Green from Concept to Rebirth

A Seminar
about Design
and
Environmental
Responsibility

Sharon McKenna

Thesis Committee Sign-off

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Sharon McKenna

5/15/01
Date

Green from Concept to Rebirth Dedication

I have spent the last year working on an idea that had been growing inside of me for a long time. For many years as I was growing up I knew that I had a social conscience, I just did not know how to face it, or channel it. Although many people have helped me reach my goals, one woman in particular asked me to do this for myself. She believed in the spirit that was inside of me and it was through her support and understanding that I also came to believe in that spirit. Her name was Wendy Berger, and she passed away in the summer of 2000, from a long and difficult illness. Although she is gone, her presence remains strong with me, and she is never far from my thoughts. This thesis project is dedicated to her.

I would also like to thank the following people for their ardent support for this project.

R. Roger Remington
Nancy Chwiecko
Dr. Nabil Nasr
Dr. Diane Hope
Barbara McKenna
Deborah Beardslee

Green from Concept to Rebirth

Project Designer	Sharon McKenna
Thesis Committee	R. Roger Remington Nancy Chwiecko Dr. Nabil Nasr
Resource people	Dr. Charles Plummer Wendy Brawer Dr. Diane Hope

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Thesis Project Definition

"A designer has always been also a teacher, in a position to inform and influence the client. With the current environmental mess it is even more important that we help to guide the intervention of design with nature and mankind. We must enlarge our own areas of knowledge, and at the same time redirect our ways of working."[1] Victor Papanek, one of the founders of the green design movement, speaks to the passion that designers hold for their industry, not to the assumption of guilt, anger, blame or indifference often felt about the environment. He knows that as professionals we have the ability to initiate change in the world around us. Paul Hawken, a leading author on business and the environment explains our obligation in very simple terms. "The impulse to enhance the economic viability of life on earth through the recognition and preservation of all living systems is one that is becoming increasingly central to religion, science, medicine, literature, the arts and women. It should be the dominant theme of generations to come."[2] There is no longer time for us to continue the patterns of over-consumption in a throw-away society.

Green design is a practice and philosophy in design, meant to bring awareness of designers' impact on the environment, and to work toward design applications that promote ecologically effective choices. Because of the efforts involved in applying green design, many designers may feel it is a burden. A change in awareness and attitude of the green design concept through education, communication, practicality and effectiveness, is imperative to the the future of design, not to mention, ultimately to the life of our planet. As the green design movement secures a position in the graphic design industry, there is a need for more information and education for both professionals and students in the field. As Papanek states, the environment is in distress. As Hawken states, the cause of this distress is due to the human tendency to over-consume. **Renewable** and **non-renewable resources** are dwindling at alarming rates due to this over-consumption. Because the design industry affects so much, it becomes the designers' responsibility not only to educate society, but to implement the green design philosophy. Human nature finds great difficulty in foreseeing the ramifications of overindulgence and/or overuse of even simple things such as paper, ink, or computers, etc. Changes proposed by the green design movement will come slowly since current methods may be more cost effective to the industry, (hidden costs are often absorbed by tax payers in the form of waste clean-up and medicine). Green design begins by addressing the issues of forming a reciprocal relationship with the environment. Seizing the opportunity to implement a change through education, especially education of youth, whose minds are fresh and willing, and whose vision may be clearer, will open a pathway to a faster paced change of awareness and acceptance of responsibility. This will preserve our planet for our future generations.

1. Victor Papanek, The Green Imperative
2. Paul Hawken, Ecology of Commerce

Please see the *Appendix One, section 13* for the thesis proposal, mission statement and block diagram. These will further assist in understanding the project definition.

Within the design industry, various disciplines interpret their responsibilities toward the environment in different ways. Other areas of design proved a good starting point in accessing information about green design. Many different definitions are used by designers to explain commitment to the idea of environmental responsibility.

The architectural and industrial design fields, in particular, were sources of much information about **sustainability** and **sustainable design**, having discussed and applied these concepts for many years. Victor Papanek wrote about them in depth in his first book, ***Design for the Real World***, first published in 1970, and again in his book, ***The Green Imperative*** published in 1997.

Looking at Paul Hawken's book, ***The Ecology of Commerce***, it is easy to understand that environmental responsibility is becoming a global concern. Hawken makes it clear that the business industry must take the initiative and change practices that have been in place since the industrial revolution. This information is validated in the bimonthly publication of Green@Work, a periodical dedicated to educating readers about environmental options.

It was important to find out that designers within graphic design, were concerned with green design. Little existed as concrete examples of this commitment in book form. Instead, the information was in small amounts, tucked within books that concentrated on other disciplines, or pamphlets, within larger periodicals. ***The Ecology of Design***, a book published by the AIGA, (American Institute of Graphic Arts), was one of the initial books located about green graphic design. This book was difficult to locate, and only through very determined searches did it become available. The struggle to obtain this information was an indicator of how much designers need to have improved access to the information of how their work affects the environment.

An existing studio utilizing the tenants of sustainable design is PRARIEfish, an interior design firm out of Chicago. This firm is dedicated to an earth based design philosophy. An article, entitled ***Red Path Design***, written by Richard Walthers, a principal of the firm, in Innovation Magazine, explains a synthesis between an environmental ethic and Native American Life-Way principals. Understanding the relationships between these two subjects adds another level of validation to this project. The message also communicates that the idea of environmental responsibility is not in any way new, but has been a concern among people for thousands of years.

EnvironDesign, a conference presented for designers of various disciplines, is the closest precedent to this thesis project, **Green from Concept to Rebirth**. *EnvironDesign* is a large gathering of industry leaders who come together to focus on learning about the environment, working to change harmful practices, striving to live in harmony with nature and technology, and spreading environmental concern. It is made up of small workshops and group lectures.

Based on current research, there are no existing models in place reflecting this thesis project, a program teaching design students about their effect on the environment.

Research Highlights

Green Design

The research began with a search for existing information on graphic design and its relationship to the environment. Through research, a high crossover with sustainable design is revealed. This was more theory based research than practical application.

Sustainable Design

Attempting to clarify and understand the difference between **green design** and **sustainable design**, research turned toward the areas of design offering information about sustainability.

Science & Nature

Finding a background in science necessary to comprehend more about the environmental impacts of design, an exploration of books and information teaching science basics began. Interest in discovering how other industries affected the environment and what was being done about their impact, found its roots in this category.

Paper, Ink & Computers

In order to relate the research back to graphic design an investigation of the impact of the tools designers use on a daily basis was implemented. This research was directed at practical applications rather than theory.

Ethics & Information

Ethics in design play a large part in the reasoning behind the area of industry that is concerned with the environment, and the area that is not. Information about **greenwashing** was rooted in this area of research.

Industry Leaders *Interviews*

Those leading the way to **eco-efficiency** and **eco-effectiveness** became a practical source to understanding and explaining that the green movement in design was taking hold and finding its respected position. Interview's began with those who were willing to talk about their involvement in this area of design. Informational searches were implemented on those unavailable for personal consultation.

Synthesis

An attempt was made to organize the research information into categories. These categories were ordered in a way believed to assist in overall comprehension and future communication.

