and other regions extending up to 1470 m are located on what was originally premontane wet forest. Above 1470 m, there is both pristine and regenerating lower montane wet forest.

Biological diversity

Premontane and lower montane wet forests are highly diverse in plant and animal life. Canopies commonly possess fruit-producing trees, including members of the Lauraceae, Symplicaceae, Sapotaceae, Fabaceae, and Moraceae, which are renowned for their mammalian and avian seed-dispersers and their involvement in complex species interactions. Lower montane wet forest harbors more orchid species than any other single habitat of the area, with well over 150 species. Eleven of these orchid species are endemic to lower montane wet forest; that is, they have never been found anywhere else.

Migratory organisms

CEC forest provides very important habitat for migratory organisms. Remnant forest patches and corridors along the Pacific slope are used by butterflies and birds, which move attitudinally according to seasons and food supply. Migratory birds of note that can be observed include Resplendent Quetzals, Three-Wattled Bellbirds, and Swallow-Tailed Kites.