The sections were as follows:

- History
- Definitions
- Key Players
- Green Design
- Paper
- Computers
- Science
- Resources
- Sustainability
- Green Studios
- Ink
- Articles

The topics all came back to the same base of information; everything has a life cycle. This is a scientific theory that applies to all aspects of life on earth. Nothing ever disappears, nothing ever goes away. **The Law of Conservation of Matter** played a major part in the way this project was researched and organized. That law states that matter on earth cannot be created or destroyed, it can only change in form or structure.

This means that nothing ever gets thrown away, and that the earth has all of the matter that it will ever have. Waste must be recyclable into natural systems if people want those materials to be returned to usable forms. Water, air, animals, paper, computers, designs, all have life cycles that are applicable and appropriate to life on earth.

The next step was a natural progression in the thesis project. The research and dissemination of the information would all relate back to **life cycles**.

Understanding the cycle of life, and approaching design opportunities with that in mind created a new spin on the way designers work, and the way people look at the world around them. This became the meaning behind the title, **Green from Concept to Rebirth.** A new dimension is added to the responsibilities designers have. Designers must continuously educate themselves and the design industry about the short and long term effects of the tools used and the life cycles of industry creations.

Eco-efficiency is a beginning step in the journey to sustainability. It is about greening the processes that designers use in their work. Eco-efficiency is only the first step, in order to make a real difference **eco-effectiveness** must follow. Eco-effectiveness uses nature as a model. It uses nature's ideas and processes to maintain creativity while also embracing nature's understanding of the concept of life cycles. For purposes of this project, understanding both of these terms is imperative. Knowing their differences and what that means to a designer's concepts, materials and processes can mean a totally different design ideology.

Finding the correct voice for the project's wealth of environmental and design information was a key point in the development of the thesis.

It appeared that the average designer lacked personal background knowledge about options for practicing ecologically effective design. If that knowledge was available, designers would be able to utilize principles of sustainability.

Many designers appear to be in this situation and realization of this drives the development of a program that would facilitate learning about environmental impacts of the design industry and choices that could minimize the ill effects of those impacts.

In considering the amount of information that would be important to impart, several potential avenues were considered. It appeared that a college course incorporating the information directed toward designers and/or students of design would be the best option. An interactive facilitation of information would allow for the exchange of ideas and enhance the transfer of this all important information to actual study and application. A greater range of people would be accessed through the vehicle of a teaching seminar. The information could be adjusted to accommodate different audiences and updated as new ideas and learning on this subject came to light in the industry. Since a seminar could remain amorphous, it could be made available to many levels of learning from students to practicing professional designers.

To relate to all of these audiences, the foundation of the seminar would have to include information that would make it valid and meaningful to a wide range of participants.

The definition of terms associated with eco-efficient design and the science behind the environmental concern would be imperative to the understanding of the seminar. Once those topics were explained and understood by the participants, the seminar could include information applicable to a particular audience. For example, if the current audience was a group of graphic designers, topics might point to paper usage and computer usage. With these specific examples, a discussion of life cycles and alternatives to current practices would ensue.

Feedback from the participants would be vital to the process; in particular, a feeling for what information would be taken away with them, and what practices they would be motivated to change based on the new information that was presented and discussed.

Intermediate Evaluation

Once the decision was made to use the seminar to disseminate information, an intermediate assessment of needs was accrued from various sources.

This assessment resulted from questioning peers, younger designers, and the thesis committee members.

Options for the format of the seminar, materials, topics, charettes, possible roadblocks, and participation perks and pitfalls were among the ideas discussed with the different groups.

Participatory became a keyword that was emphasized by committee members. The seminar needed to be *interactive* and *fun!* Knowing the desire for organization and structure easily could take over a program like this, it was pressed that the seminar would need to be organic in order to be successful, meaning the seminar and the information discussed would have to be based on the desires, questions and interests of those attending.

After polling peers and undergraduate design students, it became apparent that there was substantial interest in learning about design and its effects on the environment. When presented with the opportunity to attend the initial seminar, many were eager to do so.

As movement through the process progressed, self assurance grew with the consistent increase of interest from the potential audiences and the committee itself.

Implementation

After numerous drafts of a seminar plan *(see Appendix Two, section 13)* the seminar was scheduled and implemented. The audience consisted of a varied group of students and one professor. The education level of the students included all levels of design education ranging from freshmen to graduate students.

The seminar plan was meant to be used mainly as a guide, the actual seminar would be dictated by the interest level, participation and learning styles of the students. The hope was to maintain an environment where students felt comfortable expressing both their ideas and opinions about the topics being addressed. It was imperative for the seminar facilitator to remember that the participation of the students was valid and could be used as a teaching tool: an interactive approach from which everyone could learn.

The two pages that follow include the final seminar plan used and the image documentation. An example of a participatory game used in the program is located in *Appendix Three, section 13.*

Timing	Title	Description	Objective
5:00 – 5:10	Slide Introduction	Slides of environment contain messages of state of environmental distress of the earth, identity, seminar name, designer name and keywords Create own name tags and symbols *(Individual activity)*	Slides and messages serve as an environ wake up call. Contain info about current distress. Pneumatics created by students with env. symbol to give intrinsic value to being a seminar participant.
5:10 – 5:20	GAME #1 Find Someone Who...	Students seek out others using certain environmental requirements, ex. "Find someone who knows what PCF paper means." *(whole group activity)*	Awareness- How often to we think about these issues in our daily design life? Responsibility- Why don't we think about these issues in our daily design life?
5:20 – 5:45	Seminar Introduction Definitions	Objectives of seminar, personal motivation, and sample products. THIS WILL BE FUN! Definitions of Green Design and Sustainable Design *(instructor teaches)*	What I hope students will get out of this seminar, what they will walk away with. Introduce participants to topics.
5:45 – 6:00	GAME #2 Green Design Brainstorm Splash	Ask participants the question "What impact do designers and future designers have on the public?" Participants give suggestions, and seminar leader offers existing quotes to back those suggestions up. *(whole group activity)*	Asking for suggestions from participants helps to make them feel their opinions/ideas are valid. Using existing quotes goes further to encourage their ideas and participation. Quotes on Power Point.
6:00 – 6:10	Group Introductions	Participant names and explanation of symbol. *(whole group activity)*	Name tags with personal symbol designed by participants helps to give meaning to seminar.
6:10 – 6:30	Life Cycles Alternatives. Why am I giving you this information?	Ask for definition from participants, offer definition Science, Cradle to Grave Cradle to Cradle, Bill McDonough Today, Possible future Alternatives to what we have now, tied into life cycles, examples in our field. Culmination. *(group discussion)*	Participants will demonstrate the ability to understand the importance of life cycles. Encourage critical thinking about how we can change industry practices, and have alternatives to tomorrow.
6:30 – 6:45	BREAK	BREAK Refreshments offered	BREAK
6:45 – 7:00	Upstream and Downstream	Look upstream and downstream from your computer. What do participants know about this? Groups to determine life cycle of computers, upstream and downstream. *(small group activity)*	Participants will recognize that all products have a cycle from the earth to the earth. Individuals will move around to 5 different stations and mark charts with their ideas of upstream and down. Round Robin fashion to be able to learn from other participants. Facilitator supplies paper with comp icon.
7:00 – 7:15	What can you do? Talking about Paper	Questions that you can ask, things you can take control over. Input from participants. *(instructor teaches)*	Student will demonstrate the ability to identify personal possibility/opportunity to affect change.
7:25 – 7:45	Debriefing Evaluations	What do you feel this seminar has covered? *(small group activity)* Handouts	Students create mindmap of most valuable points of seminar, most significant info, what could affect greatest change, how impt on scale of 1 - 5 for designers, recall info from slides, hang up, review other groups, one rep. from group presents. Evaluations

The following images were taken to document the seminar.

Designers have the ability to affect perception! Think about that, it is a great responsibility, how are you going to handle it?

These theories are not new! There have been designers in our industry talking about these ideas for years.

What happens upstream and downstream from your computer? Consider everything you can possibly think about!

Each of us has to use our abilities and imagination to make changes in the way our industry works.

Dissemination

One of the primary reasons this thesis project application developed into a seminar was the flexible format which offered the opportunity to keep information up to date and changeable. This directly relates to the way environmental information is constantly being updated and reassessed. The seminar can be kept fresh and on the edge of both science and design technology to assure its validity as a source for eco-design information.

All areas of the design industry have an effect on the environment, and because of this, the extent of information to be disseminated to students and designers is abundant. This information could easily be translated into many different formats.

There is a great potential for courses in this area, ranging from a more science based understanding of the life cycles of the designs we create, to studio classes where the ideals of eco-efficient design are taught, experimented upon, and implemented.

A text written about the ideals of the seminar would be easily justified, but due to the content of the seminar, and the rate of change in technology and information, a website might better serve the need for consistently changing content.

The current state of the environment is such that this information is as valid to designers as any of their basic skills. There is no concern that the motives or information will go out of date or style. As new technology emerges, there will always consistently exist a need to learn how to manage that information responsibly and in a way that is healthy and harmonious to nature and humans alike.

Retrospective Evaluation Part One

Immediately after attending the seminar, students were asked to fill out a formative evaluation. They were asked a variety of questions, and asked to comment on their experiences, those comments are as follows:

See Appendix 4, Section 13, for formative evaluation form.

"Sharon! Thanks! You really opened my mind up to new, important things that need to be considered very seriously in design."

"Good job, you were both general and specific about information."

"This seminar was MUCH more interesting than I thought it would be. It motivated and inspired me!"

"Very informative, I enjoyed it."

"If this was a class, I believe it would be better for upperclassmen. Very good presentation."

"Listening to this seminar really made me think and I feel that it will help me as a future designer."

"I really want a class like this here. I think that all designers should know about this information, it is definitely important."

"Splendidly executed! Your presentation of the information was very appropriate. Well done!"

"Very impressive, great use of visual references, wonderful speaking flow, maybe you could consider talking about one more important item, besides computers and paper."

"I feel that this seminar was very informative and needs to be made available to others who care about how our choices and actions affect our surroundings."

"Very informative, obviously a great deal of research done."

"I think the seminar was pretty good, but I would have like to have heard more stats, more about process and perhaps some more photos or graphs used in the slide presentations, more visuals and facts!"

"I feel the most important think I learned was that designers have the power to influence others."

"Use fear as a tactic!"

Evaluation continued in the form of the Graduate thesis show. At the show's opening, feedback came from various individuals wholly unconnected with the project. Responses were very positive about the content of the project and many expressed an interest in seeing the information developed into a course for students.

Meetings within the gallery with committee members furthered the initial evaluation, along with discussion of a second seminar, tested with a different audience.

A summative evaluation follows the seminar. It is sent out to participants approximately two to three months after attending.

See Appendix 5, Section 13 for summative evaluation form.

A second seminar was planned for the project, with the purpose of fine tuning both the presentation and timing. An evaluation with committee members was conducted to review how the seminar might be altered for different audiences. For example, how the information would change when presented to students in interior design or another area of the design industry. Unfortunately, because of the timing of the institute quarter, an audience was unavailable to participate for testing. An alternate exercise was planned in conjunction with RIT's Center for Integrated Manufacturing Studies (SIMS) presentation for Earth Day. The audience invited was to be high school and middle school students from the surrounding area. Again, possibly due to the school calendar and other conflicts, the project had to be cancelled for lack of participation and outside involvement.

Long term interest in this topic has made the potential for this project expansive. The seminar and content are valid to all designers and there is a need for this information to be talked about, taught, and practiced. This need can be served in the form of a green design consultation business, one of many possible paths this project has engendered.

Conclusion

UNLESS someone like you
cares a whole awful lot,
nothing is going to get better.
It's not.
—*The Lorax*[1]

This thesis project, **Green from Concept to Rebirth** was overall, an excellent and very valuable experience. It was a fortuitous opportunity to focus on two topics that engender great passion in people; the environment and design. This project offered the challenge to channel those passions into one undertaking, while applying them to the path that could be very valuable to the future of the industry.

Support for this project was never in question, rather it was given freely, along with time, and resources. Both students and faculty were very willing to assist at any juncture in the process. Participation in the seminar by students was volunteered without protest, a validation that the information and content were important to them.

At many different intervals within the project process, it was essential to call upon members of the design community for opinions, ideas, feedback, etc. There was not any point where the project ideas were devalued.Instead, the project was looked at as ammunition for the "green army," and information was given freely to help the seminar grow in strength. This positive response from the design industry was vital to the success of this thesis project.

Based on the evaluations of the students who attended the seminar, it can be concluded that there is a wealth of opportunity and interest, to advocate change within the design industry. Students were always eager to listen and to learn. Just recently a freshman design student who had attended the initial seminar reported that she had adapted some of the information she had learned to a project for one of her classes. That validation was enough to make the entire thesis project worthwhile.

All that can be hoped for with this seminar, which will be further developed and applied, is to plant the seed of an idea with those that attend. If even one designer walks away with the desire to implement design changes beneficial to the environment, all efforts have been successful.

1. Dr. Suess, Suess-isms, *Wise and Witty Prescriptions for Living from the Good Doctor*

eco-effective

uses nature's ideas and processes to maintain creativity while embracing nature's understanding of the concept of life cycles and waste

eco-efficiency

the delivery of the maximum benefit to the user, with the minimum use of resources and the least possible environment damage

Green Design: Design for the Environment, Dorothy MacKenzie

eco-design

any form of design that minimizes environmentally destructive impacts by integrating itself with living process

Ecologic Design, Sim Van Der Ryn

ecologically efficient

practices that consider their impact on the earth's environment

ecosystem

the interacting system of a biological community and its non living surroundings

effluent

the chemical runoff resulting from the paper making process, found to have serious environmental and health impacts

ECF (elemental chlorine free)

papers made from fibers processed with a derivative of chlorine, such as chlorine dioxide

environmentally responsible design

. . .communicating your message without causing confusion. . .about adding quality to information. . . about finding solutions that accomplish your goals without creating waste or squandering natural resources. . .about finding solutions that accomplish your goals without creating or squandering natural resources. . . about creating value and sustainability instead of clutter and disposability. . .

The Ecology of Design, John Ortbal, Mike Lange & Michael S. Carrol

global picture	considering the whole system of the earth and it's environment
green design	a practice and philosophy in design meant to bring awareness of designers' impact on the environment, and to work toward design applications that promote ecologically efficient and ecologically effective choices.
greenwashing	a public relations tactic using the language and messages of environmentalism, often used to cause pubic confusion about which products are and are not environmentally sound
life cycle	the phases, changes or stages that matter passes through in its lifetime.
non-renewable resources	resources that are finite in availability
over-consumption	the act of consuming more than is appropriate for each individual when compared to the supply that is available
PCF (process chlorine free)	papers that do not include fibers processed with chlorine or its derivatives in the current production process– recycled content may contain fibers that were previously bleached with chlorine
PCW (post consumer waste)	consumer waste, as in paper, that has been recycled into another paper
renewable resources	resources that are estimated to have an infinite supply
sustainability	meeting today's needs without compromising the ability of future generations to meet theirs. *Will Swensen, "Defining Sustainability," Green@Work Magazine*

sustainable design

a practice and philosophy meant to minimize our impact on the environment and sustain the earth for future generations of all species.

Nancy Chwiecko, RIT Professor

TCF (totally chlorine free)

papers bleached without the use of chlorine or chlorine derivatives

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GREEN DESIGN

A Seminar about
Environmental Responsibility

Planning Report
Fall 2000

Designer:
Sharon McKenna

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	Dr. Nabil Nasr
Resource team	Charles Plummer
	Wendy Brawer
	Dr. Diane Hope

Green design is a practice and philosophy in design meant to bring awareness of designers' impact on the environment, and to work toward design applications that promote ecologically efficient choices. For this thesis I propose to develop a participatory seminar on green design which will be used as an educational tool to communicate this subject to designers. Included in this seminar will be information on the history, theories and practices of green design, and charettes and games to involve and challenge the participants.

This thesis application will involve identity design, print and interactive media in order to promote learning in the concepts and direction of green design.

"A designer has always been also a teacher, in a position to inform and influence the client. With the current environmental mess it is even more important that we help to guide the intervention of design with nature and mankind. We must enlarge our own areas of knowledge, and at the same time redirect our ways of working."[1] Victor Papanek, one of the founders of the green design movement, speaks to the passion that designers hold for their industry, not to the assumption of guilt, anger, blame or indifference often felt about the environment. He knows that as professionals we have the ability to initiate change in the world around us. Paul Hawken, a leading author on business and the environment explains our obligation in very simple terms. "The impulse to enhance the economic viability of life on earth through the recognition and preservation of all living systems is one that is becoming increasingly central to religion, science, medicine, literature, the arts and women. It should be the dominant theme of generations to come."[2] There is no longer time for us to continue the patterns of over-consumption in a throw-away society.

Green design is a practice and philosophy in design, meant to bring awareness of designers' impact on the environment, and to work toward design applications that promote ecologically effective choices. Because of the efforts involved in applying green design, many designers may feel it is a burden. A change in awareness and attitude of the green design concept through education, communication, practicality and effectiveness, is imperative to the the future of design, not to mention, ultimately to the life of our planet. As the green design movement secures a position in the graphic design industry, there is a need for more information and education for both professionals and students in the field. As Papanek states, the environment is in distress. As Hawken states, the cause of this distress is due to the human tendency to over-consume. **Renewable and non-renewable resources** are dwindling at alarming rates due to this over-consumption. Because the design industry affects so much, it becomes the designers' responsibility not only to educate society, but to implement the green design philosophy. Human nature finds great difficulty in foreseeing the ramifications of overindulgence and/or overuse of even simple things such as paper, ink, or computers, etc. Changes proposed by the green design movement will come slowly since current methods may be more cost effective to the industry, (hidden costs are often absorbed by tax payers in the form of waste clean-up and medicine). Green design begins by addressing the issues of forming a reciprocal relationship with the environment. Seizing the opportunity to implement a change through education, especially education of youth, whose minds are fresh and willing, and whose vision may be clearer, will open a pathway to a faster paced change of awareness and acceptance of responsibility. This will preserve our planet for our future generations.

1. Victor Papanek, The Green Imperative
2. Paul Hawken, Ecology of Commerce

" These dangerous times for Earth call not just for passion, imagination, intelligence and hard work, but –more profoundly– a sense of optimism that is willing to act without a full understanding, but with a faith of small individual actions on the global picture"
—Victor Papanek, The Green Imperative

The design industry is in may cases unaware of the effect that it has on the environment, even in relation to simple things such as ink, paper, and computers. There is currently a shortage of information and understanding about the importance of that ecological effect. green design is a practice and philosophy in design meant to heighten awareness of designers' impact on the environment, and to work toward design applications that promote ecologically efficient choices.

To meet this problem, I am proposing to create a thesis project on green design. Included will be a participatory seminar, and other informational materials explaining green design through a learning process. The seminar will be used as a teaching tool, a way to inspire, and an environmental alert to design students and professionals in attendance.

The goal of the thesis is to understand green design, to learn its applications, to analyze the philosophy, to synthesize through the creation of new applications and to evaluate practices past, present and future, and to interpret that information in an educational setting.

This thesis project, titled "Green from Concept to Rebirth," may include:

- a teaching seminar about green design

Materials:

- identity design for the program
- a solid definition of green design
- what green design means to the graphic design industry
- the historical significance of the movement
- theoretical ideas, current research and developments
- key players past, present and future changes affected by green design reform, and future inspirations

Revised Mission Statement:

"Green from Concept to Rebirth," is an educational seminar based on green design and sustainability. Participants will be encouraged to become intrinsically motivated, to learn the importance of a sustainable environment, and to heighten their awareness of responsible choices and alternatives as they design.

Goals, Objectives, Processes:

1. To construct an educational seminar that will examine green design, explain its theories and practices and communicate them to an audience.

a. to identify, research, collect and explain the theories of green design to seminar participants
   1. to challenge participants with games to further their green design comprehension
   2. to use various methods of teaching, ex. lecture, group charettes, video presentation

b. to communicate the importance of green design and how it applies to graphic design
   1. to cite historical references and key players in the the industry
   2. to explain future endeavors of green designers

c. to explain the need for green design
   1. to develop an instructional program utilizing educational and communication materials, techniques and technologies including historical information, current research and development, theoretical ideas, key players in the field, etc., to explain green design
   2. to show results of the green design movement

Mission Statement:

"Teaching and Learning about green design," is a graduate thesis project that will explore the topic of green design so that it can be a learning experience for an audience to the end that beliefs and habits about green design will change.

Goals, Objectives, Processes:

1. **To assist in developing an informed and competent design citizenry able to adapt to and utilize ecologically efficient green design practices.**

a. to motivate designers to identify current practices that are ecologically inefficient, and to change those practices
   1. to offer different options for design output
   2. to ask ethical questions about what green design means to designers

b. to provide an occasion for dialog about the need for green design in graphic design
   1. to understand the need for green design
   2. to teach designers to communicate green design theories and practices to other designers

c. to explain the responsibility of graphic designers to adopt and continue to communicate the theories and practices of green design to other industries
   1. to assist in understanding the concepts of green design, and furthering designers' knowledge of communicating those theories
   2. to identify publications and organizations that are design related and ecologically friendly

2. **To develop inventive approaches for communication and understanding about green design from designers to their clients.**

a. to instruct designers on how they can effectively communicate the need for green design to their clients
   1. to explain sustainable design and what it means to graphic designers and to their clients
   2. to assist in identifying "green wash," a term that identifies companies that falsely label themselves green
   3. to provide examples of future environmental problems due in part to the lack of green design

b. to teach designers that they can find options other than standard design procedures
   1. to give seminar participants a green design resource guide for them to use
   2. to show examples of how green designers are currently using green resources

3. **To construct and educational seminar that will examine green design, explain its theories and practices and communicate them to an audience.**

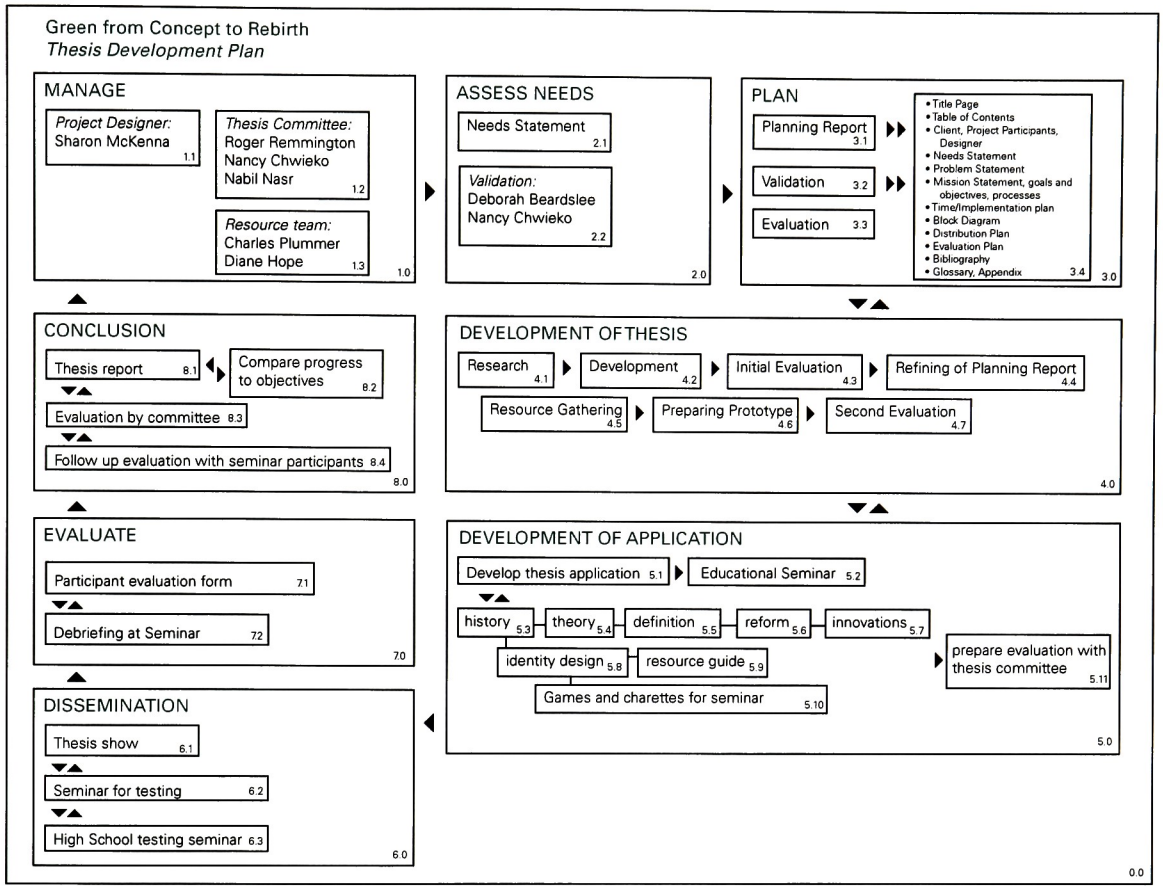
a. to identify, research, collect and explain the theories of green design to seminar participants
   1. to challenge participants with games to further their green design comprehension
   2. to use various methods of teaching, ex. lecture, group charettes, video presentation

b. to communicate the importance of green design and how it applies to graphic design
   1. to cite historical references and key players in the the industry
   2. to explain future endeavors of green designers
c. to explain the need for green design
   1. to develop an instructional program utilizing educational and communication materials, techniques and technologies including historical information, current research and development, theoretical ideas, key players in the field, etc., to explain green design
   2. to show results of the green design movement

4. To evaluate this thesis project to see that it has met its intended goals

a. to compare the actual seminar to the projected goals
   1. to utilize the planning report for comparison purposes
   2. to use feedback of seminar participants
b. to work with the thesis committee to evaluate the project
   1. to conduct actual seminar to committee
   2. to receive feedback about seminar from committee
c. to provide educational test audience the opportunity to evaluate the seminar
   1. to develop an evaluation form for participants to fill out immediately after the program
   2. to develop a 2nd follow up evaluation form to track the lasting results of the program

Thesis Plan		RIT/Calendar	
Sept 6	**Classes Begin** **Problem Identification**	Sept 6	**Classes Begin**
Sept 25	**Proposal due** Start Planning Report		
Nov 19	**Research and Analysis** research library research information gathering ideation research		
Nov 22	Thanksgiving Break	Nov 22	Thanksgiving Break
Nov 30	**Winter Quarter Begins**	Nov 30	**Winter Quarter Begins**
Dec 21	Christmas Break	Dec 21 Dec 25 Jan 1	Christmas Break Christmas Day New Years Day
Jan 3	**Synthesis** organizing	Jan 3	Classes resume
Jan 20	**Ideation** preliminary design		
Feb 18	**Evaluation** summarizing feedback		
Feb 28	Spring Break	Feb 28	Spring Break
March 12	**Spring Quarter Starts** **First Thesis Show** Sharon McKenna Tara McVean Lisa Bodenstadt Becky Biddle	March 12	Spring Quarter Starts First Thesis Show Sharon McKenna Tara McVean Lisa Bodenstadt Becky Biddle
March 15	**Implementation** refinement development preparing final works		
April 2	**Second Thesis Show** Tanya Harding Yasmin Jung Frank Marino Christine Beckley	April 2	Second Thesis Show Tanya Harding Yasmin Jung Frank Marino Christine Beckley
April 15	**Retrospective Evaluation** summarizing feedback completing thesis report		
May 26	Graduation	May 26	Graduation


Green from Concept to Rebirth
Thesis Development Plan
MANAGE
Project Designer: Sharon McKenna 1.1
Thesis Committee: Roger Remmington Nancy Chwieko Nabil Nasr 1.2
Resource team: Charles Plummer Diane Hope 1.3
1.0
ASSESS NEEDS
Needs Statement 2.1
Validation: Deborah Beardslee Nancy Chwieko 2.2
2.0
PLAN
Planning Report 3.1
Validation 3.2
Evaluation 3.3
• Title Page
• Table of Contents
• Client, Project Participants, Designer
• Needs Statement
• Problem Statement
• Mission Statement, goals and objectives, processes
• Time/Implementation plan
• Block Diagram
• Distribution Plan
• Evaluation Plan
• Bibliography
• Glossary, Appendix 3.4
3.0
CONCLUSION
Thesis report 8.1
Compare progress to objectives 8.2
Evaluation by committee 8.3
Follow up evaluation with seminar participants 8.4
8.0
DEVELOPMENT OF THESIS
Research 4.1
Development 4.2
Initial Evaluation 4.3
Refining of Planning Report 4.4
Resource Gathering 4.5
Preparing Prototype 4.6
Second Evaluation 4.7
4.0
EVALUATE
Participant evaluation form 7.1
Debriefing at Seminar 7.2
7.0
DEVELOPMENT OF APPLICATION
Develop thesis application 5.1
Educational Seminar 5.2
history 5.3
theory 5.4
definition 5.5
reform 5.6
innovations 5.7
identity design 5.8
resource guide 5.9
Games and charettes for seminar 5.10
prepare evaluation with thesis committee 5.11
5.0
DISSEMINATION
Thesis show 6.1
Seminar for testing 6.2
High School testing seminar 6.3
6.0
0.0

3.0 PLAN

Inputs	Processes	Outputs
Resources Project Designer: Sharon McKenna Thesis Committee: R. Roger Remington Nancy Chwiecko Nabil Nasr Resource People Charles Plummer Wendy Brawer	**Activities** Asses Needs Validation: Deborah Beardslee Nancy Chwiecko	**Outcomes** Planning Report Title Page Table of Contents Client, Project Participants, Designer Needs Statement Problem Statement Mission Statement, Goals, Objectives, Processes Time/Implementation Plan Block Diagram Distribution Plan Evaluation Plan Works Cited Glossary, Appendix
1.0	2.0	3.0

4.0 DEVELOPMENT OF THESIS

Inputs	Processes	Outputs
Resources Planning report Advisor Validation Advisor Evaluation	**Activities** Research Development Initial Evaluation Refining of Planning Report Resource Gathering Preparing Prototype Second Evaluation Evaluation with Thesis Committee	**Outcomes** Research history theory definitions reform innovations identity design resource info game plans charette plans Evaluation with Thesis Committee
3.0	4.0	5.0

5.0 DEVELOPMENT OF APPLICATION

Inputs	Processes	Outputs
Resources thesis application ideas develop planning report Advisor Validation describe needs compare previous learning with new to develop idea Teaching and Learning about green design	**Activities** Educational Seminar • history • theory • definition • reform • innovations • identity design • resource guide Evaluation with Thesis Committee	**Outcomes** awareness appraisal presentation distribution of thesis methodology learning experience for seminar participants Evaluation with Thesis Committee
4.0	5.0	6.0

Dissemination Plan

Thesis Show

The thesis show will serve as a way of accessing a totally different view of my thesis topic. Due to the mix of people who attend the gallery show, I will be able to gather feedback and evaluation of a different nature than just seminar participants.

Seminar

The seminar, which is the major application of the thesis project, will be conducted for an audience of design students. Organizing the information and presenting it in a manner that is exciting, as well as a learning experience is one of the main goals for this project. Evaluation of the seminar and its content, by the audience will be a major consideration of how it is revised and conducted in the future.

High School Seminar

In the future I would like to be able to adapt the thesis topic green design, and its seminar to various audiences. One of these audiences could contain high school students. They are the next generation of designers, so the information is appropriate to many of them. Evaluation from this audience will be very beneficial to future seminars that have audiences other than graphic designers. Another example could be students in elementary school.

Evaluation Phase 1 Plan

Question: Is my planning report practical for implementation?
Strategy for evaluation: record my own behavior
collect self ratings

Evaluation Phase 2 Development of Thesis

Question: Have I followed the goals, objectives, processes and strategies that I mapped out in my planning report?
Strategy for evaluation: observe and record
record my own behavior
analyze my existing work

Evaluation Phase 3 Development of Application

Question: How does my application relate to the original thesis proposal?
Strategy for evaluation: observe and record
analyze product

Question: Do seminar participants feel that the application was pivotal in their understanding of green design and its concepts and practices?
Strategy for evaluation: conduct a survey
administer an objective test
collect ratings

Hawken, Paul. *The Ecology of Commerce: A declaration of sustainability.* New York: HarperCollins, 1993.

Papanek, Victor. *The Green Imperative: Natural Design for the Real World.* New York: Thames and Hudson, 1995.

Theodore, Louis, Reynolds, Joseph, Morris, Kevin, ed. *Concise Dictionary of Environmental Terms.* Netherlands: Gordon and Breach Science Publishers, 1997

Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations, 6th ed.* Chicago: The University Press of Chicago, 1996.

Wilson, Edward O. *In Search of Nature.* Washington D.C.: Island Press, Shearwater Books, 1996.

Van Der Ryn, Sim and Stuart Cowan. *Ecological Design.* Washington D.C.:Island Press, 1996.

Wann, David. *BIOLOGIC: Designing with Nature to Protect the Environment.* Boulder, Johnson Books, 1994.

Wann, David. *Deep Design: Pathways to a Livable Future.* Washington D.C.:Island Press, 1996.

ecologically efficient	practices that consider their impact on the earth's environment
ecosystem	the interacting system of a biological community and its non living surroundings
global picture	considering the whole system of the earth and it's environment
green design	a practice and philosophy in design meant to bring awareness of designers' impact on the environment, and to work toward design applications that promote ecologically efficient choices.
non-renewable resources	resources that are finite in availability
over-consumption	the act of consuming more than is appropriate for each individual when compared to the supply that is available
renewable resources	resources that are estimated to have an infinite supply
sustainable design	a practice and philosophy in design meant to minimize our impact on the environment and to sustain the earth for future generations

Seminar Plan A, initial draft

Timing	Title	Description	Objective
1:00 – 1:10	Slide Introduction	Slides of environment contain messages of state of environmental distress of the earth. Create own name tags and symbols	Slides and messages serve as an environ wake up call. Contain info about current distress. Pneumatics created by students with env. symbol to give intrinsic value to being a seminar participant.
1:10 – 1:20	GAME #1 Find Someone Who...	Students seek out others using certain environmental requirements, ex. "Find someone who knows what PCF paper means."	Awareness- How often to we think about these issues in our daily design life? Responsibility- Why don't we think about these issues in our daily design life?
1:20 – 1:45	Seminar Introduction Definitions Timeline	What is upcoming in seminar. Definitions of Green Design and Sustainable Design Historical timeline of some of environmental movement leading up to these topics	Quick overview of seminar, prep, event, and debriefing. Introduce participants to topics. Demonstrate that movement is grounded and has historical significance.
1:45 – 2:00	GAME #2 Green Design Brainstorm Splash	Ask participants the question "What impact do designers and future designers have on the public?" Participants give suggestions, and seminar leader offers existing quotes to back those suggestions up.	Asking for suggestions from participants helps to make them feel their opinions/ideas are valid. Using existing quotes goes further to encourage their ideas and participation.
2:00 – 2:10	Group Introductions	Participant names and explanation of symbol.	Name tags with personal symbol designed by participants helps to give meaning to seminar.
2:10 – 2:25	Life Cycles	Ask for definition from participants, offer definition Cradle to Cradle, Bill McDonough Life cycle of your designs? Ask participants what this means to them. Concept to Rebirth	Encourage critical thinking about how we can change industry practices, and have alternatives to tomorrow.
2:25 – 2:35	BREAK	BREAK	BREAK
2:35 – 2:45	Life Cycles contd.	Ask participants about an unusual product's life cycle, ex. holiday lights What is the obvious life cycle of this product? What is the life cycle of this product when you think about it in terms of concept to rebirth?	Asking participants for suggestions encourages them to think about design in a different way.
2:45 – 3:00	Upstream and Downstream	Look upstream and downstream from your computer. What do you know about this?	Encourage critical thinking about what makes up the tools that we use, and what happens to them after they have lived out their use to us.
3:00 – 3:15	Ethics, Values and You Talking about Paper	Questions that you can ask, things you can take control over. Input from participants.	Encourage critical thinking about what one person can do, how one person can affect change.
3:15 – 3:30	Producers	PRARIEfish Eva Anderson Bill McDonough Wendy Brawer	Introduce participants to some names within the industry concerned with Green practices.
3:30 – 3:40	Alternatives. Why am I giving you this information?	Today Possible future Alternatives to that future	Encourage critical thinking about how we can change industry practices, and have alternatives to tomorrow.
3:40 – 3:50	Summarize Evaluations	What is Green Design Why is it important? Handouts	Recap of seminar. Find out from participants if this seminar helped their understanding of the topic, had meaning to them, made sense, etc.

Seminar Plan B, second draft

Timing	Title	Description	Objective
5:00 – 5:10	Slide Introduction	Slides of environment contain messages of state of environmental distress of the earth, identity, seminar name, designer name and keywords Create own name tags and symbols *(individual activity)*	Slides and messages serve as an environmental wake up call. Contain info about current distress. Pneumatics created by students with env. symbol to give intrinsic value to being a participant.
5:10 – 5:20	GAME #1 Find Someone Who...	Students seek out others using certain environmental requirements, ex. "Find someone who knows what PCF paper means." *(whole group activity)*	Awareness- How often to we think about these issues in our daily design life? Responsibility- Why don't we think about these issues in our daily design life?
5:20 – 5:45	Seminar Introduction Definitions	What is upcoming in seminar. Definitions of Green Design and Sustainable Design Timeline *(powerpoint presentation)*	Quick overview of seminar: Prep, Event, and Debriefing. Introduce participants to topics.
5:45 – 6:00	GAME #2 Green Design Brainstorm Splash	Ask participants the question "What impact do designers and future designers have on the public?" Participants give suggestions, and seminar leader offers existing quotes to back those suggestions up. *(whole group activity)*	Asking for suggestions from participants helps to make them feel their opinions/ideas are valid. Using existing quotes goes further to encourage their ideas and participation.
6:00 – 6:10	Group Introductions	Participant names and explanation of symbol. *(whole group activity)*	Name tags with personal symbol designed by participants helps to give meaning to seminar.
6:10 – 6:25	Life Cycles	Ask for definition from participants, offer definition Science, Cradle to Grave Cradle to Cradle, Bill McDonough, Example Life Cycle of your designs? Ask participants what this means to them. *(instructor teaches)*	Encourages critical thinking about the eco-importance/eco-effect from design concept through rebirth.
6:25 – 6:35	BREAK	BREAK Refreshments offered	BREAK
6:35 – 6:55	Upstream and Downstream	Look upstream and downstream from your computer. What do participants know about this? Groups to determine life cycle of computers, upstream and downstream. *(small group activity)*	Encourage critical thinking about what makes up the tools that we use, and what happens to them after they have lived out their use to us.
6:55 – 7:15	Ethics, Values and You Talking about Paper	Questions that you can ask, things you can take control over. Input from participants. Student input, written on board. *(individual activity)*	Encourage critical thinking about what one person can do, how one person can affect change.
7:15 – 7:25	Alternatives. Why am I giving you this information?	Today Possible future Alternatives to that future *(small group activity)*	Encourage critical thinking about how we can change industry practices, and have alternatives to tomorrow.
7:25 – 7:45	Debriefing Evaluations	Handouts	Recap of seminar. Find out from participants if this seminar helped their understanding of the topic, had meaning, made sense, etc.

Seminar Plan C, third draft

Timing	Title	Description	Objective
5:00 – 5:10	Slide Introduction	Slides of environment contain messages of state of environmental distress of the earth, identity, seminar name, designer name and keywords Create own name tags and symbols *(individual activity)*	Slides and messages serve as an environ wake up call. Contain info about current distress. Pneumatics created by students with env. symbol to give intrinsic value to being a seminar participant.
5:10 – 5:20	GAME #1 Find Someone Who...	Students seek out others using certain environmental requirements, ex. "Find someone who knows what PCF paper means." *(whole group activity)*	Awareness- How often to we think about these issues in our daily design life? Responsibility- Why don't we think about these issues in our daily design life?
5:20 – 5:45	Seminar Introduction Definitions	What is upcoming in seminar. Definitions of Green Design and Sustainable Design Timeline *(powerpoint presentation)*	Quick overview of seminar. Prep, Event, and Debriefing. Introduce participants to topics.
5:45 – 6:00	GAME #2 Green Design Brainstorm Splash	Ask participants the question "What impact do designers and future designers have on the public?" Participants give suggestions, and seminar leader offers existing quotes to back those suggestions up. *(whole group activity)*	Asking for suggestions from participants helps to make them feel their opinions/ideas are valid. Using existing quotes goes further to encourage their ideas and participation. Quotes on Power Point.
6:00 – 6:10	Group Introductions	Participant names and explanation of symbol. *(whole group activity)*	Name tags with personal symbol designed by participants helps to give meaning to seminar.
6:10 – 6:25	Life Cycles	Ask for definition from participants, offer definition Science, Cradle to Grave Cradle to Cradle, Bill McDonough *(instructor teaches)*	Participants will demonstrate the ability to understand the importance of life cycles.
6:25 – 6:35	BREAK	BREAK Refreshments offered	BREAK
6:35 – 6:55	Upstream and Downstream	Look upstream and downstream from your computer. What do participants know about this? Groups to determine life cycle of computers, upstream and downstream. *(small group activity)*	Participants will recognize that all products have a cycle from the earth to the earth. Individuals will move around to 5 different stations and mark charts with their ideas of upstream and down. Round Robin fashion to be able to learn from other participants. Facilitator supplies paper with comp icon.
6:55 – 7:15	Ethics, Values and You Talking about Paper	Questions that you can ask, things you can take control over. Input from participants. *(instructor teaches)*	Student will demonstrate the ability to identify personal possibility/opportunitiy to affect change.
7:15 – 7:25	Alternatives. Why am I giving you this information?	Today, Possible future Alternatives to what we have now, tied into life cycles, examples in our field. Culimination. *(group discussion)*	Encourage critical thinking about how we can change industry practices, and have alternatives to tomorrow.
7:25 – 7:45	Debriefing Evaluations	What do you feel this seminar has covered? *(small group activity)* Handouts	Students create mindmap of most valuable points of seminar, most significant info, what could affect greatest change, how impt on scale of 1 - 5 for designers, recall info from slides, hang up, review other groups, one rep. from group presents. Evaluations

Seminar Plan D, fourth draft

Timing	Title	Description	Objective
5:00 – 5:10	Slide Introduction	Slides of environment contain messages of state of environmental distress of the earth, identity, seminar name, designer name and keywords Create own name tags and symbols *(individual activity)*	Slides and messages serve as an environ wake up call. Contain info about current distress Pneumatics created by students with env symbol to give intrinsic value to being a seminar participant
5:10 – 5:20	GAME #1 Find Someone Who	Students seek out others using certain environmental requirements, ex. "Find someone who knows what PCF paper means." *(whole group activity)*	Awareness- How often to we think about these issues in our daily design life? Responsibility- Why don't we think about these issues in our daily design life?
5:20 – 5:45	Seminar Introduction Definitions	Objectives of seminar, personal motivation, and sample products THIS WILL BE FUN! Definitions of Green Design and Sustainable Design *(instructor leading)*	What I hope students will get out of this seminar, what they will walk away with. Introduce participants to topics
5:45 – 6:00	GAME #2 Green Design Brainstorm Splash	Ask participants the question "What impact do designers and future designers have on the public?" Participants give suggestions, and seminar leader offers existing quotes to back those suggestions up. *(whole group activity)*	Asking for suggestions from participants helps to make them feel their opinions/ideas are valid. Using existing quotes goes further to encourage their ideas and participation. Quotes on Power Point.
6:00 – 6:10	Group Introductions	Participant names and explanation of symbol *(whole group activity)*	Name tags with personal symbol designed by participants helps to give meaning to seminar.
6:10 – 6:30	Life Cycles Alternatives. Why am I giving you this information?	Ask for definition from participants, offer definition. Science, Cradle to Grave Cradle to Cradle, Bill McDonough Today, Possible future Alternatives to what we have now, tied into life cycles, examples in our field. Culmination. *(group discussion)*	Participants will demonstrate the ability to understand the importance of life cycles. Encourage critical thinking about how we can change industry practices, and have alternatives to tomorrow.
6:30 – 6:45	BREAK	BREAK Refreshments offered	BREAK
6:45 – 7:00	Upstream and Downstream	Look upstream and downstream from your computer. What do participants know about this? Groups to determine life cycle of computers, upstream and downstream. *(small group activity)*	Participants will recognize that all products have a cycle from the earth to the earth. Individuals will move around to 5 different stations and mark charts with their ideas of upstream and down. Round Robin fashion to be able to learn from other participants. Facilitator supplies paper with comp icon.
7:00 – 7:15	What can you do? Talking about Paper	Questions that you can ask, things you can take control over. Input from participants. *(instructor leading)*	Student will demonstrate the ability to identify personal possibility/opportunity to affect change.
7:25 – 7:45	Debriefing Evaluations	What do you feel this seminar has covered? *(small group activity)* Handouts	Students create mindmap of most valuable points of seminar, most significant info, what could affect greatest change, how impt on scale of 1 - 5 for designers, recall info from slides, hang up, review other groups, one rep from group presents. Evaluations

Appendix Three

This is first participatory game in the seminar, the challenge was to find an individual attending the seminar who could answer the request on the card. The objective was to increase awareness of the issues presented on the cards, and to engender questions about why we don't spend more time thinking about them.

Find Someone Who...

Uses double paper cups for coffee.	Knows what happens to their computer when they dispose of it.	Knows the post-consumer waste content of their recycled paper.	Knows that their printer uses soy ink and recycled paper.
Knows about the Hanover Principals and who wrote them.	Double sides their copies.	Purchases recycled cartridges for their printer.	Purchases their supplies from vendors that share their environmental values.
Uses tree-free paper.	Knows what PCF means.	Knows what TCF means.	Has seen the First Things First Manifesto.
Knows who sponsored the First Things First Manifesto.	Knows how much paper average American uses.	Belongs to an environmental organization.	Knows what Kenaf paper is and how to get it.
Uses their studio waste as scrap paper.	Knows what cellulose is, and how it applies to paper.	Has heard of design for disassembly.	Knows what an "old growth" forest is.

Formative Evaluation

Green from Concept to Rebirth

A Seminar about Design & Environmental Responsibility

Formative Seminar Evaluation
Please rate from 1 to 5, 5 being the best

1. Do you feel that the seminar added to your overall knowledge of green design?

   1 2 3 4 5

2. After attending this seminar do you feel motivated to adopt any of the green design practices?

   1 2 3 4 5

3. How much prior knowledge of green design did you arrive with?

   1 2 3 4 5

4. Was the length of the seminar appropriate?

   1 2 3 4 5

5. If this information was expanded into a 10 week course, would you consider taking it?

   1 2 3 4 5

6. If you were to carry this information to others, do you feel you would be an advocate of green design?

   1 2 3 4 5

Additional Comments:

_____

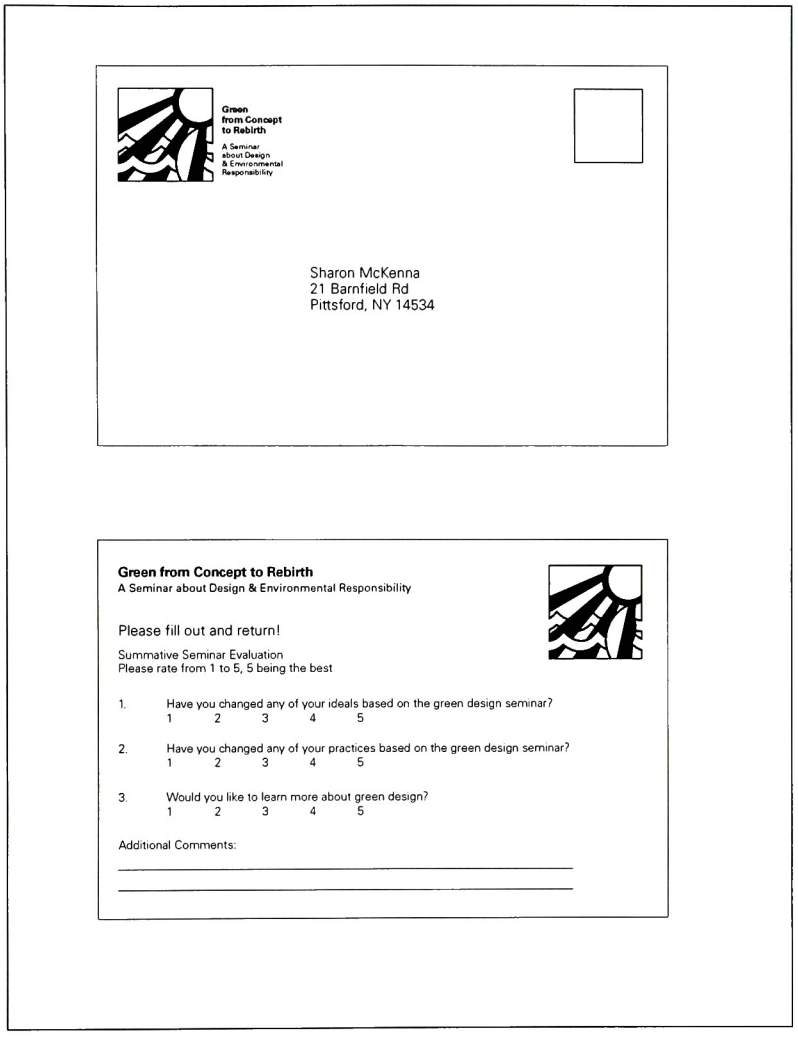
_____

_____

_____

Thank You!

Summative Evaluation



Green
from Concept
to Rebirth
A Seminar
about Design
& Environmental
Responsibility

Sharon McKenna
21 Barnfield Rd
Pittsford, NY 14534

Green from Concept to Rebirth
A Seminar about Design & Environmental Responsibility

Please fill out and return!

Summative Seminar Evaluation
Please rate from 1 to 5, 5 being the best

1. Have you changed any of your ideals based on the green design seminar?
   1 2 3 4 5

2. Have you changed any of your practices based on the green design seminar?
   1 2 3 4 5

3. Would you like to learn more about green design?
   1 2 3 4 5

Additional Comments: