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YOUNG ADOLESCENTS' COMPREHENSION OF LITERARY TEXTS

AS MEDIATED BY THE REINTERPRETATION / REPRESENTATION

OF LITERARY TEXTS THROUGH DRAMA:

A LITERARY UNIT ON HUMANE AND ENVIRONMENTAL EDUCATION

Laurie Leslie ©

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It is with the heart that one sees rightly;
what is essential is invisible to the eye.
Antoine de Saint Exupery

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ABSTRACT

This qualitative study describes the relationship between young adolescent readers' comprehension of environmentally-themed literary texts and the representation and reinterpretation of those texts through drama. The participants in this study were four members of one response group from a Grade 6 class engaged in a five week, text-based unit on humane and environmental education.

Three themes emerged from the analysis of the data: curriculum design and implementation, comprehension, and metacognitive awareness. Data analysis was facilitated by Protherough's (1983) framework for response, Rubin's (1990) levels of comprehension, and Eisner's (2003) dimensions of curriculum.

Various factors influenced student comprehension during the study. These included: i) elements of design such as the conceptual framework of the unit, the conceptual linking of texts, the guided practice of using strategies to promote comprehension and metacognitive awareness, the use of drama to mediate comprehension, and sustained engagement with related text sets; (ii) planned and spontaneous teacher interventions to scaffold learning experiences and facilitate critical literacy; and, (iii) opportunities for shared and private engagement, response and reflection through oral, written, and dramatic symbolic systems.

The detailed design and implementation of the unit on humane and environmental education illuminates the processes undertaken by educators involved in curriculum design, development and implementation. It also provides a comprehensive model for the teaching of humane and environmental education within the conceptual framework of a response-based language arts unit.

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CHAPTER ONE

OVERVIEW OF THE STUDY

This study describes how young adolescent readers' comprehension of literary texts is mediated by the reinterpretation and representation of texts through the use of drama. It is the first of a series of studies, yet to be completed, which will explore relationships between young adolescent readers' comprehension of literary texts and the use of multiple symbolic systems. The larger study, conducted by Dr. Mary Clare Courtland, of Lakehead University, will focus on a variety of symbolic systems: drama, art, dance / music, writing, and media. Units in the larger study will be based on literary text sets which are thematic in nature and examine social issues. Studies will be organized around social issues related to:

- the environment (drama)
- race / multicultural diversity (art)
- ageism / intergenerational relationships (writing)
- gender (music / dance)
- popular culture (media)

As Dr. Courtland's graduate assistant at Lakehead University, Faculty of Education, I was invited to serve as a co-researcher in the initial study on drama. The Grade 6 teacher at the research site offered to facilitate the research as a classroom teacher.

The design of this study was qualitative and emergent (Bogdan & Biklen, 1998; Patton, 1990). Data were collected through informal interviews, participant and non-participant observations, and the analysis of texts and artifacts generated by student respondents, privately and publicly, in response to literary text sets. The respondents in this study were young adolescents in a Grade 6 class. This study took place over a five week period, approximately three or four times per week, in blocks of time ranging from 80 - 90 minutes.

The study involved two phases. Phase I took place during the first week of the study, and began with the introduction to the unit. Data collected from this phase were analyzed to select a purposive sample of response groups for Phase II (Leedy, 2001; Patton, 1990). Phase II consisted of three response groups; the individuals in these groups served as the foci for further

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in-depth data collection and analysis. This study followed one of the response groups. The group included four students in Grade 6, two boys and two girls.

During this study, the respondents were engaged in a language arts unit with an environmental focus. The unit was developed by the researchers in accordance with the provincially-mandated curriculum guidelines for Grade 6. Expectations for language arts as well as other curriculum areas were addressed within the unit. The unit adopted a critical literacy approach (Bainbridge & Malicky, 2000) to heighten respondents' understanding of the social issues connected to the environment and the implications of these issues. Students were given opportunities to read and respond to a variety of fiction and non-fiction materials to enhance deeper understanding of the texts. Throughout the unit, students were instructed in the use of drama. A final, open-ended dramatic product (a prepared improvisation, choral reading, narrative play, series of tableaux and/or other dramatic interpretation) was generated by each student response group to re-interpret the theme. This production was shared with the parents of the participants.

Rationale

There is a need for research on reader response which describes and illuminates the processes through which readers become engaged with and respond to literary texts through varying symbolic systems. Gardner's (1993) research on multiple intelligences emphasizes the variety of means by which humans are capable of meaning construction. Eisner (2002) criticizes the dominant emphasis, within educational institutions, on verbal and written symbolic systems:

> We have created a culture in schooling that is so heavily pervaded by verbal and written performance systems that we take such performance systems for granted. In the process we forget that the culture at large depends on a much wider array of human competencies. We regard alternatives that are nondiscursive as "enrichment activities." We assign them to the margins of our concerns; they are events that are "nice to have" but not really of educational significance. Furthermore, we do not often recognize the unique epistemological functions that different expressive forms make possible. (p. 148)

Eisner (1991) notes that if the goal of education is to deepen individuals' understanding, then schools need to support the development of multiple forms of literacy.

Smagorinsky (1996) also emphasizes the importance of using a variety of symbolic systems. He contends that the process of composing extends well beyond the writing process:

> Through the act of translating their thoughts into a material product, learners often develop new ideas about the object of their thinking. For instance, I have studied students who have interpreted literature by drawing, dancing, and acting out the relationships between characters. Typically, their process of interpretation produces new insights for them; the process of composing their interpretive text actually changes the way they think about the literature they are reading... A student who writes or draws an interpretation leaves a product behind, and this product becomes a symbol that the student can use to promote further reflection (and often reconsideration) of the ideas that produced it. (p. 15)

According to Smagorinsky, the act of reinterpreting literature into another symbolic form, such as drama, leads students to new understandings and reflections. Similarly, the product generated by the student also serves as a symbol for further reflection.

Courtland, MacDonald, Golab, and Mallik (1999) support Smagorinsky's ideas. In a Grade 7/8 study on picture books, they found that the reinterpretation of texts through symbol systems such as writing, drama, and art mediated readers' thinking about texts.

Sumara (1995) suggests that revisiting and reinterpreting text is essential to a heightened understanding of text. The re-reading, re-inscribing process gives readers the opportunity to more clearly perceive the process of cognition for a fuller and deeper interpretation of the text. Responding to text through drama may afford students the opportunity to revisit and reinterpret text.

Gardner's (1999) theory of multiple intelligences proposes the existence of eight separate human intelligences. He notes that each individual is equipped with these intellectual potentials. The first two, linguistic and logical-mathematical, are generally most valued in school and on traditional intelligence tests (Gardner, 1999, p. 41). The use of drama within the classroom may enhance the development of three intelligences generally associated with the arts: musical, bodily-kinesthetic and spatial. Educators need to offer children opportunities to engage in literacy activities that may better reflect their strengths, whether these be interpersonal or intrapersonal (Gardner, 1993; Checkley, 1997).

Learning is a socioconstructive process that involves individual and social constructions of meaning within sociocultural settings (Bainbridge & Malicky, 2000). The ways we think are learned through social interactions. Collaboratively, through the development of shared meanings, individuals are able to extend their own knowledge (Gambell, 1993). It is essential that literacy researchers extend their foci to describe the ways in which cultural tools or symbolic systems actually mediate readers' comprehension of literary texts. Drama, as a collaborative process, requires further exploration as a potential medium for comprehension.

While some researchers have found that educational drama is a powerful and effective medium and promote its increased use in classrooms, Lang (1999) observes that few teachers actually use educational drama as a teaching strategy. The current *Ontario Curriculum, Grades 1-8: Language, 1997* guideline offers minimal guidance for the use and assessment of drama at the elementary level. I believe there is a need for research to provide models of curriculum which promote literacy learning through drama and other symbolic systems.

Field-based inquiries on multiple symbolic systems have the potential to inform language curriculum development (Smagorinsky, 1996, p. 204) in the same manner as early research on the writing process inspired process approaches to writing (Bainbridge & Malicky, 2000). Beach (1993) notes that research on writing approaches have significantly altered classroom practices by providing teachers with "vivid illustrations of concrete ways to translate theory into practice" (p.3). Further studies on interpretation and reinterpretation of literary texts through multiple symbolic systems such as drama also have the potential to alter classroom practices by offering concrete models to teachers to facilitate easier integration of drama into the current curriculum.

Eisner (2002) points to the need for further research into the decision-making processes of curriculum development. He contends that current emphasis on development of curriculum materials and formulation of curricular policy rarely addresses the decision-making processes involved in designing curriculum,

> The study of the processes through which decisions are made is seldom a part of
> their mission. Hence what groups do in different contexts and circumstances is at
> present largely known through recollection rather than through, say, naturalistic
> observation as an enthnographer might study the process. (p. 134)

By addressing the decision-making processes involved in the design of the unit on humane and environmental education, this study has the potential to inform research into the area of curriculum development.

The decision to select young adolescents and to focus on humane and environmentally-themed texts reflects the professional and personal interests of the researchers and ties in with the reader response focus on social issues to be conducted in the larger study by Dr. Courtland. Additionally, the materials selected for the environmental text sets, as well as the drama and writing activities designed within the environmental unit, reflect current literature regarding the need for re-evaluation and revision of existing approaches to environmental education within our educational institutions (Lousley, 1999; McElroy, 1997; Russell and Bell, 1999; Russell, Bell & Fawcett, 2000; Taylor, 1996).

Research Questions

1. How is young adolescent readers' comprehension of literary text sets mediated by re-interpretation / representation of texts using drama?

2. How does shared response influence comprehension, reinterpretation and representation of literary texts?

3. What drama teaching strategies promote young adolescent readers' engagement with and response to literary texts?

4. How is young adolescents' comprehension of environmental issues influenced by the use of environmental text sets and environmentally-themed drama?

Explanation of Terms

In this study, the following terms are employed:

Critical literacy

Critical literacy is a term which has begun to replace critical reading (Bainbridge and Malicky, 2000). This term relates to the interactions between the reader and the text.

"As children construct meaning, they analyze texts for hidden biases" (Bainbridge and Malicky, 2000, p.150). Through this stance, readers learn to examine power relationships, to question who has power and why (Smagorinsky, 2002). The text sets selected for this study, along with the read alouds, and oral novel were selected for their potential to heighten critical literacy as it relates to humane and environmental education.

Efferent reading and aesthetic reading

How do students make sense of the materials they read? Rosenblatt (1938, 1978, 1991) describes the act of reading as a transaction between the reader and the text. The role of the reader is critical to the making of meaning. She identifies two stances: efferent - reading to extract information, and aesthetic - reading to derive a personally enriching experience (Courtland & Gambell, 2000, p. 49). Rosenblatt describes these stances as distinct; depending on the purpose for reading, readers adopt one or the other. Sumara (1996) and Courtland and Gambell (2000) argue that the construction of meaning incorporates both efferent and aesthetic stances in a fluid way, rather than as discrete processes.

Humane and environmental education

Humane education and environmental education, while not interchangeable terms, are closely related. Humane education focuses on the benevolent treatment of animals, human beings, and the Earth, offering a model for inclusion of all species and consideration of the interconnectedness of nature (Selby, 2000). Selby (1995) notes that humane education, as defined in 1933 by the US National Parent-Teacher Association, refers to the teaching in schools about the principles of justice, goodwill and humanity toward all life. The general philosophy notes that children trained to extend justice, kindness, and mercy to animals will become more just, kind and considerate towards one another (Selby, 1995). Environmental education emphasizes broader interconnections and focuses on responsibility towards the environment at all governing levels.

During this study, the term, humane education, was used in formal communication with the student participants; however, the goals of the unit, reaching beyond kindness and compassion,

encompass many of the goals of environmental education. As such, this study refers to humane and environmental education as the unit theme.

Intertextual connections

Comprehension develops gradually. "As students comprehend and create interpretations, they make connections to books read previously" (Tompkins et al., 2002, p. 345). De Beaugrande (1980, as cited in Tompkins et al., 2002) calls these connections intertextuality. According to Sumara (1995), the reading and sharing of books involves students in a complex system of interaction and interrelation. Short (1993) suggests that connection making is further enhanced with the use of text sets, particularly where groups of text sets relate to a larger theme.

Multiple symbolic systems

Symbol systems are languages that communicate / represent ideas, emotions, feelings, history, and more (Goldberg, 2001). Gardner (1999) proposes that people make sense of the world through eight human intelligences: linguistic, logical/mathematical, spatial, musical, bodily/kinesthetic, interpersonal, intrapersonal, and naturalistic. As a result, individuals have preferred ways of learning and sharing knowledge. Different symbol systems (i.e. poetry, artwork, words, numbers, music, dance) may appeal more or less to individuals dependent on their strengths / weaknesses (Goldberg, 2001).

Drama / Educational Drama

Also known as creative drama, educational drama is participant and process centered (Cornett, 1999). Students are guided through explorations of personal experiences, social issues, or pieces of literature (Cornett, 1999). According to Cornett (1999),

> Children improvise action and dialogue and use drama elements to structure the process. They creatively use voice, body, and space to make others believe in a mood, idea, or message and take on "pretend" roles to generate creative problem solutions... creative drama's purposes are artistic, emotional, and academic. (p. 233)

The educational drama techniques used in this study are defined below:

- **choral reading** - students take turns reading a poem / story together. Students may read all together, in small groups, or individual students can read particular lines or stanzas (Tompkins et al., 2002)
- **hot seating** - role playing in which individuals ask questions of the character in role, on the hot seat (Tompkins et al., 2002)
- **monologue** - a play, prepared improvisation, or recitation for one speaker
- **readers' theatre** - oral presentation in which scripts are read aloud expressively instead of being memorized. Voice, gestures, and facial expressions are used to communicate images, events, and actions (Bainbridge & Malicky, 2000)
- **role play** - text based or improvisational dramatic playing, assuming a new identity (Tompkins et al., 2002)
- **tableaux** - actors, in role, freeze in action to portray a scene from a story (Bainbridge & Malicky, 2000).
- **voice-in-the-head** - once tapped on the shoulder, individuals in role share the thoughts and feelings going through their minds at the moment (Bainbridge & Malicky, 2000)

Reader response

Rosenblatt (1978) describes reading as a transaction between the reader and the text. According to Rosenblatt (1978), there are two stances readers undertake in these transactions: efferent (reading for information), and aesthetic (reading for personal enrichment). Aesthetic reading is a two stage process, involving engagement with the text and response to the text. Reader response focuses on the reader's felt response to the text (Tompkins et al., 2002). It is the "web of feelings, sensations, images, ideas" (Rosenblatt, 1978) evoked by reading the text. These feelings may be influenced by the reader's prior experiences, cultural history, knowledge of life, and experience of other texts (Tompkins et al., 2002).

Text sets

Short (1993) defines text sets as collections or groupings of conceptually-related texts that are used by groups of students for discussion and comparison. Each group member usually reads several books and shares these books with other group members. Together, the group explores comparisons and connections across their books and lives.

Research Design and Methodology

As part of a larger study on multiple symbolic systems, this study examined the nature of the relationship between young adolescent readers' comprehension of literary texts as mediated by reinterpretation and representation of those texts using drama as a symbolic system. The language arts-based unit was on Humane and Environmental Education. The design of this study was qualitative and emergent (Patton, 1990). This study included two phases. Phase I occurred in the first week of the study. At that time, the researchers observed the whole class, individuals and response groups, to select a purposive sample for Phase II (Leedy, 2001; Patton, 1990). Criteria for the purposive sample emerged from ongoing analysis of the data. The purposive sample, on which this thesis focuses, included two girls and two boys in a Grade 6 classroom. Data were collected through participant and nonparticipant observations, informal discussions, analysis of documents such as student journals and organizers, individual and group drama presentations, and formal interviews of groups in the purposive sample after completion of the unit.

Prior to the commencement of this study, Mary Clare Courtland and I met with the school principal and Grade 6 classroom teacher to discuss the unit and ideas for implementation. Both educators were participants / co-researchers in the study. The principal researcher, Mary Clare Courtland, obtained permission to conduct this study from the school board and the school principal. The principal researcher and co-researchers met with the class one week prior to the study's commencement to explain verbally to students the purpose of the study, to generate enthusiasm for the environmental focus, and to invite the students to participate. Appendix I contains the verbal explanation to students; Appendix II, the letter of informed consent.

Twenty-seven of the Grade 6 students participated in the study, although the primary focus of this report was on four students in one response group. The researchers instructed and/or observed in the classroom for approximately two hours per day, three or four days per week. This schedule increased during the last week of the study to allow students time to complete their projects for the culminating drama presentation.

Extensive hand-written field notes were recorded daily by the principal researcher and co-researcher, throughout their roles as participant / nonparticipant observers. The classroom

teacher also contributed field notes at various intervals. The different sources of data such as the principal researcher's log and co-researcher's journal, the student journals and artifacts generated by the students, and the interviews, contributed to effective triangulation of the data (see Patton, 1990). Consistency was maintained using the constant comparative system of analysis (see Leedy, 2001) wherein data were constantly re-evaluated for emerging themes, recurrent events, and categories (Bogdan & Biklen, 1998). A detailed description of the research design and methodology is presented in Chapter Three.

Significance of the Study

This study contributed to the existing knowledge on reader response theory, and to the nature of the relationship between shared response and the ways in which drama, as a cultural tool, mediates young adolescent readers' comprehension of literary texts and the development of critical literacy skills. Second, this study provided insights into the development of curricular approaches which promote readers' engagement and response as well as critical literacy, by using drama as a symbolic system for mediation. This study also provided information on teaching practices and principles including the scaffolding of instructional and learning experiences. The unit plan for this study might be replicated and/or built upon by other educators interested in teaching humane and environmental education.

Limitations

Attempting to portray young adolescents' thinking poses certain methodological limitations. In addition, specific factors such as language proficiency and readers' own metacognitive awareness of their comprehension processes, may influence readers' comprehension of the literary texts. Additionally, while this study addressed themes related to humane / environmental education, the study did not incorporate explorations of that theme within the natural, outdoor environment.

This chapter provided an overview of the research problem, rationale, research design and methodology, along with an explanation of relevant terminology. Chapter Two reviews the literature on reader response theories, use of drama as a symbolic system, and humane education. The research design and methodology are discussed in detail in Chapter Three. Findings of the study and their interpretation are presented in Chapter Four. Chapter Five shares the conclusions, implications, and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This review reviews literature in three specific areas relevant to this study, namely: reader response theories, multiple symbolic systems with emphasis on educational drama, and humane and environmental education.

Reader Response Theories

Early reading theories describe a strong, meaningful relationship between the reader and the text. Rosenblatt (1938, as cited in Courtland and Gambell, 2000; 1978, 1991) describes the act of reading as a transaction between the reader and the text. The role of the reader is critical to the making of meaning. She identifies two stances: efferent - reading to extract information, and aesthetic - reading to derive a personally enriching experience (Gambell & Courtland, 2000, p. 49). Rosenblatt (1978, as cited in Courtland and Gambell, 2000) describes these stances as distinct. She contends that, depending on the purpose for reading, readers adopt one or the other. Sumara (1996) and Courtland and Gambell (2000) argue that the construction of meaning incorporates both efferent and aesthetic stances in a fluid way, rather than as discrete processes.

According to Rosenblatt (1978), aesthetic reading is a two-stage process. Initially, as the reader engages with the text, he/she experiences a broad range of feelings, ideas, memories and attitudes. This interplay between the text and the reader's mind becomes an experience through which the reader lives. In the second stage, the reader organizes, sorts and classifies the feelings, ideas, memories, and attitudes initially experienced. This process, identified as response is a result of reflection and reinterpretation of the text.

Rosenblatt (1982) describes readers' involvement with the text as a coming together of the fictional world, as created by the author and the real world of the reader. Where similarities exist between the two worlds, the reader will enter into the author's imagined world. By identifying with story characters, the reader opens him/herself up to learning life lessons.

Many and Wiseman (1992) also stress this intimate relationship between reader and text, noting that response may involve revisiting and reinterpreting the text. This process permits the reader to organize and clarify the feelings and ideas experienced during reading. According to Bogdan and Straw (1993, as cited in Courtland & Gambell, 2000, p. 50), reading is a meaning-

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constructing process, as opposed to a meaning- getting process. In this constructivist approach the role of the teacher is to lead students through the negotiations of meaning-making.

Readers' engagements and responses to literary texts are mediated by many factors. One of these factors is background. Background refers to the prior knowledge, experiences, interests, world views, and past readings of the reader (Dias, 1994, as cited in Courtland & Gambell, 2000; Sumara, 1996). Past experiences in English language arts classes and the existing social and power relations within the classroom may also affect reader response (Lewis, 1998, as cited in Courtland & Gambell, 2000). Lewis (1998, as cited in Courtland & Gambell, 2000) contends that adolescents' concerns about identity, as well as the personal and social situations with which they are struggling, can be addressed in the English language arts program. An additional factor is the readers' understanding of the conventions of literary texts, contexts and shared response (Dias, 1994; Meek, 1988, as cited in Courtland & Gambell, 2000).

As a facilitator in the meaning-making process, the teacher must blend the internal and external factors that affect readers' responses. This is accomplished through the social act of shared response and reflection. While the initial response to reading is individual, it must embrace others and their responses before gaining clarity (Gambell, 1993). This reflective dimension of critical thinking leads readers to further explore issues of concern, clarifying their meanings and possibly altering their conceptual perspectives (Brookfield, 1987). Courtland, French, Owston, and Stead (1999) contend that sharing enriches interpretation. In collaboratively reading, rereading and responding to Lowry's (1994) *The Giver*, and by sharing their findings through readers' theatre, Courtland et al. (1999) found,

> The coming together as a community of readers and writers and the dialogue we
> share also serve as a commonplace location for literary experience and response.
> Together we are rereading texts, weaving ideas into new patterns, and generating
> responses. (p. 6)

Vygotsky (1978, as cited in Short, 1993) argues the zone of optimal learning is "what we are able to learn with support of other learners, not what we already are able to do alone" (p. 284). According to Short (1993), dialogue has the power to "change the thinking of learners" (p. 299).

Short (1993) argues that students learn more when they are able to make connections between current and past experiences and that critical literacy is heightened by reading related texts. Short (1993) investigated the use of text sets within a grade 3 and a grade 6 classroom. She defines text sets as collections or groupings of conceptually-related texts that are used by groups of students for discussion and comparison. Within the student groupings, members usually read several books and share these books with other group members. Together, the group explores comparisons and connections across their books and their lives. She worked with classroom teachers to select text sets that included novels, picture books, and information books. Students selected their preferred text set for study. Response groups were encouraged to articulate the links across text set materials and to consider what they wanted the class to understand from the text set. In subsequent research, Short (1993) discovered that connections were strongest where all text sets related to a broader theme. According to Short, connections change with new experiences and texts. Her findings suggest that readers consider new perspectives and intertextual connections through their interactions with each other and the books in their text set. The use of text sets is a curricular strategy that highlights the connection-making process. Related books are used to facilitate understanding of each other and the issues. Hartman (1992) refers to this conceptual linking of texts as the "open-bordered text" (p. 297). The artificial borders of "separation and univocality" (p. 297), imposed by the physicality of the text, become blurred when the text is situated within a collection / network of texts.

The use of text sets, collaborative planning, and shared response as strategies for promoting critical literacy is further supported by Courtland et al. (1999). In their picture book study Courtland et al. (1999) explored the relationship between shared response and comprehension. This study involved students in Grades 7 and 8 engaged in reading, discussing and responding to various picture book text sets. Students responded through writing, drama, art, and multi-media. The findings of the study further emphasize the need to incorporate reader response groups or cooperative learning groups into language learning. Courtland et al. also support the use of text sets as a strategy for promoting intertextuality. Their study suggests that project planning using text sets as a base further heightens intertextuality.

Instruction focused on developing flexible and adaptable strategies for comprehension helps students construct meaning (Bainbridge & Malicky, 2000; Cunningham & Allington, 2003; Tierney et al., 1990; Rubin, 1990). Cunningham and Allington (2003) contend that little agreement exists concerning the number and nature of comprehension strategies in use within today's classrooms. According to Tierney et al. (1990), effective strategies generally meet one or more of the following critieria: activate students' prior knowledge, guide student focus and learning, foster active and engaged participation, and / or reinforce new concepts (p. 38). Bainbridge and Malicky (2000) adopt a social constructivist approach to the teaching of comprehension through questioning, introduction to new skills, and the teaching, modeling, and practice of strategies. Hierarchies of questions, such as those based on Bloom's Taxonomy (1956) have been developed to promote higher levels of comprehension (Bainbridge & Malicky, 2000). Rubin (1990) contends that teachers need to ensure question-asking involves interpretive, critical, and creative thinking rather than merely literal thinking. Rubin (1990) defines four levels of comprehension: i) literal comprehension based on directly-stated information, ii) interpretive comprehension based on implied information, iii) critical comprehension based on the passing of personal judgment on the accuracy, truthfulness, or validity of something, and iv) creative comprehension based on going beyond the presented information to come up with alternate solutions (p. 60-1).

Tompkins et al. (2002) suggest that development of comprehension is a gradual and cumulative process:

> Comprehension continues to develop as students read, respond to, and explore the story, and deepens as they discuss the story and write responses in reading logs. Students move beyond the actual text as they work on projects, and extend their comprehension further. (p. 345)

Instructional scaffolding, developed by Jerome Bruner pursuant to Vygotsky's views on human development, is a strategy designed to support the development of comprehension through sequential, teacher-supported experiences (Smagorinsky, 2002). Smagorinsky (2002) defines scaffolding as "the way in which experienced and capable people assist others in learning new knowledge and skills" (p. 19). He contends that sustained exploration of a concept across a variety of texts helps students "understand the complexity of a theme and construct their own

understanding of the role it plays in their lives" (p. 21). Tompkins et al. (2002) refer to scaffolds as the "support mechanisms" (p. 9) employed to help students perform tasks within their zone of proximal development. The use of scaffolding enables children to "move from their current stage of development to their potential" (Tompkins et al., 2002, p. 10).

According to Short (1993), scaffolding is most effective where conceptual learning is sequenced from highly supported through to independent learning. She also maintains that teachers need to find opportunities for "scaffolded learning" (p. 28), wherein students become the facilitators assisting in one another's learning.

Comprehension, as an area involving thinking, falls under the cognitive domain (Rubin, 1990). By intertwining language arts with thinking skills, and in seeing students as "active consumers of information" (Rubin, 1990, p. 13), teachers encourage students to work at various levels of cognition: analyzing, categorizing, synthesizing, and evaluating (Rubin, 1990). Tompkins et al. (2002) describe four cognitive processes or learning strategies that children employ for learning and remembering information: rehearsing / repeating, organizing / grouping information into categories, elaborating / expanding on information, and monitoring or keeping track of progress (p. 7). As learners develop their repertoire of methods for learning and remembering, they become more aware of their own cognitive processes and are better able to regulate them; reflecting upon and sharing their own literacy processes (Tompkins et al., 2002).

The term metacognition refers to this awareness of cognitive processes and to students' regulation of these processes in order to maximize their learning (Tompkins et al., 2002). Fearn and Farnan (2001) identify cognition and "re cognition", the process of cognizing again, (p. 20) as individual experiences, noting that one person is unable to cognize for another individual. Cognition is a learned behaviour. Learning does not occur as effectively in the absence of cognition therefore teachers have a responsibility to make cognition and recognition happen (Fearn and Farnan, 2001; Tompkins et al., 2002). According to Tompkins et al. (2002), methods through which teachers can facilitate the development of children's metacognitive abilities include the following: introducing and modeling learning strategies, providing guided practice, discussing independent learning strategies, and inviting students to reflect on their own cognitive processes.

Multiple Symbolic Systems

Current research emphasizes the importance of using a variety of symbol systems to aid learners in their constructions of meaning (Eisner, 2002; Courtland et al., 1999; Courtland & Gambell, 2000; Lang, 2000; MacLeod, 1987; Smagorinsky & O'Donnell-Allen, 1998). Smagorinsky and O'Donnell-Allen (1998) conducted a study of high school seniors as they constructed a body biography of a character in *Hamlet*. They found that the artifacts / projects generated by the readers mediated new thinking. Similarly, in the Grade 7/8 study of picture books, Courtland et al. (2000) found that the reinterpretation of texts through symbol systems such as writing, art, and drama, mediates readers' thinking about text. Gadamer (1990, as cited in Tompkins et al., 2002) notes that the act of translating a short story to a sound track, sculpture, creative dance, or dramatized scene has the potential to expand one's understanding of the form and content of the story. Through the act of translation, students acquire a sense of ownership while they construct meaning for themselves and others.

Bainbridge and Malicky (2000) compare drama to language usage: both are used "to learn about events, issues, and relationships" (p. 340). They present drama as a means of helping students to better understand their world. Myers and McCaulley (1985, as cited in Tompkins, Pollard, Bright and Winsor, 2002) share this view, contending that the social nature of drama promotes learning. Individuals learn best when actively engaged with others in making sense of themselves and the world in which they live.

Lang (2000) observes that many students have been bombarded by popular visual media images and are unwilling to identify with "uncool" or unfamiliar characters in fiction. She argues that drama provides opportunities for these students to make personal connections with fictional characters by bringing these characters to life in the classroom. This personal engagement may lead to aesthetic response by helping students empathize and find commonalities with a variety of characters. Getting into role involves research, collaboration and oral growth. According to Lang, the writer and reader enter into an act of co-constructing the meaning of a story. In this creative act the potential for examining story themes is enhanced. This allows new understandings of the story to open up for participants (Booth, 1994; Lang, 2000). Booth (1994) contends that drama may be one of the few situations that allows spontaneous narrative to enter

naturally into the flow of talk. Incorporating Booth's notion of spontaneous narrative, Lang (1999) suggests that text is used as a jumping-off point in educational drama. Participants prolong engagement by incorporating themselves and their own ideas into the author's work through the creation of new characters suggested but not described in the story, by expanding on characteristics of characters already in the story, and by considering what might have happened before or after the story.

As an art involving reconstructing, original creativity, and/or performance, drama has been shown to positively affect children's expression of ideas in oral, as well as written language (Lang, 1999). In her collaborative Grade 4/5/6 and Grade 8/9 action research study, Lang (1999) researched the use of educational drama to enhance students' oral and written responses to literature. She found that drama, as a "collaborative enterprise involving negotiation" (p. 51) motivates students to "think more deeply" (p. 52). She argues that "students' written responses illustrate how effective the drama experiences were in helping them to engage with and respond to literature" (p. 56).

MacLeod (1987, as cited in Tompkins et al., 2002) maintains that there are five ways of understanding, mediating, and communicating our world: words, numbers, images, gestures and sounds. He suggests that literacy in all five areas would enhance student learning and argues that many students depart from school illiterate because they are not proficient in "the five fundamental ways of knowing"(p. 288). In Canada, a number of provincial departments of education are beginning to recognize the value of working with a variety of forms of representation and meaning-making and are including sections on drama and mime in the language arts curricula (Tompkins et al., 2002).

Despite claims that drama evokes stronger and richer responses to literature, Lang (1999) contends that very few teachers use educational drama strategies on a regular basis. She strongly believes this issue can be resolved by showing educators how teaching with drama may effectively meet existing curriculum expectations. She notes that educational drama strategies and structures can be used to explore and extend understanding and appreciation of literature.

Smagorinsky (1996) suggests that the process of creating and the product which has been created cannot be separated. If students are going to use drama as a product, they need to first

become informed about how to use this medium. Educators need to offer children opportunities to engage in various types of drama activities to promote drama literacy. According to Smagorinsky (1996), an interpretation, such as a video-taped performance "becomes a symbol that the student can use to promote further reflection (and often reconsideration) of the ideas that produced it" (p. 15). In keeping with Smagorinsky's (1996) ideas on process and product, this study heightened student awareness of drama techniques by introducing the students to several different forms of drama. The idea of drama as a product was not introduced until drama literacy had been established. The final drama performance was video-taped and revisited by the response groups.

Humane and Environmental Education

The field of environmental education in Canada and elsewhere is in a state of flux; concerns have been articulated regarding the definition (Russell, Bell & Fawcett, 2000; Taylor, 1996) and the current practices (Lousley, 1999; McElroy, 1997; Russell, Bell & Fawcett, 2000). In addressing the confusion surrounding the definition and focus of environmental education in Canada, Russell, Bell and Fawcett (2000) suggest that environmental education should be contextually appropriate and avoid simplistic approaches to problems. Those influenced by critical approaches argue that environmental education must include social and political dimensions aimed at altering both individual and group behaviours (Taylor, 1996). McElroy (1997) sees the potential for schools to more accurately address environmental education. He, like Bell and Russell (1999), stresses that while schools are engaged in many positive ecological activities, the overwhelming bias is still very anthropocentric (the belief in the superiority of humans and their right to dominance). By telling only parts of the story and/or by telling the story in terms of human benefits and ingenuities, educators unwittingly encourage children to respect and repeat environmentally destructive behaviours. As Stables (2001) argues,

> For the world to be worth living in, we surely need high levels of both cultural and critical environmental literacies in order that we can acknowledge that we live in an ecosystem, the future of which is dependent on our moral choices, feel empowered to act for the environment in ways that seem apposite and become better able to evaluate the effects of our, and others', actions with respect to the environment. (p. 253)

Russell, Bell and Fawcett (2000) warn that the current classroom emphasis on the 3 R's, Reduce, Reuse and Recycle, in its focus on the individual, may lead to "superficial reform" and hide the desperate need for collective action and intense changes in values and behaviours. Similarly, Lousley (1999) notes that special days designated for garbage clean-up, or even routine litter patrols in school hallways, while producing aesthetically pleasing results, do not necessarily contribute to altering our production / consumer oriented society. Educators need to address the interconnectedness of all natural systems, including but not limited to the human species. Further, emerging literature on the environmental justice movement is finding links between environmental degradation and social injustices such as racism, classism and sexism (Russell & Bell, 2000).

Researchers who take a critical approach also argue that effective environmental education must shift from the anthropocentric to the ecocentric – an Earth-centered view that does not separate humans or anything else from the natural world (McElroy, 1997; Bell and Russell, 1999). McElroy (1997) outlines four common anti-environmental myths that are taught and perpetuated in our schools and society in general: the Dominion Myth, the Civilization Myth, the Growth Myth, and the Omnipotence Myth. (Figure 1 summarizes these myths.)

Figure 1. Summary of environmental myths fostered within our society.

The Dominion Myth - a divine Creator has designated man as the dominant species given free reign of the "natural storehouse". Destruction of habitat and extinction are regrettable but acceptable outcomes of this human management of nature.
The Civilization Myth - Western culture, with its emphasis on technological advancement, is civilized and progressive. Less developed countries should pursue this model of advancement.
The Growth Myth - Growth is a sign of success. There are no limits to growth, industry, economics and human affairs.
The Omnipotence Myth - our scientific knowledge about nature is extensive. As humans, we are able to observe, understand, manage and solve problems when we need to solve them.

(Adapted from McElroy, 1997, p. 9)

In order to develop a more Earth-centered approach to environmental education, McElroy (1997) suggests our curricula must: i) collect evidence of offensive content (in literature and elsewhere); ii) expose the myths held by society; and iii) establish counter-myths and evaluative criteria.

A related movement to environmental education is humane education, which, in its attempts to focus on the treatment of animals, human beings, and the Earth (Selby, 2000), offers a model for inclusion of all species and consideration of the interconnectedness of nature. Selby (1995) notes that humane education, as defined in 1933 by the US National Parent-Teacher Association, refers to the teaching in schools about the principles of justice, goodwill and humanity toward all life. The general philosophy states that children trained to extend justice, kindness, and mercy to animals will become more just, kind and considerate towards one another. Animal and human concerns should coalesce in an effort to promote tolerance (Bell and Russell, 1999; Selby, 1995).

Bell and Russell (1999) have explored "the constitutive role that language plays in human / nonhuman relationships and consider how such insight might be taken up in an elementary school language arts program" (p. 71). They present a list of eleven specific recommendations teachers might consider when implementing environmental education within the classroom. These suggestions range from probing issues of division, oppression, stereotyping, culture, and notions of technology and progress, to increasing awareness of lifestyle choices, interconnectedness of all natural systems, and the ability to positively promote change. The humane issues considered in this study share similarities with Bell and Russell's (1999) list of recommendations. In particular, students involved in the study examined issues of technology and progress, lifestyle choices, interconnectedness of all natural systems, and means for promoting positive change.

Sumara (1994) believes literary texts influence, affect and change relationships within the classroom. Choosing one book instead of another is to choose one framework over another. Personal experiences with the text are mediated through class conversation. This renders the personal relationship with the text more public. With careful selection, environmental text sets have the potential to enhance student awareness of environmental issues, concerns, practices and responsibilities. The selection of text sets on the environment was intended to show sensitivity to the many issues of environmental education, emphasizing a humane education approach. As such, the text sets reflected a general focus on the interconnectedness of all natural systems.

Given that learning is deepened by multiple connections and strengthened when text sets are related to a broader theme (Short, 1993), the text sets in this study were selected to heighten student understanding of environmental issues.

In this study, literacy in drama and critical reasoning was introduced to the whole class and established through various text readings and through a variety of dramatic interpretations and journal responses to these readings. Student groups practiced and further developed these literacy skills by responding to various text sets linked by a general theme of humane and environmental education. A novel was read aloud to heighten critical awareness of environmental issues. Using text set materials and student organizers, groups researched environmental / humane issues. Drawing from a repertoire of new and previously experienced drama techniques, groups then planned a drama performance to share their knowledge and views on one aspect of humane education.

This chapter has provided a review of selected, related literature on reader response theories, the use of multiple symbolic systems, and environmental / humane education. Chapter Three discusses the research design and methodology, and the data analysis process.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter describes the research design and the methods for the study of young adolescent readers' comprehension of literary texts as mediated by reinterpretation and representation through drama as a symbolic system. The respondents, a purposive sample of four students, constituted one of seven response groups in the Grade 6 classroom. This study is the first of a series of studies to be conducted by Dr. Mary Clare Courtland of Lakehead University. As a whole, the studies will examine the nature of young adolescent readers' comprehension of literary texts as mediated by reinterpretation and representation through multiple symbolic systems: drama, art, writing, music / dance, and media.

Design

The design of this study was qualitative and emergent (Leedy, 2001; Patton, 1990). The humane and environmental education unit in this study provided opportunities for students to respond in a variety of ways to fiction and non-fiction materials in text sets (Short, 1993) and "read alouds", including an oral novel. In addition to the readings, students were provided formal instruction in critical literacy (Bainbridge & Malicky, 2000; Smagorinsky, 2002) and educational drama (Lang, 2000). The responses to the readings offered the context to observe efferent and aesthetic responses to text, intertextual relationships, and the nature of comprehension as expressed through the representation and reinterpretation of text through drama.

The study involved two phases. Phase I began in the first week of the study. The Grade 6 class was introduced to the unit on humane and environmental education and invited to participate in an environmental role play, as members of an environmental organization for young people. Data collected from this phase were analyzed to select a purposive sample of response groups for Phase II (Leedy, 2001; Patton, 1990). Phase II consisted of three response groups; the individuals in these groups served as the foci for further in-depth data collection and analysis.

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Setting

The school was a neighbourhood school located in a working class area of an urban school system in northern Ontario. Classes ranged from Junior Kindergarten through Grade 6. There were classes at each grade level as well as split grade classes. The respondents in the study were twenty-seven of the twenty-nine students in a Grade 6 classroom. There were 14 girls and 15 boys in the class. Most of the students had attended the same school since kindergarten.

Sample

Respondents in the purposive sample were four students in a Grade 6 class. The group included two boys and two girls. The classroom teacher regarded Group I as being serious, on task, and motivated. This group contained four students of average ability: Bonnie, Tammy, Max, and Wayne. Bonnie and Wayne were the most verbal of the four group members, eager to share their ideas, while shy at the same time. Wayne was an active participant in whole class discussions. Max was absent from school much of the first week due to dental surgery. Upon his return, he easily joined the response group and listened attentively to his classmates as they informed him of the environmental unit and recent developments connected to the unit. In group discussions with the researchers, Max was often last to share his views, always waiting for an invitation. Tammy was quiet and reserved, yet also willing to share her thoughts and ideas. All four individuals were fair readers and took care to develop relatively detailed journal entries. The group members treated each other with respect at all times. Wayne emerged as a gentle leader of the group; however, group decisions were based on group consensus. The individuals in this group had limited previous exposure to drama and to environmental issues. This group was selected as a purposive sample due to their enthusiasm, ability to attend to and complete tasks, verbal abilities, and social skills of each of the individuals.

Time frame

The research was conducted over a period of five weeks, for approximately eighty to one hundred twenty minutes, three or four days per week. During week four of the study, the time spent in the classroom was increased to half days and eventually to one full day to accommodate

student research, production planning, rehearsal and presentation. The study was interrupted by Education Quality and Accountability Office (EQAO) testing which took place during the week between Phases I and II. Schedules also had to be rearranged to accommodate Track and Field Days.

Methodology

Research methods used in this study included: participant and non-participant observations, informal and semi-structured interviews, and the analysis of texts and artifacts generated by student respondents in response to literary text sets. These texts and artifacts included student journals, student planners, student oral responses in discussion groups, student educational dramas, a final group performance, a video tape of that performance, student letters, and the observers' notes. Field notes were taken throughout the study. The classroom teacher took notes occasionally where the researchers were involved in the instruction process. All observations were recorded in journals.

Participant and non-participant observation

Observation may be viewed on a continuum ranging from complete involvement as a full participant to complete detachment in the role of a complete observer (Bogdan & Bilken, 1998). Participant observation affords the researcher the opportunity to enter into the world of the respondents, getting to know them and to earn their trust while keeping detailed written records of what is heard and observed. These records are supplemented by other data such as journals (Bogdan & Biklen, 1998). In this study, the researchers, in their dual roles as observers / instructors, made field notes as both participant and non-participant observers. Working as a team helped to limit observer bias (Bogdan & Biklen, 1998) and to provide a more detailed picture of the setting under study. As a participant observer, I co-instructed students in issues of drama and critical literacy, participating in the read alouds and discussions, as well as the mini lessons on research and planning strategies. In addition, I attempted to enter into the world of one of the purposive sample groups, sharing their enthusiasm, responding to questions, and

offering comments / suggestions when asked. I also responded to student journals and participated in the interview process throughout the study.

Interviews

Two types of interviews were employed in this study: informal interviews and semi-structured interviews. Informal interviews, in the form of conversations, took place with the classroom teacher as well as the response groups throughout the study. Through these conversations, the researchers were able to gather data regarding the students' environmental perceptions and intertextual connections, as well as the research, planning, and cooperative group strategies employed by the response groups. At the end of the study, semi-structured interviews were used to interview the purposive sample of response groups as well as the classroom teacher. Students viewed a video-tape of their final performance before responding to the semi-structured interview questions.

Smagorinsky (1996) contends that the process of composing extends beyond the writing process. By interpreting literature through drawing, dancing, and acting, students gain new insights and may even change the way they think about the literature to which they are responding. (Smagorinsky, 1996). Similarly, the product left behind - the video-taped performance, in this study - "becomes a symbol that the student can use to promote further reflection (and often reconsideration) of the ideas that produced it" (Smagorinsky, 1996, p. 15). Interviewing the students at the end of the study permitted the response groups to share, discuss and reflect upon the product generated by their response group.

Document analysis

Documents and artifacts collected during this study included: the observers' fieldnotes, student journals, Group Project Organizers, student oral responses in discussion groups, student educational dramas, the final group performance, a video tape of that performance, follow-up letters written by the students after the unit, and the interviews. The information from these documents was analyzed on the basis of emerging themes and patterns as relevant to the research questions.

Mary Clare and I maintained logs to record field notes, impressions, information and questions. The observers' fieldnotes provided information regarding a huge range of topics: physical arrangement of the classroom, unit curriculum, classroom management, responses to environmental texts, dramas, and discussions, emerging themes and patterns, response group learning, research and planning processes, the final performance and video taping of that performance, and the debriefing of student response groups and the classroom teacher at the end of the unit. Some examples of these documents are described below. An excerpt from the co-researcher's journal [CRJ] recorded the following information from an informal interview, early in the study, with the classroom teacher:

> Patty and I talked about how this class seems to have incredible difficulty sharing and brainstorming as well as working independently. She mentioned that, in the past, she has used very teacher-directed methods because the students accomplish so little when the expectations involve independent group work. I replied that perhaps they will improve with practice. It is a definite weakness but we need to see what the groups are capable of achieving on their own. (CRJ, p. 41)

The following example from the principal researcher's journal [PRJ] provided information about a response group drama re-interpretation of the environmental issues / messages presented in *Old Turtle* (Wood, 1992):

> #3 This skit was similar to a TV commercial. Tammy introduced herself as narrator and the other characters. [o.c. I didn't hear this]
> Wayne threw paper on the floor. Tammy called out, "Rewind!" Wayne and Bonnie picked up the litter. One said, "See, a little bit makes a big difference." The other "Yes! It sure does."
> Message: "If you want to make our world litter free, it starts with you and me." (PRJ, p. 14)

The researchers also made theoretical notes and notes of emerging patterns and methodological notes (Bogdan & Biklen, 1998). The following comment offered insight into the patterns emerging from the data: "Much of the information revolves around organizational strategies as well as research strategies" (CRJ, p. 73). Theoretical notes often included comments and questions about the effectiveness of daily lessons. This comment from Day 6 of the study considered the use of readers' theatre:

> ... The first group was the best. They were motivated, expressive and dramatic... The second and third groups did not give as commanding a performance and the attention of the audience seemed to wander... It would be interesting to see what

would happen if three different readers' theatres were used. Would the audience
be more receptive and passive if they were less familiar with the script? (CRJ, p. 32)

The students wrote journal entries as part of their daily activities. Their entries included
personal responses to drama techniques, read alouds, humane education terminology and issues,
and response group research planning. Student journals [SJ] were collected every week. The
principal researcher and the co-researcher each collected and responded to journal entries from
half of the class. Thus, all journal entries were read every week by the researchers. In addition,
by rotating responses half a class at a time, the researchers were provided opportunities to read
entries from all class members within a two-week time frame. In response to the tableaux used to
interpret *The People Who Hugged the Trees* (Rose, 1990), Tammy wrote,

> Today we did tableaux. A tableaux (sic) is a play where you freeze and you act out
> something. The story we did our tableaux to was the people who hugged trees. Our
> scene was the ax cutter was trying to cut down the tree but Amrita hugged the tree.
> We also assigned books we had in our text set. The books I choose (sic) were the
> promise to the sun, water ecology and rain to dams. (SJ, p. 15)

In response to Tammy's journal entry, the principal researcher wrote, "You will have to write in
your journal about these books. Keep reading and writing." (SJ, p. 15)

Early in the study, students brainstormed lists of environmental issues. Each issue was
accompanied by a clarifying point stating why the issue was a problem. These lists were revisited
briefly at the end of the unit so that the students might add to or modify their ideas. Every
member of the response group added new, at times, more specific issues / problems at the end of
the unit. In each case, a minimum of seven new entries was added. Initial responses included:
pollution (it kills animals), endangered animals (if they're all gone there won't be any left), paper
mills (make the air dirty so when we breathe we don't get clean air), hunting (because people kill
animals they're not supposed to which causes endangered animals), vehicles (because they
pollute the environment), and more. Modified responses included: oil spills (because they pollute
the earth, water and the environment) - 3% of the earth's water is fresh, all bodies of water are
connected, everything needs water to live, it costs $80 000 dollars to clean one animal after an oil
spill.

During the research and performance planning processes, student response groups
maintained a Group Project Organizer. Asked to brainstorm potential ideas for their final

performance, the response group, with their focus on water issues, designed a web to link their thoughts and research. Their ideas are shown in Figure 2 - Brainstorm of Water Issues. These ideas were later developed by the response group and incorporated into their final performance.

Figure 2. Brainstorm of water issues.

All systems are connected	Boulevard Lake	Water cycle
White Sand Lake	How it's polluted	Boats
	Sewage Garbage	
All water systems are connected	**Water Issues**	Campers Geese
What it does to our water		
	Oil spills	
Cost for clean up		How they clean up
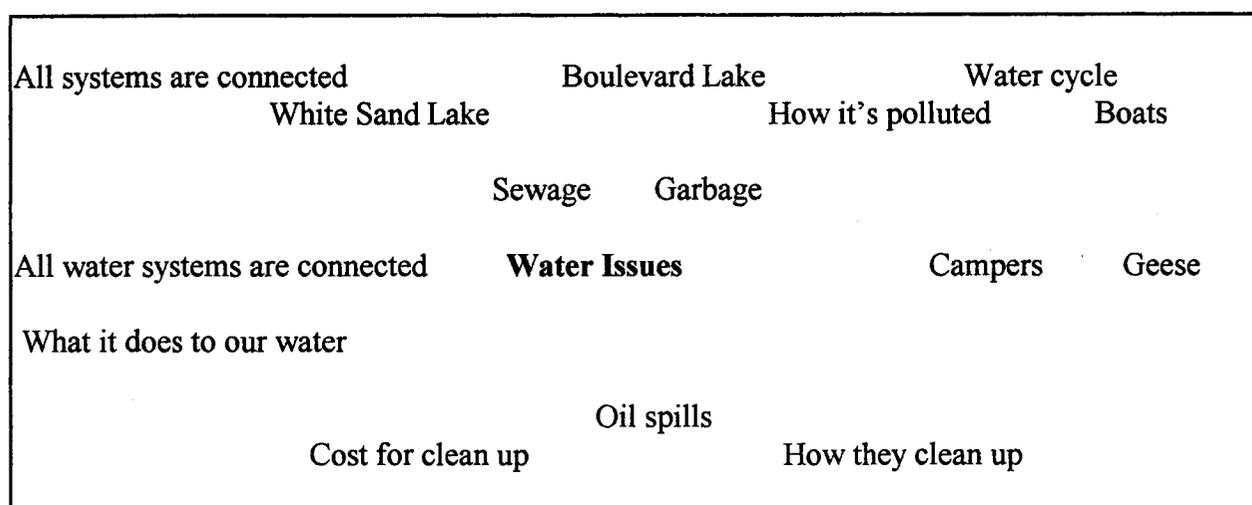
At the end of the unit, post unit interviews with the classroom teacher [PUICT] and the response groups [PUIRG] were conducted. Asked, "What would you leave as is in the unit?" the classroom teacher responded,

> I like the idea of having the text sets right there that they (students) could pull them out and bring them if they're going to work elsewhere. That was good having that portable centre right there. I like the drama techniques. I like the fact that they were responding to a drama technique. That was very hands-on for them... There was a good balance between writing and reading and doing... (PUICT, p. 8/9)

The interview provided insights into the teaching of the unit curriculum, particularly the techniques, issues and concepts introduced.

The post unit response group interview yielded information about student perceptions of performance, drama as a re-interpretation tool, and textual interconnections. When asked, "You mentioned about drama being fun, do you think there are other benefits to using drama?" Wayne

replied, "Gets the message across better than just going 'don't pollute'... everyone's listening and no one's like daydreaming and bored" (PUIRG, p. 2).

After completion of the unit, the Grade 6 class received a special letter from Dr. Courtland, under the pseudonym Meg Coughlin. This letter invited the students to write to Meg, a supposed education officer and colleague of Dr. Courtland, and "tell me what you have learned about humane education through your research. How did drama work as a medium for representing your ideas?" In her letter to Meg Coughlin, Bonnie wrote,

> We learned a lot about Water Issues like: how the water cycle works, that water can get polluted by geese droppings, campers, garbage and bacteria, also it costs $80 000 to clean off 1 animal after an oil spill, 3% of our water is fresh, 75% of the world is water, and a baby is 90% water.

The letter to Meg Coughlin allowed students to reflect on the performances, their own knowledge acquisition, and their power to effect environmental change.

Research Process

Entry / negotiation

Before the commencement of the study, Mary Clare submitted the proposal to the Lakehead University Research Ethics Board and the school board for permission to complete a series of studies. The school principal and the classroom teacher were co-researchers in the study.

Mary Clare and I met with the Grade 6 class in the week preceding the study to introduce the environmental unit, generate enthusiasm, explain ethics considerations verbally to the students, and hand-out parental consent forms. Appendix I contains the verbal explanation to students; Appendix II, the letter of informed consent. It was agreed that students who did not return the consent form signed by their parents and by themselves would participate in the unit in the same manner in which they would be expected to participate in the regular program. Twenty-seven of the twenty-nine students participated in the study. My role in this study was as a co-researcher, co-instructor, assisting in the collection of data and instructing the unit curriculum.

Data collection

Data collection for this study took place over a five week period. The researchers were in the classroom three / four times per week, 80 - 90 minutes per day, and for increased time periods toward the end of the environmental unit. Extensive field notes were recorded in journals. All fieldnotes and interviews were transcribed and typed. Data triangulation occurred through the use of different sources of data (Patton, 1990) such as the principal researchers' journals, student journals, student notes, student planners, student responses, student educational dramas and the final group performances. The response group discussions of the purposive sample and the interviews with the individuals in these groups were taped and transcribed.

Data analysis and interpretation

Data analysis was ongoing through the data collection phase to identify emerging patterns and to decide on the purposive sample for Phase II. The use of a constant-comparative method (Leedy, 2001) was used to code data and identify emerging patterns and themes. Connections were made to the existing literature.

During data analysis, the transcribed data were collated and pages were numbered. Photocopies of the data set were made. Materials in the data set were identified based on the initial letter of each word. As a result, the following codes identify the sources of data:

- principal researcher's journal = PRJ
- co-researcher's journal = CRJ
- Student journals = SJ
- Group Project Organizer = GPO
- Final Performance Script = FPS
- Post unit interview with classroom teacher = PUICT
- Post unit interview with response group = PUIRG
- Letter to Meg Coughlin = LMC
- Final performance video = FPV

The data gathered during this study yielded information about curriculum design and implementation, comprehension, and metacognitive awareness. As might be expected, there is some overlap in the themes. Several sources were insightful in identifying potential codes and categories. Eisner's (2002) dimension of curriculum informed the codes and categories for curriculum design. Protherough's (1983) framework for response (Gambell & Courtland, 2000)

and Rubin's (1990) levels of comprehension informed the codes and categories on comprehension.

Information on curriculum implementation was categorized using an adapted version of Eisner's (2002) dimensions of curriculum. Two categories which were not addressed in this study – evaluation and organization of content areas were omitted in the adaptation. Evaluation was performed separately by the classroom teacher. Two of Eisner's (2002) original categories: types of learning opportunities and organization of learning opportunities were combined to form one category. The adapted framework is shown in Figure 3.

Figure 3. Adapted framework for curriculum design and implementation.

Curriculum Design and Implementation

- aims, goals, and outcomes
- content
- organization and types of learning opportunities
- mode of presentation and mode of response
- role of the teacher

(Adapted from Eisner, 2002)
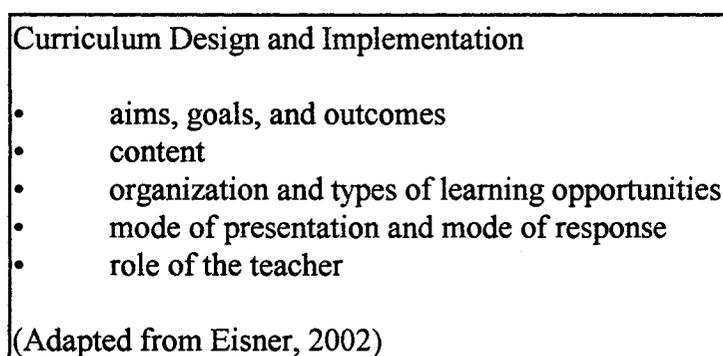
Although intended as a guide for teacher planning, Protherough's framework for response (1983, as cited in Courtland & Gambell, 2000), is applicable to this study. The framework considers types of learning opportunities as well as organization of learning opportunities for short term planning. Protherough outlines six stages, with each stage featuring a set of questions to facilitate teacher planning. Protherough's framework for response is shown in Figure 4.

In my interpretation of the data, I found variances in the depth of students' responses. As a planning guide, Protherough's Framework does not specifically address varying levels of comprehension. Rubin (1990), on the other hand, refers to four levels of comprehension: literal comprehension (based on information directly stated), interpretive comprehension (based on

information that is implied), critical comprehension (based on personal judgement of accuracy, truthfulness, and validity), and creative comprehension (based on going beyond the presented information to create alternate solutions). Loosely based on Protherough's stages (1983), the interpretation of the data in this study also incorporates Rubin's (1990) levels of comprehension. The adapted framework is presented in Figure 5.

In developing the adapted framework, several changes were made to Protherough's (1983) framework. Stages 1 and 2 of Protherough's (1983) framework were combined into one category - teacher interventions: information communicated pre-response by the teacher in introducing the curriculum and its related ideas. Stages 3 and 4 (Individual Responses and Shared Responses) include reference to Rubin's (1990) levels of comprehension. Stage 5, Assessment and Evaluation, while highly significant to response promotion, was omitted. Protherough's (1983) Stage 6, Possible Final Readings or Presentations was incorporated into Shared Response.

Figure 4. Protherough's framework for response.

1. Possible Pre-reading Activities

- Are there themes or issues which might be better introduced before the story is encountered?
- Will there be a preliminary preview / foreword to create interest?
- How can an appropriate atmosphere be created for reading?
- Is it necessary to establish a context for the reading?
- Should it be linked in any way with previous reading? If so, how?
- Is there any essential information (allusions, vocabulary) that students must have to understand the reading?

2. The First Reading

- How will it be presented? Teacher reading, recording, dramatization, or another option?
- Will it be uninterrupted, or with pauses for prediction, retrospection, or speculation?
- Will it be complete?
- Is any editing necessary?

3. Encouraging Individual Responses

- How far should the teacher intervene at this stage?
- What methods are most likely to encourage immediate personal responses?
- How can perceptions of the reading be tried out? Relating to personal experiences, re-telling, anecdotal parallels, selecting key passages?
- How can immediate responses be more clearly formulated? For example, pairs or groups seeking clues, identifying questions to answer, finding points of focus?

4. Developing and Sharing Responses

- What kinds of collaboration focussed on particular passages would be appropriate?
- What aspects of the narrative (story line, characters, mood, viewpoint, style) need particular attention? What activities will be most helpful for this?
- What forms of imaginative rehandling in talk or writing might be used?
- Would there be reasons for extending into other media? Art work, improvisation, recording, etc.?

5. Assessment and Evaluation

- How can helpful contacts with previous reading be established?
- What are the central issues on which judgment of this text will depend?
- What are the key questions that have to be asked about this text?
- What aspects of narrative technique should be considered?
- In what terms can these students be expected to "value" their experience of this story?

6. Possible Final Reading or Presentations

- What is the best way of rounding-off this work or bringing together group activities?
- Should there be any formal outcome? For example, a display or compilation?
- What reasons are there for and against a rereading of the text in some form?

(Protherough, 1983, as cited in Gambell & Courtland, 2000, p. 102-3)

Figure 5. Adapted framework for organizing findings on comprehension.

1. Teacher Interventions •   Themes or issues introduced before the story is encountered •   Establishment of reading context where necessary •   Links to previous reading •   Sharing of essential / related information (allusions, vocabulary, related concepts) to help students understand the reading and make connections •   Organizers and directives provided to facilitate student reading / research / daily work (i.e. KWL Reading Strategy) 2. Individual Responses •   literal / content-related responses •   interpretive responses (based on implied information) •   critical responses (judging) •   creative responses (problem solving, action planning) [Based on Rubin's (1990) levels of comprehension] 3. Shared Responses •   levels of comprehension [based on Rubin's (1990) levels of comprehension] •   intertextual connections •   group decisions re: drama format •   perceptions of drama   Adapted from Protherough's (1983) Framework for Response (as cited in Gambell & Courtland, 2000, p. 102-3)

The adapted framework for organizing the data on comprehension replaced Protherough's (1983) planning questions with guiding statements for considering the data on comprehension. The data were divided into three categories: teacher interventions, personal responses, and shared responses. Responses in student journals, notes in the group project organizer, comments on individual and final drama presentations, statements from the interviews, and the letters to Meg Coughlin were placed in these categories.

Data on the third theme, Metacognitive Awareness, were divided into two categories: cognition and the use of strategies.

This chapter described the research design, the qualitative methods used in data gathering, and the data analysis. The following chapter presents the findings and interpretation.

CHAPTER FOUR

FINDINGS AND INTERPRETATION

Chapter Four presents the findings and interpretation of this study. The first section provides an overview of the unit. The second section describes the findings. Three themes emerged from the analysis of the data: curriculum design and implementation, comprehension, and metacognitive awareness. Each is presented below. The final section discusses the interpretation of these findings.

Design of the Unit: Humane and Environmental Education

The description of the unit is mapped in relation to the dimensions of curriculum articulated by Eisner (2002): aims, goals, and objectives, content, organization and types of learning opportunities, modes of presentation and response, and the role of the teacher.

Aims, goals, and objectives

The aims of this unit were consistent with the aims of education for the province of Ontario, as outlined in *The Ontario Curriculum, Grades 1-8, Language Document* (1997). A difference between Eisner's (2002) theoretical framework and The Ontario Curriculum (1997) lies in the terminology: where Eisner (2002) refers to goals and objectives, The Ontario Ministry of Education and Training (1997) refers to overall and specific expectations within The Ontario Curriculum (1997). In developing the unit, the expectations were taken directly from *The Ontario Curriculum, Grades 1 - 8*. These are outlined in Figure 6. The overall, as well as the specific expectations, were communicated explicitly to the students involved in the study. Explicit communication and ongoing monitoring of students' progress facilitated student achievement.

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Figure 6. Ontario Ministry of Education expectations, articulated for the unit.

Reading (1997, The Ontario Curriculum Grades 1-8, Language)

Overall Expectations (goals)
- decide on a specific purpose for reading, and select the material that they need from a variety of appropriate sources

Specific Expectations - Reasoning and Critical Thinking (objectives)
- plan a research project and carry out research

Specific Expectations - Vocabulary Building (objectives)
- understand specialized words or terms, as necessary

Drama and Dance (1997, The Ontario Curriculum Grades 1-8, The Arts)

Overall Expectations (goals)
- interpret and communicate the meaning of novels, scripts, legends, fables, and other material drawn from a range of sources and cultures, using a variety of drama and dance techniques (i.e. readers' theatre), and evaluate the effectiveness of the techniques

Specific Expectations - Reasoning and Critical Thinking (ojectives)
- provide evidence for their interpretations of personal experiences and events of social significance, which they present through drama and dance, using a variety of research sources

Specific Expectations - Vocabulary Building (objectives)
- create, rehearse, and present drama and dance works to communicate the meaning of poems, stories, paintings, myths, and other source material drawn from a wide range of cultures

Student copies of the Ministry expectations were reviewed at the beginning of the unit and pasted into individual journals for future reference. These were referred to during the unit - "I'm going to ask you to look at the sheet first - expectations linked to reading and drama and dance. When you read and learn ideas you're going to have to translate those ideas into drama" (CRJ, p. 13).

The unit on humane and environmental education was also designed to promote expressive outcomes using drama as a forum for teaching / learning on issues related to humane education. Key concepts related to humane and environmental education included:

- issues of technology and progress
- lifestyle choices
- interconnectedness of all natural systems
- empowerment = making a difference, action plans, means for promoting positive change
- responsibility   (Bell & Russell, 1999)

Content

This response-based unit was designed to heighten critical literacy of Grade 6 students in relation to drama and humane and environmental issues. The general components of the unit included the following:

1. Text Sets – Eight text sets were developed. Text set topics included: animal protection, aboriginal worldviews, civilization and the environment, production and consumption, local environmental issues, forest conservation, water issues, and humanitarian efforts. Resource lists, along with the topics of consideration related to the text sets are contained in Appendix III.

2. Picture Books (referred to as read alouds) – Comprehension of the issues, concepts and ideas related to humane education was supported through the reinterpretation / representation of pictue books using oral language, drama, and writing as modes of response. A list of the read aloud texts is presented in Figure 7.

3. Educational drama techniques / experiences – To facilitate student familiarity with drama techniques and to inform the selection process for the final dramatic performance students engaged in the reinterpretation / representation of picture books through various educational drama experiences. The forms of educational drama instructed during this unit included: voice-in-the-head, role play, prepared improvisations, tableaux, choral reading, readers' theatre, and monologue. A list connecting specific drama experiences to specific picture books and concepts is outlined in Figure 7. Detailed instructions and/or scripts for each of the drama techniques are provided in Appendix IV.

4. Cooper's (2002) Green Boy – Read daily as an oral novel study, *Green Boy* (Cooper, 2002) was intended to promote further oral and written interpretation of many environmental issues connected to the unit on humane education.

5. Response Group Planning of the Final Performance – Students engaged in text set research and in the planning and scripting of their final performance with the support of their response group. A copy of the Group Project Organizer was developed to facilitate research and organizational strategies used by the response groups in planning the final performance and is outlined in Appendix V.

6. The Final Dramatic Performance – Response groups shared the dramatic representations / reinterpretations of their text sets with their parents and classmates. This final performance was video-taped and revisited during the post unit interviews with the response groups.

Figure 7. Summary of read alouds / concepts / drama techniques.

Read Aloud Text	Concepts introduced through text	Educational Drama Technique
Old Turtle (Wood, 1992)	harmonious living between animals and humans	three part prepared improvisation: beginning, middle, ending
The People who Hugged the Trees (Rose, 1990)	tree conservation, interconnectedness, standing up for one's beliefs	tableaux
The Creation (Bruchac, 1998)	creation of the earth and its inhabitants (animals first, humans last)	choral reading
Old Turtle (Woods, 1992)	reused due to student familiarity with text	readers' theatre
Two Islands (Gantschev, 1985)	technology, pollution, consumerism, greed, beautification, preservation	monologue

Organization and types of learning opportunities

This five week unit was designed to provide young adolescents in Grade 6 with opportunities to develop comprehension as well as critical and drama literacy skills by reading and responding to literary texts (fiction and nonfiction) on a humane education theme. A tentative timetable was developed prior to the onset of the unit, then revised each week. Initially, the unit was designed such that the researchers would be in the classroom three days per week for approximately 70 to 80 minutes at a time. Students were given opportunities to learn and respond to learning in various large and small groupings, as well as independently.

The structure for Weeks I and II incorporated the following:

- Read aloud (15-20 minutes)

- Drama Activities (30 minutes)

    ~Mini Lessons (selected days) (15 minutes)

    ~Planning time: Response Groups (45-60 minutes)

    *reading texts (independent)

    *planning

    *investigating/analyzing response groups

    *synthesizing

    *reinterpreting

    ~Journal Writing (independent) (10 minutes)

    ~Whole class discussion / ECO role play

An overview of the unit, as communicated to students during Week I of the study, is presented in Figure 8. This outline summarizes the types of learning opportunities provided to students.

Figure 8. Overview of the environmental / humane education unit.

Overview of Unit				
	Environmental / Humane Education			
\ Read aloud	\ Drama	\ Work in response groups \ Select text set \ Read \ Talk about ideas \ Select a theme \ Research \ Performance	\ Journal / groups	\ Whole meeting of Club
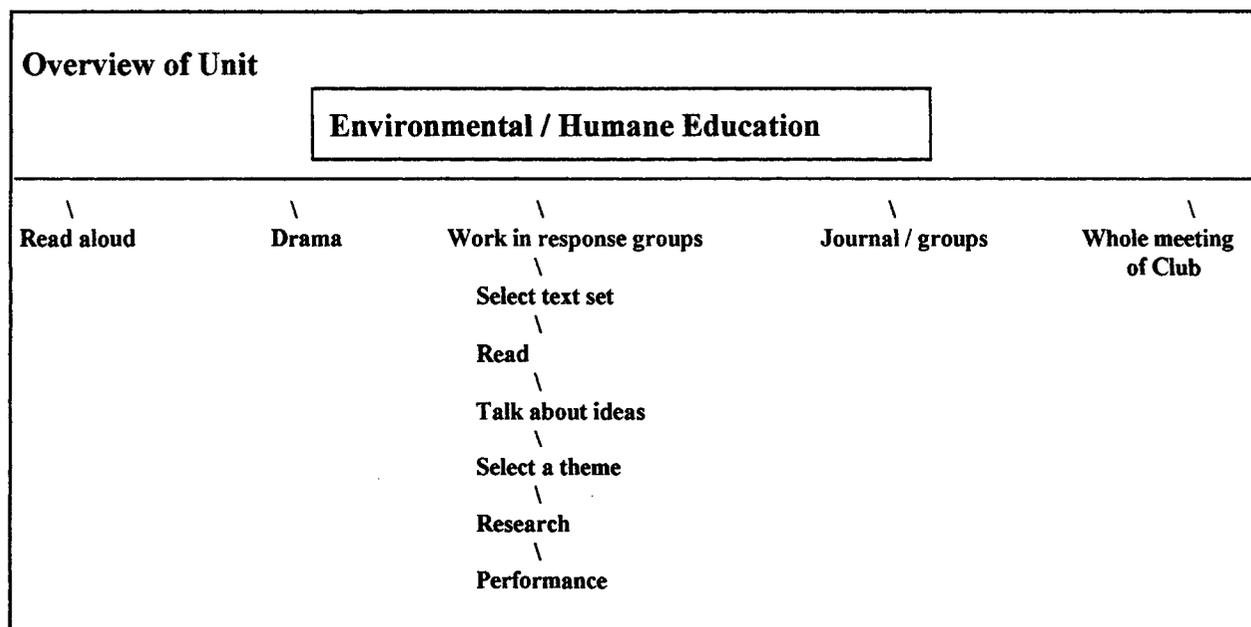
Modes of presentation and response

The contents of the humane and environmental education unit were presented to students to create optimal conditions for learning and to promote student responses. The presentation of unit materials was characterized by the following criteria: students were active participants in their own learning, links were established between new information and prior knowledge, researchers used scaffolding to support learning, students were given methods for organizing their information, and opportunities were provided for students to learn through social interactions.

Student interactions with text were accompanied by opportunities for response designed to heighten student involvement in the unit and to promote deeper comprehension of the humane and environmental issues. Interactions with text included oral reading of picture books and a novel. In addition, response groups engaged in the independent reading of their text sets. The use of educational drama was intended to facilitate intertextual connections and concept development. Visual strategies, including brainstorming, webbing, KWL, and the use of a Group Project Organizer, were introduced to support student learning. Students responded to the readings, concepts and issues using three modes of response: verbal, written and dramatic.

Students participated in a variety of large group, small group, and individual experiences within this literature-based, response-centered unit on humane and environmental education.

Role of the teacher

The intended roles of the teachers were as models and facilitators.

Findings

Three themes emerged from the data analysis: design and implementation of the unit, comprehension, and metacognitive awareness. Each is presented below.

Design and Implementation of the Unit

Class profile

The contents of the unit built upon previous student experiences. The classroom teacher noted connections to curriculum content in several areas:

> It builds on some of the Social Studies curriculum that we did as far as Native culture except for environment. That was something we dealt with in the fall and it built on that. The Christian Living as far as respecting yourself, respecting others, it built on that. The science area... // ... it just gave them a little bit more in-depth knowledge in different areas" (PUICT, p. 2)

Journals, a daily component of the humane education unit, had also been widely used within the classroom. Initially, journal responses to the unit were open-ended, guided by student interests. As the unit progressed, suggestions were often made to guide student focus and encourage lengthier comments. Numerous journals were written in response to questions based on the read aloud stories and text sets, and the research and performance planning processes. Students reported that previous exposure involved some open-ended journaling, as well as assigned writing where students responded to "little questions" or to memorable quotes - "You had to write what you thought the quote meant" (PUIRG, p. 6).

Research skills, introduced earlier in the year, were further developed in the humane education unit. Referring to previous exposure to research strategies, the classroom teacher commented, "They have had independent study where they worked on a research project of their own - 'I wonder' questions, but then it was very guided. They had to come up with five questions around their 'I wonder' question. And they had to research those specific questions" (PUICT, p. 4). She indicated that while the research component of the humane education unit built on existing research skills, the research approach differed in the sense that it was more "open-ended" (PUICT, p. 2).

Although many of the drama techniques introduced in the unit were new, the students had been exposed to drama before the beginning of the unit. The classroom teacher noted that "some of the drama techniques were definitely new for them" (PUICT, p. 4), specifically readers' theatre, voice-in-the-head, and hot seating: "Choral reading - we've done a little bit of. They were familiar with that. But the Readers' Theatre, a new strategy. The voice-in-the-head. That's one I think I'll remember too ... (hot seating) Ya. That was interesting" (PUICT, p. 4).

The arrangement of students into response groups was performed early in the unit by the classroom teacher. Students were divided into response groups to accommodate the use of text sets. Six groups of four students and one group of five were formed. The extra member of the fifth group was described as being "weak academically" (CRJ, p. 10). In planning the groups, the classroom teacher gave consideration to personalities and ability / skill levels, such that at least one group member was a strong individual. Four of the groups contained two males and two females. One group, all males, contained students described as "behavioural - impulsive and inattentive" (CRJ, p. 10). The classroom teacher thought about separating the four boys but could not think of where else to place them without interfering with the productivity of four groups. She decided "segregation would be the best arrangement for everyone" (CRJ, p. 10).

The classroom teacher facilitated the assignment of text sets by having response groups record their three preferences. She then assigned text sets to the seven response groups. The purposive sample described in this study selected Water Issues as their text set focus. Text sets were assigned to the seven response groups before the researchers arrived for Day 2. Individuals were also provided with new notebooks to be used for journaling responses.

Timeline and format of the unit

The unit was implemented over a period of four weeks, three or four days per week in periods of 70 to 80 minutes. The classroom teacher used additional class time, beyond the daily 70 to 80 minutes allotted for the study, for further oral novel reading, research of text set materials, and reflection.

The unit was designed to provide both structure and flexibility. The concepts and drama forms were formally introduced during Weeks I and II of the study. While response groups engaged in text set reading as early as Week I, reading and research became more intense in Weeks III and IV. Similarly, large chunks of time were also devoted to the planning and rehearsal of the final performance during Weeks III and IV. Involvement in Week V entailed interviews with the response groups and classroom teacher. The schedule for Weeks I through V can be found in Appendix VI.

Introduction to the unit

Introduction to the humane and environmental education unit began during the initial meeting with the students to explain the research study. Mary Clare read Schim Schimmel's (2000) *Children of the earth... remember* to set the tone for response through drama (using imaging / voice-in-the-head) and to introduce the theme of humane education. This story about the world emphasizes connections among people, animals and Mother Earth; one big family. Students were asked to close their eyes, lower their heads, and to picture, in their minds, words from the story. Next, students were asked to picture one scene and to describe the picture when tapped on the shoulder. This activity was intended to introduce students to drama in a non-intimidating manner. Next, Mary Clare explained the letter of consent and invited students to sign the form, along with their parents. Finally, students were asked to brainstorm, independently, a list of the environmental problems with which they were already familiar and to state why each issue was a problem (i.e. Pollution - makes it harder to breathe, kills animals, wrecks the food chain, dirties the land and water...). The researchers believed this listing might activate the students' prior knowledge and indicate knowledge acquisition when revisited at the end of the unit.

The introductory activities introduced in Weeks I and II were designed to help students understand the unit expectations, daily routines, and content. Time was spent introducing students to the various components of the unit: i) the environmental / humane education focus; ii) the educational drama techniques; iii) the response groups designed around the eight possible text sets (animal protection, aboriginal worldviews, civilization and the environment, production and consumption, local environmental issues, forest conservation, water issues, and humanitarian efforts); iv) the read aloud texts and oral novel; Cooper's (2002) *Green Boy*; v) the unit expectations for work completion and journal writing, including the Group Project Organizer; vi) the foundations for the whole class environmental club role play; and vii) the nature of the culminating project.

Initial engagement and response

On the first official day of the unit, Mary Clare put on her green hat and stepped into role as a guest speaker from The Environmental Children's Organization (ECO). She thanked the students

for inviting her to speak to their newly formed environmental club. Two items were on the agenda: i) Severn Cullis Suzuki's speech at a conference in Rio de Janiero and ii) the ECO. Mary Clare read aloud text from the speech in Suzuki's (1993) *Tell the world: A young environmentalist speaks out*. In the speech, Suzuki mentions fish full of cancer, animals and plants disappearing forever, extreme worries young people face today about the uncertainty of the earth's health, holes in the ozone layer, spread of the desert, children starving in Somalia and living on streets in Brazil, and the need for the world population to act as one big, responsible family. The speech ends with, "...what you do makes me cry at night. You grownups say you love us. I challenge you... make your actions reflect your words" (Suzuki, 1993, p. 21).

In response to the reading, students were asked to brainstorm groups of delegates who may have been in attendance at the conference. The students suggested the following: Boy Scouts, industry workers, environmentalists, health care workers, students / teachers, politician's and reporters / members of the Press. They then adopted one perspective and shared, in role, how this particular group might have responded to the speech. Immediately following the conference role play students were introduced to the idea of using text sets, and to the text set topics.

On Day 2 of the unit, Mary Clare presented students with an overview of the humane education unit written on chart paper. This overview introduced students to the many components of the unit. A second piece of chart paper listed the drama techniques used thus far: role playing, imaging and voice-in-the-head. This list was revisited daily, establishing connections between the story / text read and the drama techniques used. Copies of the curriculum expectations (see Figure 6 - Ministry Expectations) were distributed to students to be glued into the back of their journals. The school principal then asked students to define critical thinking. Student definitions included "analyzing," "being serious," "using what's in your head," and "adding your own ideas" (CRJ, p. 14).

Throughout Weeks I and II of the unit, students explored various environmental issues by listening to and discussing stories, by representing and reinterpreting the issues through various drama techniques, and by responding in their journals. Each day, a new drama technique (see Figure 7) was introduced and used to interpret the text. In response to Rose's (1990) *The People Who Hugged the Trees*, student groups developed tableaux depicting a scene from the story. One member from each group described the scene briefly. In one of these tableaux, the four participants

portrayed themselves as two trees, Amrita standing in front of the trees, and the axeman swinging at the trees. In role, "Amrita" informed the audience, "I'm Amrita and I'm protecting the trees" (CRJ, p. 20). In a second tableau, two characters positioned themselves as people hiding behind their cohorts, in role as two strong trees. Joey explained the scene, "We're two trees blocking the people from the sandstorm" (CRJ, p. 20). After performing their tableaux, students responded to the experience in their journals. Tammy wrote, "Today we did tableaux. A tableau is a play where you freeze and you act out something. The story we did our tableau to was the people who hugged trees. Our scene was the ax (sic) cutter was trying to cut down the tree but Amrita hugged the tree" (SJ, p. 15). Journals were collected each week so that the researchers might be informed by the responses and reply, in positive terms, to each set of entries.

Reinterpretation and representation of text set research

Beginning at the end of Week II, throughout Week III, and into Week IV, instruction shifted from introduction of drama techniques to the teaching of reading / research and organizational strategies in order to promote comprehension and to prepare students for their final dramatic interpretation. Response group members worked in teams to complete various components of the unit: the text set research, the Group Project Organizer, and the planning and performance of the dramatic interpretation of the text set.

To assist response groups with the re-interpretation of their text sets and other related texts through drama, Mary Clare designed a Group Project Organizer. A copy of this organizer can be found in Appendix V. The organizer was completed by each response group. Within the Group Project Organizer, students were asked to record a plan for assignment of text set readings to individuals in the response groups, to assign roles for group discussions, to list KWL research findings, to outline the drama approach chosen by the group for the final performance, and to explain the preparation process for the performance.

Earlier in the study, the researchers had decided to instruct students in the use of literature circles (Daniels, 1994). The section of the Group Project Organizer based on discussion roles related to this decision. Due to time constraints, this focus was omitted. As a result, section two of

the organizer was not used. Mini lessons were developed, on an "as needed" basis to address instructional demands or clarify points.

Response group and individual expectations for completion of the expressive activities contained within the humane education unit were distributed to and discussed with students. The specific Individual / Response Group Expectations are shared in Figure 9.

Figure 9. Individual / response group expectations.

Each **student** is expected to:
- contribute to the development of a plan in his/her response group for reading the books in the text set;
- read assigned books and share these books with the response group;
- reflect in the journal once per day; and
- cooperate with his/her response group to plan, research, create, and perform a dramatic presentation which interprets the group's findings about the theme

Each **response group** is expected to:

- select a text set;
- decide how group members will complete the readings;
- discuss ans interpret the ideas in the books and resource materials;
- select one theme for further investigation
- develop a plan and timelines for conducting research (plan must be approved)
- discuss individual research findings with the group;
- create a dramatic presentation which interprets the findings; and
- perform the presentation for an audience

Many of the individual and response group expectations were tied into and supported by the various components of the Group Project Organizer. For example, each individual was expected to "contribute to the development of a plan in his / her response group for reading the books in the text set" (OJ, p.10). The first responsibility outlined in the Group Project Organizer entailed the disbursement of text set resources to the response group. Response groups were given time to browse through their text sets, noting the range of materials contained within each text set bin; fiction and non fiction materials, newspaper clippings, internet references, and bibliographic listings of resources. Students were reminded that "all boxes / bins are a start"(PRJ, p. 10); acquiring information for their projects might entail the use of additional resources from the internet, home, the library, or other sources. Individuals were asked to respond to their text sets by writing their thoughts, feelings, ideas and / or plans "once per day" (PRJ, p. 10) in their journals.

Explicit communication of the expectations regarding the daily completion of the expressive activities contributed to efficient, timely and organized completion of the individual and response group tasks. Response groups were given daily "To Do" lists. Figure 10 is an example of one of these lists.

Examples of daily oral directives included:

- Now listen carefully to what I want you to do. Each group is going to get a piece of paper. I'm going to tell you your role. When I tell you what your role is you have to think like a person in that group... (CRJ, p. 7)

- What I'm going to give you today is a Group Project Organizer and you're only going to work on one part today. You're going to decide what each person will read... If you look at the sheet it says to develop a plan for who is going to read the book. Write down who's going to read what. Remember you need a scribe. The purpose in doing a plan is because you have to share the reading. (CRJ, p. 21)

- I want one person to come up from each response group to get a handout [2 handouts on group expectations for today and Monday]. These are actually the things we talked about yesterday but I'm going to review them so you all know where we're going. This is a to do list. Your parents probably make lots of 'To Do" lists. (CRJ, p. 57)

Figure 10. Example of response group "to do" list.

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Response Groups: To Do List

1 Continue to use the KWL strategy to:
    a) write what you know
    b) decide what you want to know
    c) identify what you have learned

2. Identify a theme or issue which you want
    to interpret / represent for your final project.
    a) do you need to do more research?
(The research should be completed by Monday
morning)

3. Create a text map.

mercury contamination        pollution

drinking            Water Issues
water                            tourism
```

The primary focus of Week IV involved planning the performance. Students used the knowledge acquired through formal instruction of educational drama techniques, text readings, reflection, and discussion, to design a final drama performance on one issue connected to humane education. Response groups decided on the information they wished to include in their performances and the format / drama technique(s) with which their messages would be conveyed. Two students; one male, one female, were invited to assume the role of master of ceremonies. The researchers assisted these individuals in the preparation of cue cards to facilitate introduction of the overall performance on humane education and of each group performance within.

On two occasions, when the majority of the class was involved in track and field, the classroom teacher assigned the remaining students to design programs (to be given to parents at the performance) and a mural-sized Earth Pledge. The classroom teacher was uncertain of the origins of this pledge. The Earth Pledge is presented in Figure 11.

The Pledge was decorated with the paint-dipped hand prints of each classroom member (their signatures), as well as the classroom teacher and the researchers. It was read by all participants at

the end of the final performance. Parents were invited to join in the recitation.

The class also developed and rehearsed a prayer to be read at the beginning of the performance. To facilitate the formulation of the prayer, I met with response groups and individuals to brainstorm their "hopes and prayers" for planet Earth. Their ideas were organized into one large prayer, depicted in Figure 12. (Note: Prayer was an intrinsic part of the teachings at the study site.)

Figure 11. Earth pledge.

Earth Pledge

The Earth is my Home,

I promise to keep It Healthy and Beautiful.

I will love the Land, the Air, the Water, and All Living Creatures.

I will be a Defender of my Planet.

United with friends, I will save the Earth.

(author unknown)
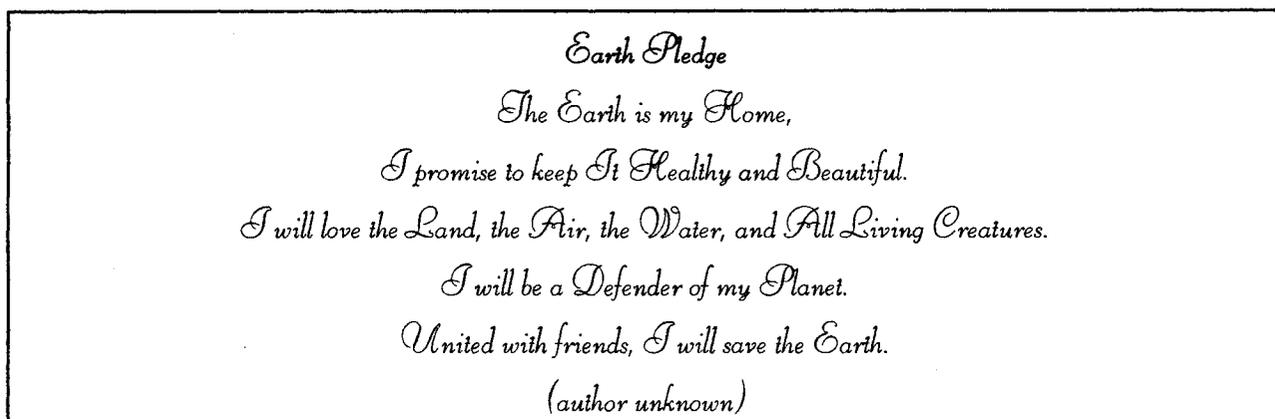
Figure 12. Environmental prayer.

Dear God,

Our Environmental Prayer to God
(Written by Grade 6, June 6, 2002)

We thank you for bringing us together
to celebrate your beautiful Earth.
We thank you for teaching us
that we need to be more grateful for what we have -
That we cannot take our world for granted forever.

We are thankful for the messages of respect and love
for our Earth and its creatures, for its water and its soil,
for its trees that provide us with shelter, for the sun in the sky,
and the air that we breathe.

We ask that you continue to teach us about our Earth,
and to guide us in our decisions
so that we might end all suffering -
War, Pollution, Starvation, Poverty and Habitat Destruction.
Help us to change the ways people look at and think about
the environment and each other.

In the name of the Father, the Son, and the Holy Spirit,
Amen

Students were more likely to use a drama technique when they had experience with that technique. Each of the seven response groups presented a final drama performance on one topic related to humane education. Figure 13 outlines the themes and forms of drama used to re-interpret and represent the texts. Five of the seven groups conveyed their messages through prepared improvisations / role plays wherein the actors memorized lines and actions. Of these, one group also made use of a narrator to introduce portions of their skit and two groups added some form of choral reading: a poem and a rap song. The remaining groups selected monologue and story theatre to convey their information / messages. Story theatre was the only technique not modeled in class by the researchers to be selected for the final performance.

Figure 13. Final performance themes shared / drama techniques selected.

Response Group Theme	Drama Technique
humanitarian efforts	prepared improvisation / role play and choral reading of poem
aboriginal worldviews	story theatre
local environmental issues	narrated prepared improvisation / role play
water conservation	prepared improvisation / role play and cassette taped broadcast
animal protection	prepared improvisation / role play
tree conservation	series of three monologues
water issues	prepared improvisation / role play and original rap

Students reportedly enjoyed participating in the unit for four reasons: the unit contents were interesting; the drama experiences were enjoyable; they learned new facts and skills; and the overall experience was pleasurable. At the end of the unit, Leah exclaimed, "It was fun. We got time to look at our text sets and write in our journals about it. I don't think I would change anything!"(PUIRG, p. 5) Eugene assessed the appeal of the unit, "It was about something different for us. There were a lot of new things that...like all the different things we did - like readers'

theatre and all that stuff, um. And all the research we did. We found out quite a bit" (PUIRG, p. 6). Eugene enjoyed the exposure to new skills and new information. Leah provided a further explanation of what made the unit fun, "Well the whole project - it was fun. So you want to learn more about your text set and your topic, so you want to learn more, so you read more and..." (PUIRG, p. 7). Leah's explanation demonstrated the potential for the unit to draw students into the learning process through the quest for knowledge.

Comprehension

Two factors facilitated student comprehension: teacher interventions and private and shared responses. They are discussed below.

Teacher interventions

Throughout the unit teachers / researchers used planned and spontaneous interventions to inform student comprehension. Teacher interventions consisted of various experiences, including: intentional, as well as incidental scaffolding of materials and learning experiences, formal and informal teaching of mini lessons, facilitation of small group discussions, and use of focus questions to guide student comprehension through text reading and journal writing. Teachers intervened in the following instances: i) to introduce unit-related concepts and vocabulary; ii) to introduce and promote critical literacy; and iii) to clarify issues, ideas and expectations. More specifically, the interventions used by the teachers / researchers were manifold and included:

- **brainstorming** - "At this point, I became the instructor, getting students to brainstorm on a piece of paper all the environmental issues they could think of and a brief explanation about why the issue was a problem..". (CRJ, p. 4)

- **organizing activities /experiences** - "Now listen carefully to what I want you to do. Each group is going to get a piece of paper. I'm going to tell you your role..". (CRJ, p. 7); "On the Track and Field Days (2) only 8 kids were left behind. Patty had these students design pamphlets to be copied, coloured and distributed to parents at the presentation" (CRJ, p. 75)

- **reviewing** - "We're going to keep a list of drama techniques. Who remembers what we did the other day?" (CRJ, p. 13)

- **modeling metacognitive strategies** - "How do you think we're doing so far with our work?" (CRJ, p. 14); "Did you find it easy or hard to talk in the concentric circles?" (CRJ, p. 36); "On your piece of paper, write down the things you liked about each skit and any suggestions you have for the group" (CRJ, p. 76)

- **teaching concepts / techniques** - "A monologue is when one person speaks alone, without a discussion" (CRJ, p. 37)

- **responding to student responses** - "You worked well together and created a thoughtful skit with an important message" (SJ, p. 14); "What was the good part, the part you liked best? I'd love to know more about your thoughts"(SJ, p. 18)

- **questioning to promote comprehension** - "Nobody bothered to tell me about the two dead men? Two dead men aren't important?" (CRJ, p. 29)

- **facilitating group discussion** - "So what was the message? How does that fit in to what we are learning about in humane education?" (CRJ, p. 31); "I sat with Shawn, George, Mike and Shane. I was their recorder, prompting them and writing down ideas..." (CRJ, p. 42)

- **clarifying / providing links** - "What do you want to learn from your reading? What will you show in your performance... Use your organizer sheet to show what you are learning" (CRJ, p. 43)

- **guiding behaviour** - "We're forgetting when we are in a big group we need to raise our hand to speak" (CRJ, p. 44); "I began circulating amongst the groups, trying to focus the members and help as needed" (CRJ, p. 66)

Cumulatively, these interventions shaped student comprehension of the issues by providing scaffolded learning experiences. Teacher guidance enabled students to make intertextual connections and to examine the issues more thoroughly.

Scaffolding was used to introduce new concepts and related vocabulary to students. After reading *The story of the three kingdoms* (Myers, 1995), a story in which human intelligence surpasses the strength and wisdom of the animals, the concept of anthropocentrism was introduced. Students were asked, "Are humans smarter than the animals in the story or are the animals smarter than humans? ...How many of you know a big word that stands for man being in charge? It starts with an 'A'?"(CRJ, p. 39). Enthusiastic answers included "anthropology", and "anthropod" (OJ, p. 39) Finally, the word and its definition were written on the board and explored by the whole

class – "anthropocentrism – humans at the center, humans in charge of the world, humans as rulers" (CRJ, p. 39). Later, in their journals, students commented on the new word:

- Today we learned the word Anthropocentrism. It means man is in charge. It is a long word. (SJ, p. 24)

- We learned the word anthropocentrism. It means humans are the center. They are in charge and we are the rulers. (SJ, p. 19)

When asked, "Why would we look at that word when we are talking about the environment? (CRJ, p. 39), Jeff responded, "It's about what man has done to the earth by taking advantage." Jay added, "Man has made an environmental mess" (CRJ, p. 39).

Critical literacy was introduced and supported using a similar scaffolding of teacher interventions wherein whole class brainstorming and/or discussion was often reinforced by small group conferencing, and/or guided journal writing. As a whole class, students were asked to define critical thinking. Their combined answers included, "adding your own ideas, being serious, planning a project, and analyzing" (CRJ, p. 14). This large group intervention was further supported by small group conferences. I met often with Wayne, Tammy, Max, and Bonnie throughout their text set reading and performance planning. During one talk, the group shared some of the messages they wished to convey in their drama performance: "that it costs $80 000 to clean one animal after an oil spill, and that 3% of the earth is fresh water" (CRJ, p. 54). The group was considering a role play about an oil spill in a nearby lake. Asked if this small lake had ever been the site of an oil spill, the group admitted it had not. Guided by teacher prompting, the group reread portions of their text set. Through this small group teacher intervention, the group came to realize they were missing key information about the interconnectedness of the water cycle and other systems (i.e. food, soil), the potential for contamination to spread to other systems, and the need for clean, reliable drinking water. "Basically, this group needed some spoon feeding" (CRJ, p. 54) to explore more fully the issues in their text set - to use critical literacy. In perceiving a need for further information, the group eagerly returned to their text set research with a renewed, more directed sense of purpose.

The method for sharing Dr. Seuss' (1971) *The Lorax* offers a second example of how scaffolding was used to promote comprehension. Prior to the reading of *The Lorax* (Seuss, 1971),

students were assigned focus questions: "The story was written in 1971. Has the environmental situation changed since then? How? Do you think you can make a difference? (Help the environment?)" (CRJ, p. 47). Responses to the focus questions were guided by whole class deliberation on various related issues. During the story, students were asked to list "any inventions we don't really need? Inventions like the thneed in the story" (CRJ, p. 44). Student responses included: nintendo, jewellery and makeup, alcohol, drugs (illegal substances) and cigarettes, fur coats, curlers, stickers, bookmarks and plastic spoons (CRJ, p. 45). During a second pause in the reading, students were asked, "What has been affected by this new industry?" (CRJ, p. 46). Among the responses were the following:

- The animals have. There's pollution. The food supply, the animal population and their voices - too much smoke causes coughing.

- The whole forest, the wood, the resources.

- With the trees cut down, they aren't getting enough fresh air.

- Soil. When they cut down trees because the trees hold the soil together. (CRJ, p. 46)

At the end of the story, a sign, containing the simple message "Unless..." protrudes from a barren land. Students were asked to interpret the meaning of "Unless..." Their suggestions included:

- Unless you compromise - plant more trees.

- Unless he stops his factory.

- Unless more truffula trees grow the Lorax won't come back.

- Unless you change your ways you will be by yourself. (CRJ, p. 46/7)

Students were then instructed to write a focused journal entry; "The story was written in 1971, 31 years ago. Take out your journals. In your journal I want you to consider if you think the message in that story still tells us something about today?" (CRJ, p. 47). In their independent journal reflections, students shared their beliefs. Tammy wrote,

> Today we read a story called The Lorax. The story was written 31 years ago. No, the situation hasn't changed since then because today people still cut down trees that they don't need. I can make a difference because I could plant new trees, start a pation (sic) and protect the trees. (SJ, p. 16/7)

Robbie commented, "The same problems that happen in the story still happen today" (SJ, p. 19). Wayne agreed, noting that "the situation is still the same" (SJ, p. 24).

Students often required further clarification to understand the messages implied within their text sets and to comprehend the content of the various texts used within the unit. Spontaneous teacher interventions resulted. Lexi, perplexed by the contents of the text set on aboriginal worldviews, commented, "We don't have anything - just myths and stories" (CRJ, p. 31). The class was asked, "Why, when we are all studying different parts of humane education, would Lexi's group have a text set about the myths and legends of the native peoples? How does that even relate to our topic?" (CRJ, p. 31) A discussion about consumerism and traditional native views ensued. Students referred to modern views in which "man sees nature as a resource" (CRJ, p. 31), to be used in abundance, and compared this to traditional native views depicted by a mutual give and take between humans and the natural world – "native peoples living with the land" (CRJ, p. 31).

Spontaneous teacher interventions were also used to clarify issues related to the oral novel. During one session the principal read a chapter of *Green Boy* (Cooper, 2000) to the students. She invited them to co-develop a summary of the chapter contents:

Jane: Why were the policemen seen as enemies?

Wayne: They were trying to stop the people. They were doing their job.

Jeff: They're trying to protect the city.

Jane: A couple of conflicting points of view seem to be going on in the story. Any questions?

Debbie: Why were the policemen there? What were they doing?

Jane: Pose that question to anyone...

Marky: They were probably trying to stop the other people from trying to build the city.

Wayne: For Marky's answer - if they were just trying to destroy the city, they would just cause more pollution, wouldn't they? (CRJ, p. 30)

Once it became apparent that several misunderstandings surrounded the plot of the oral novel, Jane commented, "Debbie and I are out of luck on the story. We need to go back and read" (CRJ, p. 30). This observation granted students permission to re-examine the text.

Development of comprehension through private and shared response

The unit was structured to provide many supported and independent opportunities for shared and private student response. Large group activities included the presentation, modeling, and guided practice of concepts, issues and drama techniques. The primary group configuration was the response group in which students planned and conducted research and responded to their text sets. Response groups also engaged in the collaborative process of re- interpreting / representing their literary text sets for the final performance. Peer interaction within the response groups helped students co-construct meanings to arrive at heightened individual awarenesses. Independent journal reflection and letter writing allowed students to formulate, internalize, and express their understandings of the issues and concepts presented in the unit. The development of comprehension was gradual and cumulative. As the unit progressed, student responses reflected deeper understandings.

Early oral, written and dramatic responses to the unit and its contents were brief, lacking in detail and depth of thought. Several factors, including lack of familiarity with the researchers and the unit contents, may have inhibited student participation. The following examples illustrate the brief nature of early responses. At the beginning of the unit, Mary Clare introduced the whole class to a drama technique known as imaging. She stated,

> I want you to put your heads down and close your eyes. Think of yourself
> as a child of the Earth. I am going to read you a passage [*reads passage about
> how the people forgot to care for Earth but the animals remembered*] Think
> for just a minute about the dolphins cavorting... the birds singing... now I want
> you to think about animals and people - think of a scene - speak out loud and
> tell us about the scene when I tap you... (CRJ, p. 2)

Mary Clare tapped students on the shoulder, one at a time, and invited them to share a scene. The same response, "Birds singing" (CRJ, p. 2), was repeated by the first five participants. At this point, the school principal was tapped. She began, "Pollution... birds crying as a result of the..." (CRJ, p. 2). She shared a wonderfully long, rich, descriptive answer meant to be a model, and to break the focus on "birds singing". The next student offered a new response, "Deer dancing". This was followed by, "Birds singing" (CRJ, p. 2/3).

Initial journal reflections were also very general and brief, often capturing sentiments about an aspect of the unit or seeking clarification on a point. In her journal, Tammy wrote, "The books that are in our text set are very interesting. So far I enjoyed reading Water Ecology" (SJ, p. 16). Wayne wrote, "Today we chose the books we want to read. My favourite book that I am interest (sic) to read is Spills" (SJ, p. 23).

The initial student listings of perceived environmental problems further illustrated the brief nature of early responses. These lists, prepared before students were divided into their response groups and before establishment of a sense of community, offered insight into student awareness of environmental issues. The ideas generated by the members of Response Group 1; Max, Robbie, Bonnie, and Tammy, are presented in Figure 14.

Figure 14. Environmental problems and explanations - beginning of unit.

Student-perceived Environmental Problem	Student Explanation (why it's a problem?)
paper mills	let out pollution that makes people and animals sick
cutting down trees	no place for the animals to live
hunting	causes endangered animals
vehicles	pollute the environment
pollution	kills animals / wrecks the water
dumps	too much garbage kills the animals
boats	the gas will spill out into the water and kill all the fish
cars	all the animals may die from drinking all the gas
wars	people will die from it
oil companies	if the oil spills, it makes our water dirty and kills the animals in the water
wasting paper	it makes us cut down more trees
people	when you hunt you will kill animals and you will kill them all

Many of the same issues were repeated by each individual; Tammy, Wayne, and Bonnie, each referred to pollution, littering, endangered animals, paper mills, and cars, as environmental problems. Explanations were brief, generalized, and predicted catastrophic results (i.e. people killing "all" the animals). Connections between concepts (i.e. pollution / vehicles (cars, boats, airplanes, etc.) / people / littering / industry / landfill sites) were not apparent in student answers.

As students collaboratively engaged in text set research, the nature of responses began to change. Responses to text set readings became more specific, illustrating retention of the factual information associated with literal comprehension (Rubin, 1990). Sharing his research findings, Wayne stated,

> I learned what to do to clean animals in oil spills. You have to use a small soft brush to brush them gently, trying not to hurt or scare them, then you use a low pressure water hose to spray them. You have to catch them in a box or a net. They keep them for 30 months before letting them go. It costs $80 000 per animal. (CRJ, p. 31)

Wayne summarized several of the facts he recalled from his text set readings. Bonnie was also eager to share some interesting facts, "If your water is green, it has to do with the plants. If your water is brown, it has bacteria in it. You shouldn't drink green or brown water. If you are camping, you need to boil the water before drinking it" (CRJ, p. 31).

The KWL response group lists of knowledge acquired from reading text set materials further illustrated the early development of literal comprehension. The list generated by Max, Wayne, Tammy, and Bonnie appears in Figure 15. The list is fairly in-depth, accurate and specific, regurgitating factual statements from the text set readings. The results may speak to the nature of research and student-training for research, with initial emphasis on literal comprehension.

Figure 15. Response group KWL research list - what we know already..

What We Already Know About our Text Set

*It takes $80 000 to clean off oil from oil spills for each animal
*That a new born baby is about 90% water
*Everything needs water to live
*About 70% of the planet surface is under water
*348 otters and about 226 of the 348 are safe
*All seeds contain 5 - 10% of water
*Only 3% of the water is fresh
*Water has enough power to move machines
*We have part of the ocean in us
*After a summer of oil spills 270 000 birds died and 1 460 sea otters died
*Fairy shrimp eggs can survive for 100 years without water
*Fresh water may spend a long time trapped as (?)
*Warm water is lighter than cold water
*A 3 minute shower uses half as much water as a full bathtub
*If you put cold water in a warm place for a day or so you will start to see bubbles
*If enough sea water was used it would be possible to recover even gold
*Why is the ocean salty? Because salt and minerals from rocks have become dissolved in the ocean
*Water has invisible skin
*Rivers age, but not the same as people
*Three-quarters of the earth is water
*Water is the most unusual substance of the earth
*Water can be cold... warm... salty
*Some animals lick dew off plants and leaves to get water
*Rain water is sometimes dirty

As the unit progressed, higher levels of student comprehension became evident in the private

responses generated by students. These private reflections always followed group discussions

wherein students had participated in the co-development of understandings. Reflecting on *The

Lorax* (Dr. Seuss, 1971), Max wrote,

> Today we read a book called the Lorax. It is a doctor seuss book. The book
> was written in 1971. The book is about problems that happen in the environment.
> The same problems that happen in the story still happen today. I can stop making
> my mom drive places. Some of the problems are: the water is being polluted,
> trees are being cut down and people are littering. (SJ, p. 24)

Characteristic of creative comprehension (Rubin, 1990), Max offered an alternative solution to help

resolve current pollution problems. Max's solution, to "stop making my mom drive places,"

although simplistic, is viable. Similar action plans, reflecting creative comprehension, were also

offered by other group members in their private journal reflections. Wayne felt he could effect change "by telling people not to litter and cut down trees" (SJ, p. 24). Tammy offered to "pick up garbage on beaches, in the parks, rivers, around the neighbourhood, and laneways... gather people to help clean up garbage to make a difference" (SJ, p. 4). The same solutions were reiterated in the post-unit letters students wrote to Meg Coughlin.

New, deeper understandings of the issues related to humane and environmental education were also evident in the modifications students made to their individual environmental problems and explanations lists. At the conclusion of the unit, students were invited to modify the list contents and/or add concepts. A summary of the new information and/ or modifications is outlined in Figure 16. Unfortunately, the time allotment for this activity was insufficient and prohibited thorough student review. Despite this limitation, contrasts were noted.

Figure 16. Summary of new information / modifications to student lists of environmental issues.

Statement Format	Original Problem / Explanation Format
1. only 3% of earth's water is fresh 2. 70% of a dog is water 3. all bodies of water are connected 4. everything needs water to live 5. 5% of seeds are water 6. we have the ocean in us 7. $80 000 is used to clean one animal after an oil spill 8. 75% of the world is water	wars - destroying homes mills - make smokey air littering - too much will turn our city into a dump oil spills - they pollute the earth, water, and environment campers - they just throw their garbage everywhere sewage - it goes from the cabins into the water animals - geese droppings pollute water forest fires - not putting out a campfire causes fires that wreck forests

Generally, students in Response Group 1 added new information to their lists. Interestingly, the additions were not often written using the original problem / explanation format; rather, they appeared as statements of fact. Items 1 and 3 were repeated in each of the lists for the individuals

in Response Group 1. Item 8 was repeated by two members of Response Group 1. Each item reflected the response group focus on water issues. Many of the items (1,3, 4, and 8) were concepts essential to understanding the importance of keeping our water clean. Five of the eight items contained specific statistics (absent from the original lists) reflecting retention of recently learned facts. Of the eight items written in the original problem / explanation format, seven were components of the final drama presentations, directly communicated through the response group prepared improvisations and/or the accompanying question sessions. For example, in the prepared improvisation presented by Response Group 1, Dr. Schmecker stated, "This lake is polluted by garbage, bacteria, geese droppings, and sewage" (FPS, p. 3).

The final performance also demonstrated various levels of student comprehension; from literal to creative, along with heightened awareness of the issues related to humane and environmental education. During the prepared improvisation produced by Response Group 1, the actors pretended to go swimming in a lake, unaware that the lake was polluted. One swimmer eventually became ill with an ear ache and a headache. Wayne, posing as Dr. Schmecker, explained the root of the ailments: "This lake is polluted by garbage, bacteria, acid rain, geese droppings and sewage." (FPS, p. 3), drawing on his literal comprehension of the text set research. Intertextual connections, demonstrating higher levels of comprehension, were evident when Wayne produced an overhead (photocopy of page from one of the text set books) of the water cycle to explain the connectedness of all systems: "all lakes, rivers and bodies of water are connected" (FPS, p. 3). The prepared improvisation continued with the performers offering personal strategies, indicative of creative comprehension, for solving the problems associated with pollution. Though many of the solutions were idealistic and did not address larger issues of industrial pollution, the students were optimistic about their own abilities to effect positive change. Tammy suggested, "I think I can gather some people so we can clean up this lake and make people aware... I can keep the Earth clean by cleaning up garbage around parks, lakes and laneways" (FPS, p. 4). Max offered, "I think I can also pick up garbage around parks, alleys and beaches" (FPS, p. 5). Transferring attention and knowledge to local polluted waterways, Max commented, "I think I can help Boulevard Lake because it's polluted by geese droppings and people throwing their garbage" (FPS, p. 5). Tammy added, "I think I can help White Sand Lake because it's polluted by geese droppings, campers and

sewage" (FPS, p. 5). Neither Max, nor Tammy suggested ways to combat the pollution other than to pick up garbage. The performance ended with a rap containing the following messages: "Put your garbage in the garbage can... Keep our lakes clean... We can do this with the help of you and me" (FPS, p. 5), urging others to join in the fight against pollution.

The development of comprehension was supported by the interactive nature of shared response and by the planned and incidental use of scaffolded teaching and learning experiences. These factors informed student thinking, resulting in higher levels of comprehension. Shared response through discussion enabled students to build upon each others' knowledge in order to arrive at deeper levels of understanding. The collaborative nature of shared response enabled students to co-construct meaning and to strengthen their understandings by drawing on intertextual connections from text set resources.

The open-ended nature of discussion provided a forum for students to test, validate, and pool ideas from their readings, experiences and dialogues. The following group response to *The Lorax* (Dr. Seuss, 1971) illustrated the constructive nature of shared response. Students, engaged in a discussion about the effects of the new industry, shared the following interaction:

> Debbie: ... There's pollution. The food supply, the animal population and their voices - too much smoke causes coughing.
>
> Wayne: The whole forest. The wood, the resources...
>
> Alice: With the trees cut down they aren't getting enough fresh air.
>
> Marky: Soil. When they cut down trees because the trees hold the soil together.
>
> LL: Good. You're even using information from your text sets. You're using your knowledge.
>
> (CRJ, p. 46)

In building new understandings together, students were given opportunities to transfer and reinterpret their text set information.

Independent reflection on group discussions and on the text set presentations shared by fellow response groups informed student thinking and heightened awareness of the issues related to humane and environmental education. Comments offered by Wayne, illustrated the potential for

shared response to alter individual perceptions. At the end of the unit, Wayne stated,

> I always wanted to be a doctor, or really a professional hockey player, but I wanted to be a doctor here in Thunder Bay. Now I want to be a doctor in another country like a third world country - that helps children that are sick and that's what this unit did for me. (PUIRG, p. 9)

Engaged in research on water issues, Wayne's comments reflected attention to issues related to the broader theme of humane and environmental education; humanitarian issues. His comments about being inspired by the unit to alter his career path may have stemmed from personal reflections on whole-class discussions and text set dramatizations. During one discussion Bonnie shared a story about "African children who were taken away and branded by their government and how their families refused to let them back for fear the government would punish the family severely. She said some of the kids were as young as four years old "(CRJ, p. 31/2). The prepared improvisation produced by the response group engaged in humanitarian issues focused on child labour in Africa. Key lines from the prepared improvisation included the following:

- "I don't eat as much as I should and I get tired too quick" (FPV)

- "Eighty million kids work in Africa. Families sell them for $11 when they are only four years old" (FPV).

- "Lets hope these kids can stop working and live a normal life" (FPV).

The prepared improvisation was accompanied by a poetry reading. The poem, taken from *If You Could Wear my Sneakers!* (Fitch, 1997), describes a young beaver who has been working far too long;

> Hasn't anybody noticed that he isn't very strong?
> When the Beaver's older he can be employed,
> He's really far too young,
> Youth must be enjoyed. (p. 19)

Asked, "Why did you read the poem about the Beaver?" (CRJ, p. 77) the group responded, "We read it 'cause it's about a beaver who works too hard like the little kids who work too hard in Africa" (CRJ, p. 77).

Students believed that the collaborative process of planning and participating in a drama performance led to deeper understandings about the issues and concepts contained within the unit. For example, Wayne and Tammy made the following observations:

> Wayne: ...We had to read it carefully and then we would have to think about how to act it out. It was a bit more challenging doing the drama because you had to think of what you do to act it out - like oil spills cost $50 000. You had to think of a way to act that out.

> Tammy: Or you had to think about the order of the information could come in. Like at what part or else - something about spills at the beginning or then something about information on bacteria in water like at the very end. It's sort of mixed around. So we had to think of a way to keep all the oil spills at the beginning, stuff like so the info wasn't spread all over everywhere. (PUIRG, p. 3/4)

According to Wayne and Tammy, the decision making processes involved in planning drama forced them to consider their representation of the text into dramatic form.

Students maintained that the act of observing, as well as planning and participating in drama performances, impacted their comprehension. They perceived drama to be a highly effective and "fun" (PUIRG, p. 2) method for exploring text; offering a visual metaphor for comprehension. After watching their video-taped final performance, members of Response Group 1 were asked how using drama might have helped them learn. Tammy replied first, "When you sit in a classroom day after day sitting there listening to the teacher it sort of gets boring and sometimes you start daydreaming but if you're doing something fun while you're learning, then it's easier" (PUIRG, p. 2). Cory built upon Tammy's ideas, "...Gets the message across better than just going 'don't pollute'...Because everyone's listening and no one's daydreaming and bored. They're all, if you make it exciting, they'll pay attention to you and listen" (PUIRG, p. 2). Tammy continued, "I think it helps like to get the message across because people can see what's happening or you can ask what's happening..." (PUIRG, p. 2). Wayne also felt the "visual" component of drama was effective: "It's visual and it's not the same. 'Don't pollute' - kind of gets boring after a long time" (PUIRG, p. 2/3). This visual metaphor for comprehension was also expressed in the letters students wrote to Meg Coughlin. Max shared his perceptions about the effectiveness of drama in his letter to Meg Coughlin. Max informed Meg that he felt the group's message was effectively conveyed through drama because "we got to show it visually instead of telling people, that would be boring" (LMC, p. 5). Tammy wrote, "I think we got our message across in our drama presentation because people could actually see what was happening today in the world and what can happen to the world" (LMC, p. 3).

Metacognitive Awareness

During the unit on humane and environmental education, teachers introduced and modeled learning strategies, and provided opportunities for students to practice and reflect upon these learning strategies. Respondents demonstrated metacognitive awareness through the development of cognition and use of strategies.

Cognition

Students were cognizant of new learning acquired over the course of the unit. In the post-unit interviews, members of Response Group 1 were asked, "Do you think you know more about the environment now than you knew when you first started this project?" (PUIRG, p. 6) A resounding, "Way more" (PUIRG, p. 6) resulted. Wayne admitted that he had never been concerned about litter in the past. "If there was a piece of garbage I wouldn't really care, but now I know the effects of what could happen if I don't pick it up" (PUIRG, p. 6). Towards the end of the unit, Tammy wrote the following comment in her journal; "I learned a lot of things about water issues that I didn't know before" (SJ, p. 17). Bonnie's letter to Meg Coughlin also acknowledged the awareness of new learning,

> We learned a lot about Water Issues like: how the water cycle works, that water can get polluted by geese droppings, campers, garbage and bacteria, also it costs $80 000 to clean one animal after an oil spill, 3% of our water is fresh, 75% of the world is water, a baby is 90% water. (LMC, p. 2)

The acts of participating in the final performance and viewing the final performance video resulted in metacognitive awarenesses about the overall effectiveness of the performance. Student comments assessed three areas: self as performer, the effectiveness of the group performance, and the effectiveness of drama as a medium for communication. For example, in evaluating himself, Cory commented, "I could have my lines memorized a bit more better" (PUIRG, p. 1). Yvonne said, "I liked how we got a message out to the parents and people who were here for this" (PUIRG, p. 1).

Comments assessing the overall effectiveness of the performance referred to the content, the props and the preparedness of the performers. For example, in evaluating the content of the

performance, Cory stated, "Should have had more facts in ours. We saw more stuff but we could have changed the plan to get more facts in" (PUIRG, p. 2). In her journal, Tammy wrote, "...it was effective because we used a lot of interesting props and we had a rap at the end of it... I would do something different because we could have had more information about water issues and we could have had more lines to our rap (SJ, p. 18).

Response Group 1 was very satisfied with the delivery and contents of their message. Cory commented, "I think we got our message across. I think it was very effective. There were lots of questions. Our message was if you don't clean up our water we all will get sick sooner or later" (SJ, p. 27). Robbie liked the rap produced by the group; "because it was funny and had a good message" (PUIRG, p. 1).

Group members reported that performing in front of an audience was stressful. In his journal, Wayne wrote, "Today we did our play it was hard. I think we did it better in practice because we had no (audience)" (SJ, p. 26). Max' journal comments reflected similar concerns. Max explained, "Today we performed our skits. We were very nervous. We were very nervous because we're (sic) performing in front of parents" (SJ, p. 21). Tammy was less anxious. She stated, "I was a bit nervous but I had a lot of fun" (SJ, p. 18).

Use of Strategies

Metacognitive awareness was demonstrated by students in the research process, in the planning of the final performance, and in their reflections on the final video-taped performance. Two metacognitive strategies, modeled by the researchers, provided students with opportunities for growth in metacognitive awareness: step by step planning and peer feedback. As the unit progressed, students began to develop their own strategies to facilitate task completion.

As a component of the Group Project Organizer, each response group was expected to "explain" how the group would prepare for the final dramatic performance (GPO). The step by step plan submitted by Response Group 1 is shared below:

- ► Our first step is to do research on different water issues
- ► Our second step is to choose our drama approach
- ► Our third step was to make a word web about what we want to put in our drama project

►   Our fourth step was to think about what info we want to tell people in our role play about water issues

►   Our fifth step is to start writing a script

►   Our sixth step is to practice for the performance   (GPO, p. 3)

Collaboratively, the group produced a written plan outlining the sequential steps to be undertaken from the beginning to the end of their performance planning. Visualization and documentation of the steps was intended to model metacognitive strategies and to facilitate groups in the successful completion of performance planning.

As the unit progressed, students demonstrated their own metacognitive awarenesses and developed independent strategies to facilitate task completion. These strategies encompassed completion of the assigned tasks for the unit – from resource selection to performance planning.

Wayne developed a plan for gathering resources; "The place I am going to go to get my information is the public library, the internet and the library at our school" (SJ, p. 22). Faced with a desire to learn more about the pollution of a local lake, the group determined that Bonnie should ask her Aunt "who lives there" (SJ, p. 26) about the situation. Response Group1 developed and employed collaborative strategies for making group decisions. While selecting individual reading assignments from the text set, the group members began by choosing the resources they each liked best. Wayne stated, "I like all the reality (fact) books" (CRJ, p. 22). Tammy and Bonnie each selected three resources - two information books and one story. Max, absent at the time, was assigned his books and readily accepted the decision. As evidenced by the comments students wrote in their journals, diplomacy and group consensus seemed to characterize this group's approach throughout the unit. At one point, Max stated, "I think my group worked well today. We shared our ideas and wrote them down" (SJ, p. 19). Towards the end of the unit, Tammy noted, "I think that my group worked together. We all put ideas in the play (SJ, p. 14). Each member of the group contributed equitably.

The planning strategies developed by Response Group 1 facilitated the organized and timely completion of tasks. Wayne shared some of the group planning strategies in his journal;

> Today we started memorizing our skits. We also made props. Tomorrow is the day
> we perform. We made food and a microphone. The food was made out of construction
> paper and the microphone was made out of tin foil and some construction paper. (SJ, p. 21)

Response Group 1 used a systematic approach to task completion. Members were aware of the existing time lines. At one point, Max evaluated the group's progress, noting, "Today we worked on the script for our role play... We are almost done the rough copy. Today we got lots of work done. Everything is due next Friday. I think we will be done by then..." (SJ, p. 20).

The second formal strategy used by the researchers to promote metacognitive awareness involved the use of peer feedback as a means of informing decisions. Prior to the final performance, students were given the opportunity to rehearse in front of their peers. Peers were instructed to offer constructive suggestions to the performers. The classroom teacher recorded suggestions given to the response groups. The suggestions offered were very specific yet brief in nature. As such, response groups could incorporate them into the final performance with minimal disruption to the script. Suggestions for improvement given to Response Group 1 included, "You might consider changing the doctor's line to 'we don't know all the side effects of repeated exposure to polluted water' because people don't usually die if they swim in a contaminated lake. Most of the time, they get ear aches or diarrhea, and it doesn't usually happen instantly" (CRJ, p. 78) and "They can't phone the doctor at the beach, there isn't a phone" (CRJ, p. 78).

Peer feedback played a significant role in the modifications made to the response group performances and resulted in student development of original metacognitive strategies. Response Group 1 altered their script to accommodate peer suggestions. Wayne commented, "It was very hard, we had to add in more lines... do a new part..." (PUIRG, p. 5). In the post-unit interview with the classroom teacher, Mary Clare remarked, "The group we just had in here actually made the comment that having the practice in the morning helped because then they made revisions which was interesting. You can kind of see the parallel to the writing process" (PUICT, p. 5). Self and peer awareness of strengths and weaknesses informed student decisions about the final performance when addressed in the planning stages and when easily accommodated.

Response groups developed original strategies for incorporating peer feedback into their imminent performances. Response Group 1 developed an original strategy, in the form of a visual cue, for memorizing their new lines for the final performance. Tammy explained,

> Most of us didn't know our lines. That's why I had that note pad. It also had some
> of the answers like down, just in case // When we were practicing, a couple of us were

forgetting part of the answers to the questions I was asking, so took key words from there. (PUIRG, p. 5)

This strategy, recording key words, was developed as a result of the rehearsal, during which students experienced a need for prompt lines. Wayne explained that the modifications made by the group in response to peer suggestions meant "... it was hard to memorize lines in two hours" (PUIRG, p. 5). Using prompt lines permitted the group to perform more confidently.

Three themes emerged during data analysis: curriculum design and implementation, comprehension, and metacognitive awareness. The themes provided insight into the relationships between young adolescents' comprehension of literary texts and the representation and reinterpretation of texts as mediated by drama. The following section presents the interpretation of the findings.

Interpretation

The study took place within the context of a conceptual unit on humane and environmental education. The organization of the unit, including the nature of assignments, invited and supported the development of critical literacy through private and shared response. Young adolescents were given opportunities to engage in the reinterpretation and representation of literary texts through various modes of response: oral, written and dramatic. Student observation and discussion of the video-taped final performance provided further opportunities for the revisitation and reinterpretation of text for heightened understanding. The discussion is organized around the following topics: description of the unit, curriculum design and implementation, comprehension, metacognitive awareness, and environmental education.

Description of the unit

The conceptual framework of the unit, structured such that all literary texts, experiences, responses, and assignments related to the general theme of humane and environmental education contributed to student development of comprehension. The study found that the use of conceptually-linked texts and experiences within a conceptual unit further enhanced student comprehension. This is consistent with Short's (1993) research findings that the connection-making process is significantly enhanced by the use of text sets related to a broader theme.

Consistent with Courtland et al.'s (2000) findings on intertextuality and Hartman's (1992) notion of "open-bordered text," this study also provides insights into the relationship between intertextuality and comprehension, and the use of conceptually-linked text sets. The study suggests personal experience and engagement within one text set heightens intertextuality across text sets.

The design of the unit incorporated strategies to promote student comprehension of the issues related to humane and environmental education as well as metacognitive awareness. Various components of the Group Project Organizer, including the KWL graphic organizer and the step-by-step performance plan, facilitated comprehension of the unit concepts and issues while fostering cognition. The use of such strategies is recommended by authorities such as Tompkins et al. (2002) and Tierney et al.(1990). These strategies are typically taught and practiced independent of particular content. The study found that connecting the use of strategies to a conceptual framework provided relevance and meaningful contexts in which to learn the strategies.

Curriculum Implementation

Tension exists between the design of the curriculum and the actual curriculum that unfolds. The curriculum implementation of the unit on humane and environmental education contributed insights into the decision-making processes involved in curriculum development and implementation. Eisner (2002) emphasizes the need for continued research into this area. This study described the design of the unit, as well as its implementation. It illuminates the curricular processes and decision-making involved.

Ongoing monitoring of students' progress enabled the teacher to scaffold learning experiences on a daily basis. Skillful planning of the conceptual unit on humane and environmental education, from highly supported to increasingly independent, facilitated student understanding of the complexity of the theme and fostered the constructions of shared and private meanings. At the onset of the unit, experiences were structured to provide core information to all participants regarding: unit expectations, daily routines, components of the unit, and key concepts essential to developing critical literacy in the areas of drama and the environment. As the unit progressed, individuals were given opportunities to explore texts independently and to develop a dramatic interpretation with the support of their response groups. This scaffolding of learning experiences

enabled students to accomplish tasks with the support of their peers, and supports Vygotsky's (1962) notion of the zone of proximal development.

Students were taught explicitly different forms of drama and provided with opportunities to use each form to reinterpret literary texts. The findings of the study support Smagorinsky's (1996) findings that educators need to offer children opportunities to learn about the symbolic system so that they may use it to reinterpret and represent texts. Drama proved an effective medium for comprehending texts and concepts about humane and environmental education. This is consistent with Lang's (1999) findings on the use of drama with secondary students.

Comprehension

Two factors facilitated the development of student comprehension: teacher interventions to scaffold learning experiences and private and shared response. Teachers intervened to introduce unit-related concepts and vocabulary, to introduce and promote critical literacy, and to clarify issues, ideas and expectations. The interventions included: brainstorming, organizing activities / experiences, reviewing, modeling metacognitive strategies, teaching concepts / techniques, responding to student responses, questioning to promote comprehension, facilitating group discussion, clarifying / providing links, and guiding behaviour. Teacher-supported experiences promoted sustained exploration of humane and environmental issues across a variety of texts. The multiple roles of the teacher in guiding students' learning are illuminated in the study. The roles are consistent with those noted by Tompkins et al. (2002) and Smagorinsky (2002).

Opportunities for shared and private response supported the gradual and enhanced development of student comprehension. These opportunities included: response group modeling and guided practice of concepts, issues and drama techniques; response group development of a dramatic reinterpretation / representation of their literary text set; large group discussion of unit-related texts, themes, issues and concepts; response group discussion of the video-tape final performance, and independent journal and letter writing. Large and small group interactions permitted students to co-construct meanings in a supported environment resulting in enriched interpretations of literary texts. Private responses afforded students the opportunity to consolidate and internalize their new awarenesses. The findings of this study are consistent with Courtland et

al.'s (1999) findings on the relationship between shared response and comprehension and support a social constructivist approach (Bainbridge and Malicky, 2000) to teaching comprehension.

Initially, oral, written, and dramatic responses were brief, lacking in detail and depth of thought. Students did not make connections between / among concepts. As students collaboratively engaged in text set research, the nature of the responses began to change. Their responses demonstrated comprehension at literal, interpretive, critical, and creative thinking levels. Students demonstrated their understanding not only of factual information, but to make connections across their text sets and to consider problems related to humane and environmental education, and to propose solutions. The levels of comprehension reflect Rubin's (1990) description of the levels.

The development of comprehension was supported by the interactive nature of shared response. As a forum for shared response, response groups enabled students to assist each others' comprehension of the issues and concepts related to humane and environmental education. Members of the response groups engaged in the collaborative research, discussion and reinterpretation of their text sets to arrive at deeper understandings. These findings support Smagorinsky's (2002) notion of scaffolded learning and its emphasis on the need for teachers to provide opportunities for students to assist one another's learning.

The study illuminated how drama mediated young adolescents' comprehension in a variety of ways. During the first two weeks of the study in which students had opportunities to experience different dramatic forms, the students adopted different points of view, stepped inside literary characters such as Amrita, and explored issues related to the environment, for example, when they read and re-interpreted *The Lorax* (Dr. Seuss, 1971). These findings are consistent with Lang's (1999) research on exploring characters through story drama.

Planning the final dramatic performance nudged the response groups into conducting further research into their text set topics, to articulate their messages clearly, and to consider carefully how to deliver the message effectively using drama as a medium. Students were conscious of the constraints this symbolic system placed on the product they would have to develop. The students in Response Group 1 used a visual metaphor to describe their work with drama. They also had opportunities to read the text set, write the script, and translate that script into a dramatic performance. Drama thus served as a medium for exploring literary texts – fiction and non-fiction.

The collaborative act of reinterpreting literary text into a drama performance resulted in heightened awareness of the unit issues and concepts. As evidenced by their letters to Meg Coughlin and their comments in the post unit interviews, the negotiations inherent in selecting content, translating written content into visual content, and designing props for the dramatic re-interpretation of their text sets, resulted in new understandings. These findings are consistent with Smagorinsky and O'Donnell-Allen's (1993) findings that generating artifacts mediated new thinking. They also support Courtland et al.'s (2000) findings that reinterpretation of text through symbol systems mediates readers' thinking about text.

Metacognitive awareness

Metacognitive awareness facilitated comprehension by motivating students to regulate and maximize their own learning experiences. Students demonstrated metacognitive awareness in two ways: through their development of comprehension and through their use of strategies. Two strategies modeled by teachers facilitated the development of metacognitive awareness: completion of the Group Project Organizer, and the guided practice of peer feedback during rehearsal of the final drama performance. The Group Project Organizer provided a template to students to generate step-by-step planning. Peer feedback enabled students to assess critically each others' performances and to revise their own performances. In addition, teacher emphasis on metacognitive awareness resulted in student formation and use of original strategies to facilitate efficient task completion. These findings support Fearn and Farnan's (2001) and Tompkins et al.'s (2002) recommendations that teachers have an obligation to ensure metacognitive awareness occurs in order to facilitate effective learning.

The process of creating, viewing, and discussing the video-taped drama performance promoted metacognitive awareness. Collaboratively, students arrived at new understandings of the issues and concepts related to humane and environmental education, of the strengths and weaknesses of their performance and of the effectiveness of drama as a mode of communication. This study supports Smagorinsky's (1996) findings that an interpretation, such as a video-taped performance, becomes a symbol for further reflection and possible reconsideration of the ideas that produced it.

Environmental education

Interpretation of the data suggested the teaching of environmental education needs to address the interconnectedness of all natural systems. Grounded in Bell and Russell's (1999) list of recommendations, the study addressed a variety of issues related to the environment, including technology and progress, lifestyle choices, responsibility, the interconnectedness of all natural systems, and the ability to positively promote change. The design and implementation of the unit was structured to promote critical literacy of the issues and concepts related to humane and environmental education. The findings of the study support Russell, Bell, and Fawcett's (2000) assertion of the need to promote values and responsible behaviours beyond the current classroom emphasis on the 3 R's: reduce, reuse, recycle.

Re-interpretation / representation of literary texts through drama offered a medium for exposing anthropocentric myths, providing evidence of environmental degradation, and promoting responsible behaviours and solutions. As demonstrated in private and shared student responses, the dramatic interpretations of the read alouds and text sets heightened student comprehension of animal protection, aboriginal worldviews, civilization and the environment, production and consumption, local environmental issues, forest conservation, humanitarian efforts, and water issues. The findings support Stables' (2001) research on the importance of fostering cultural and critical environmental literacies. The findings are also consistent with McElroy's (1997) research outlining the need to eliminate the environmental myths taught and perpetuated in our schools in order to develop a more Earth-centered approach to environmental education.

This study provides a model for the design and implementation of a language-based unit on humane and environmental education. The components of design and implementation worked together to foster heightened critical literacy of the issues and concepts related to the unit:. These components included: the conceptual framework, the use of text sets, the scaffolding of learning experiences, the socio-constructivist approach to learning through response groups, shared and private response and use of multiple symbolic systems, the use of teacher interventions, and the modeling and practice of strategies for promoting comprehension and metacognitive awareness. This study builds upon and furthers current research into environmental education by suggesting

the need to incorporate the principles of effective language arts teaching into existing humane and environmental education programs.

In Chapter Four, I have described the context of the study, the themes which emerged from the analysis of the data, and the interpretation of the findings. The final chapter presents the conclusions, implications and recommendations.

CHAPTER FIVE

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

This qualitative study explored the relationship between young adolescent readers' comprehension of literary texts and the representation and reinterpretation of these texts through drama. The participants were students in a Grade 6 class, engaged in a unit on humane and environmental education. The purposive sample of this report was a group of four students in one response group. The study took place over a five-week period.

Three themes emerged from the analysis of the data: curriculum design and implementation, comprehension, and metacognitive awareness. The findings contribute to our understanding of the development and enhancement of student comprehension as well as the design and implementation of environmental education through shared and private response to literary texts. The conclusions, implications and recommendations are discussed below.

Conclusions

The study illuminated elements of design which promoted student comprehension of the texts as well as of concepts and issues related to humane and environmental education. These elements included: the conceptual framework, the conceptual-linking of texts, the guided practice of strategies for promoting comprehension and metacognitive awareness, the use of drama to mediate comprehension, and sustained engagement with related text sets.

The design and implementation of the humane and environmental education unit provided insights into the decision-making processes undertaken by educators involved in curriculum planning, development and implementation. Regular and consistent monitoring of student learning and modification of the unit plan illuminated the processes of interaction between planned and emergent curriculum. The on-going nature of the decision-making processes resulted in enhanced programming to promote student learning.

The gradual development of student comprehension was supported by teacher interventions to scaffold learning experiences and by private and shared response. The incidental structuring of the unit, from highly supported to increasingly independent, facilitated student comprehension of

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issues and concepts related to humane and environmental education and contributed to the formation of individual awarenesses.

The use of scaffolds as support mechanisms guided student comprehension and development of critical literacy of concepts and issues related to humane and environmental education. Conceptual-linking of all literary texts and unit experiences enhanced the connection making process. Teacher interventions influenced the development of comprehension: modeling of answers and skills, guiding of student practice, questioning to promote comprehension, and providing of direct assistance. Explicit use of strategies, such as the KWL reading strategy and the Group Project Organizer, promoted comprehension as well as metacognitive awareness. Opportunities for scaffolded learning permitted students to assist and enhance each others' learning.

Private and shared response heightened student comprehension of the issues and concepts related to humane and environmental education. Student response groups fostered the co-construction of meanings to arrive at new and deeper levels of comprehension. Generating and discussing their video-taped performance provided further opportunities for students to arrive at new and deeper understandings. Private response, including journal and letter writing afforded opportunities for students to evaluate, internalize and personalize shared responses.

Drama, as a medium, enhanced comprehension of the concepts and issues related to humane and environmental education. Drama provided a forum for students to explore issues related to the environment by stepping inside a character. The constraints imposed by the visual reinterpretation and representation of literary texts facilitated the collaborative negotiation and selection of content and resulted in heightened awareness of the unit issues and concepts. Visual messages, in comparison to printed messages, were perceived to be more interesting to observe, more enjoyable to develop, and easier to comprehend.

The study illuminated the relationship between metacognition and comprehension. Modeling and guided practice of metacognitive strategies enhanced student comprehension. Peer evaluation informed the final dramatic presentations. In recognizing, monitoring, and striving to maximize their own learning, students began to develop original strategies for efficient task completion. Self-

monitoring and regulation of metacognitive strategies fostered intrinsic motivation for deeper comprehension of text set-related issues.

Although this study focused on the relationship between young adolescents' comprehension of literary texts and the use of drama as a mediator, the teaching of humane and environmental education was also addressed. The curricular design and implementation of the unit fostered critical literacy of humane and environmental issues by exposing anthropocentric myths, providing evidence of environmental degradation, emphasizing interconnectedness of all natural systems, and promoting responsible, earth friendly behaviours. These issues and concepts were developed and explored within the conceptual framework of a response-based language arts unit wherein students engaged in the re-interpretation / representation of literary text sets through drama.

Implications

This study has implications for classroom teachers and researchers. As well as exploring the relationship between drama and comprehension, the study provided a contextual model for incorporating drama effectively to meet current Ontario curriculum expectations. The unit defined educational drama techniques and provided contextual illustrations of the implementation of these techniques to facilitate other educators interested in using educational drama as a medium of response for literary texts.

One of the implications for teachers is designing and implementing curriculum which facilitates the connection-making processes for students. Conceptual units arranged to incorporate related text sets offer a medium for providing theme-related, conceptually-linked instruction. Such units should be embedded within a socio-constructivist theoretical framework. Incorporating the following components into the unit design has the potential to heighten student comprehension: i) scaffolded experiences, ii) conceptually-linked resources, organized into text sets, iii) teacher interventions, and iv) shared and private engagement and response using a variety of symbolic systems, of which drama is one. The overall scaffolding of experiences, from highly supported, to increasingly independent promotes comprehension. It permits students to develop and practice skills and gain confidence while exploring issues and concepts in a supported atmosphere, before testing them independently.

The use of response groups, combined with opportunities for large group interaction, and individual conferencing, supports shared and private engagement and response. In addition, response groups foster scaffolded learning, wherein students facilitate each others' learning. The process of co-constructing meaning and shared understandings further promotes comprehension.

Teacher interventions, including brainstorming, questioning, modeling, clarifying, facilitating, and reviewing, have the potential to guide and inform student comprehension. By promoting metacognitive awareness, teacher interventions helped students maximize their own learning potential. Embedding strategies for teaching comprehension and metacognition within the context of a conceptual unit provides a model for meaningful application.

Language arts programs should incorporate drama as a means of mediating young adolescents' comprehension of literary texts. Drama provides motivating and collaborative opportunities for students to explore literary texts in a variety of ways.

The findings of this study suggest educators and researchers interested in the teaching of humane and environmental education should give equal consideration to the content as well as the design and implementation of their programs / units, incorporating conceptually linked texts and experiences as well as strategies for fostering comprehension.

There are several implications for researchers. The viewing of the video-taped performance to promote further reflection, based on Smagorinsky's (1996) conception of student-generated artifacts, was an effective research strategy as was the letter writing, in role, to Meg Coughlin. Incorporating such strategies into the research design and methodology enhances not only readers' comprehension, but adds to the data which informs the researchers' understanding of readers' comprehension and metacognitive awareness.

Recommendations

Future Research

The following recommendations might provide a focus for future research:

1.   Research into curriculum design and implementation needs to describe further the contexts for decision-making in which teachers engage in implementation.

2. Research into curriculum design and implementation should explore the tensions between planned and emergent curriculum and the nature of modifications made to address students' learning.

3. Research into comprehension needs to further explore the relationship between young adolescents' comprehension of literary texts and the reinterpretation / representation of literary texts through multiple symbolic systems, including, but not limited to oral, written and dramatic systems.

4. Research into the teaching of humane and environmental education needs to examine how the implementation of strategies designed to promote comprehension and metacognitive awareness fosters students' understanding of the concepts and issues.

5. Classroom teachers and curriculum designers of humane and environmental education should develop units in which the concepts are contextualized in some thematic manner.

Curricular / Instructional

The following recommendations may prove helpful to educators in the planning, development, and implementation of conceptual language arts unit.

*   Support the conceptual framework of the unit through conceptually-linked texts, experiences, responses, and assignments.

*   Organize the unit to accommodate flexibility, sufficient length and time (4-6 weeks), and regular, predictable blocks of time for reading, responding, and reflecting.

*   Give careful consideration to classroom dynamics when assigning response group members.

*   Accommodate response group use of text sets through physical arrangement of the room.

*   Communicate explicitly Ministry aims, goals and expectations.

*   Scaffold unit experiences from highly supported to increasingly independent.

*   Provide opportunities for scaffolded learning in which students assist each other's learning.

*   Consider purposeful use of scaffolds, including theme-related text sets, student response groups, and teacher interventions.

*   Introduce and model techniques, concepts and issues prior to their application.

- Engage in the continual processes of evaluation and modification to enhance the design and implementation of the unit to meet student needs.

- Incorporate the modeling and practice of a variety of strategies for promoting comprehension and metacognitive awareness.

- Incorporate opportunities for shared and private response.

- Address multiple symbolic systems through response, including: oral, written, and dramatic systems.

- Give consideration to culminating tasks in which students generate a product (such as a video-taped performance, dance, etc.).

- Provide opportunities for students to discuss and reflect upon the products they generate.

The following recommendations may prove helpful to educators and researchers in the planning, development, and implementation of humane and environmental education:

1. The content of the unit / program must promote values and responsible behaviours beyond emphasis on the 3 R's (Reduce, Reuse, Recycle).

2. The content should incorporate the following: interconnectedness of all natural systems; exposure of anthropocentric myths; evidence of environmental degradation; promotion of responsible behaviours; and ability to positively promote change.

3. Educators should consider teachings from humane as well as environmental education models.

4. The design and implementation of the unit / program should give consideration to the curricular / instructional recommendations outlined above for educators in the planning, development, and implementation of conceptual language arts units.

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APPENDIX I
VERBAL EXPLANATION TO
STUDENTS

LETTER TO PARENTS AND STUDENTS

☆☆☆☆☆ Drama ☆☆☆☆☆

Dear Parents:

I am a professor in the Faculty of Education, Lakehead University where I teach courses in language arts methods.

I have worked with your son's/daughter's teacher to develop a unit on environmental issues in which students will respond through drama. The unit is based on expectations in language arts and related subjects and the language standards of the Ontario Ministry of Education and Training. The learning experiences and activities have been developed to promote language proficiency and critical literacy as well as an appreciation of drama.

I am conducting a series of studies on how readers in grades 6/7/8 read and interpret literary texts though different communication systems and how these media influence comprehension. I ask your permission to include your son/daughter as a respondent in the study. When the students are working on the unit, I shall be observing in the classroom, participating in response groups, interviewing students, and collecting information on reading comprehension such as journal entries, and projects. I shall videotape presentations. If you do not grant permission, I shall not collect any information on your son's/daughter's work.

The educational benefit of this research is that it will help researchers and teachers to understand more about how different communication systems help readers to comprehend texts. Teachers would then be able to use this knowledge in planning language arts programs. Personal benefits for students include opportunities to develop their language proficiency and critical literacy skills and to develop an appreciation for other communication systems.

If you give your consent, it is important that you understand the following ethics guidelines for the conduct of research mandated by Lakehead University.
- There are no risks involved to the students in participating in the study.
- You have the right to withdraw your consent at any time.
- Your son's/daughter's anonymity and confidentiality will be protected.
- The data will be stored securely for seven years.
- The findings will be shared through conference presentations and publications.

At the end of the unit, we shall invite you to an event where you can see your child's accomplishments. I shall provide a summary of the findings to the teacher and school principal.

I have met the class and described the study to the students. I have asked them to discuss their participation with you and to sign the attached form.

If you have any questions, please contact the teacher or me 343-8696 (office), 345-4695 (home) or via email mccourtl@mercury.lakeheadu.ca

Sincerely,

Mary Clare Courtland

Mary Clare Courtland, PhD
Professor

APPENDIX II
Letter of Informed Consent

CONSENT FORM

☆ Drama ☆

I have read the letter informing me of the research study Dr. Courtland is conducting. Should I give my permission for my son/daughter to participate, I understand the following:

- There are no risks to son/daughter.
- She/he has the right to withdraw at any time.
- Her/his anonymity and confidentiality will be protected.
- The data will be stored securely for seven years.
- The findings will be disseminated through workshop or conference presentations and publications.

▪▪

My child _____
(NAME)

may participate/may not participate (CIRCLE ONE) in the study.

_____
Signature of Parent/Guardian

I _____consent/do not consent
(NAME)

to participate in the study. (CIRCLE YOUR ANSWER)

_____
Signature of Student

PLEASE RETURN TO YOUR SON'S/DAUGHTER'S TEACHER.

APPENDIX III
Text Sets

Humane Education - Text Set Foci

Basic Text Sets (collections of materials of various genres) reflecting a combined focus on Humane Education have been established under the following headings. These text sets are meant to inspire adolescent readers to seek out further resources related to their specific topic(s). As such, the text sets are a beginning point and do not represent complete lists of all resources related to the specific topics. The topics have been selected to provide coverage of the many issues related to Humane education. The researcher believes such diversity will contribute to a more accurate, more broad perspective of the humane and environmental issues facing our world of today. The text set topics are:

1. **Animal Protection**
2. **Aboriginal Worldviews**
3. **Civilization and the Environment**
4. **Production and Consumption**
5. **Local Environmental Issues**
6. **Forest Conservation**
7. **Water Issues**
8. **Humanitarian Efforts**

Expanded Topics for Student Consideration

The following chart offers possible topics for consideration under each of the general text set headings. Students may develop further suggestions: •

Text Set Headings	Topics for Consideration
Animal Protection	• animal welfare, animal experimentation • animal rights • wild animals in captivity • recovery of endangered species • habitat conversation (rainforests,etc.) • hunting • conservation of marine mammals • international wildlife issues
Aboriginal Worldviews	• creation myths • legends • traditional view of nature, of humans • circle of giving and receiving • what can we learn?
Civilization and Environment	• technology • anthropocentrism (focus on man) • progress, growth (economic, etc.) • ecotourism • renewable / non renewable resources • energy conservation • global warming • pollution, environmental degradation • global economies, trade, etc.

Production and Consumption	- consumerism - advertising (using environment) - packaging - waste management - cause - effect, by products, side effects
Local Environmental Issues	- water protection - animal and habitat protection - forestry (logging, pulp and paper, etc.) - ecotourism
Forest Conservation	- importance of trees - depletion of habitat - significance of rainforest - depletion of forest - forest management - protection agencies and policies
Water Issues	- pollution - protection - management - water cycle (dependencies)
Humanitarian Efforts	- volunteerism, humane movements - people helping people locally, nationally, internationally (active citizenship) - United Nations sanctions and efforts - issues related to war and peace - international environmental efforts, policies, treaties - oppression, prejudice, discrimination

Basic Text Set Resource Suggestions (to be built upon by student participants)

<u>Animal Protection</u>

Brown, A. (1992). *Zoo*. New York: Alfred A. Knopf.*

Pringle, L. (1991). *Living treasure - saving earth's threatened biodiversity*. New York: William Morrow and Company, Inc.

Rosen, M. (1993). *Songbird story*. London, UK: Frances Lincoln Limited.

Saunders, S. (1998). *Hurricane Rescue*. New York: Avon Books, Inc.

Saunders, S. (1998). *Red tide alert*. New York: Avon Books, Inc.

Saunders, S. (1998). *Stranding on Cedar Point*. New York: Avon Books, Inc.

Saunders, S. (1998). *The dolphin trap*. New York: Avon Books, Inc.

Selby, D. (1995). *Earthkind: a teachers' handbook on humane education*. Staffordshire, UK:

Trentham Books Limited. (selected documents on animal welfare)

Tsuchiya, Y. (1988). *Faithful elephants*. Boston: Houghton Mifflin Company.

Valgardson, W. (1997). *Garbage creek and other stories*. Toronto: Groundwood Books / Douglas & McIntyre Ltd.

<u>Aboriginal Worldviews</u>

Bruchac, J. (1998). The creation: an iroquois myth. In Benson, R. et al. *Tales - Heroes, Deeds, and Wonders*. Scarborough: Prentice Hall Ginn Canada.

Caduto, M. & Bruchac, J. (1991). *Keepers of the animals*. Saskatoon: Fifth House Publishers.

Caduto, M. & Bruchac, J. (1989). *Keepers of the earth*. Saskatoon: Fifth House Publishers.

Caduto, M. & Bruchac, J. (1994). *Keepers of life*. Saskatoon: Fifth House Publishers.

Wargin, K. (2001). *The legend of the lady's slipper*. Chelsea, MI: Sleeping Bear Press.

Wargin, K. (2000). *The legend of the loon*. Chelsea, MI: Sleeping Bear Press.

Yerxa, L. (1993). *Last leaf first snowflake to fall*. Toronto: Groundwood Books.

<u>Civilization and Environment</u>

Dehr, R. & Bazar, R. (1989). *Good planets are hard to find!*. Vancouver, BC: Earth Beat Press.
    Toronto: McClelland & Stewart Inc.

Gantschev, I. (1985). *Two islands*. Natick, MA: Picture Book Studio USA.

Hare, T. (1990). *Nuclear Waste Disposal*. New York: Gloucester Press.

Lambert, M. (1986). *The future for the environment*. New York: The Bookwright Press.

LeBox, A. (2001). *Wild bog tea*. Toronto: Groundwood Books / Douglas & McIntyre.

Leggett, J. (1991). *Waste war*. North Bellmore, NY: Marshall Cavendish Corporation.

Zolotow, C. (1995). *When the wind stops*. USA: Harper Collins Publishers.

www.davidsuzuki.org/About_us/History.asp

www.evergreen.ca/en/about/new.html

<u>Production and Consumption</u>

Dr. Seuss. (1971). *The Lorax*. New York: Random House.

Hadingham, E. & J. (1990) *Garbage! Where it comes from, where it goes*. New York: Simon and
    Schuster Books for Young Readers.

Maurer, R. (1989). *Junk in Space*. New York: Simon and Schuster Books for Young Readers.

Mowat, F. (1990). *Rescue the earth! Conversations with the green crusaders*. Toronto:
    McClelland & Stewart Inc.

Peckham, Alexander. (1990). *Resources control*. New York: Gloucester Press.

Thompson, C. (1998). *The paradise garden*. New York: Alfred A. Knopf, Inc.

Thompson, C. (1996). *The tower to the sun*. New York: Alfred A. Knopf, Inc.

Wilcox, C. (1988). *Trash!*. Minneapolis: First Avenue Editions.

<u>Local Environmental Concerns</u>

www.city.thunder-bay.on.ca/water/tips.html

www.gca.ca/THUNDERB.htm

The Chronicle Journal, The Newspaper of the Northwest. A collection of environmental
    articles.

Forest Conservation

Bash, B. (1989). *Tree of life: The world of the african baobaob*. San Francisco: Sierra Club Books.

Cherry, L. (1990). *The great kapok tree: A tale of the amazon rainforest*. Orlando, FL: Harcourt Brace Jovanovich.

Leggett, J. (1991). *Dying Forests*. New York: Marshall Cavendish Corporation.

Patchett, L. (1990). *Trees for tomorrow*. London, UK: A & C Black (Publishers) Ltd.

Rose, D.L. (1990). *The people who hugged the trees*. Niwot: Roberts Rinehart, Inc.

Silverstein, S. (1964). *The giving tree*. United States of America: Harper Collins.

Thornhill, J. (1991). *A tree in a forest*. Toronto: Greey de Pencier Books.

http://tropical-forests.com/facts/people.htm.

www.uoguelph.ca/Research/spark/oasis/environ9.html

Wright-Frierson, V. (1991). *A North American rain forest scrapbook*. Markham: Fitzhenry & Whiteside.

Humanitarian Efforts

Atgwa, P. et al. (1998). *Stand up for your rights. A Peace Child International Project*. Chicago: World Book.

Benson, R. et al. (1998). Free the children. In Benson, R. et al. *Looking for answers*. Scarborough: Prentice Hall Ginn Canada.

Coerr, E. (1977). *Sadako and the thousand paper cranes*. Toronto: General Publishing Co. Limited.

Fitch, S. (1997). *If you could wear my sneakers!*. Toronto: Doubleday Canada Limited.

Rondina, C. (1998). Problem solvers. In Benson, R. et al. *Looking for answers*. Scarborough, ON: Prentice Hall Ginn Canada.

Springer, J. (1997). *Listen to us the world's working children, a book for kids*. Toronto, ON: Groundwood Books / Douglas & McIntyre Ltd.

Suzuki, D. (1999). *You are the earth from dinosaur breath to pizza from dirt*. Vancouver, ON: Greystone Books.

Vale, N. (1996). Help wanted. In Benson, R. et al. *Keeping the peace*. Scarborough, ON: Prentice Hall Ginn Canada.

Young People of the World. (1999). *Pachamama: Our earth - our future*. A joint project of the United Nations Environment Programme and Peace Child International. London, UK: Evans Brothers Limited.

Water Issues

Carr, T. (1991). *Spill! The story of the Exxon Valdez*. New York: Franklin Watts.

Cochrane, J. (1987). *Water ecology*. East Sussex, UK: Wayland (Publishers) Ltd.

Mollel, T.M. (1992). *A promise to the sun*. Toronto: Little, Brown and Company (Canada) Limited.

Seed, D. (1992). *The amazing water book*. Toronto: Kids Can Press Ltd.

Twist, C. (1990). *Hands on science: Rains to dams*. New York: Gloucester Press.

Wheeler, J. (1990). *The water we drink*. Edina, MN: Abdo & Daughters.

www.city.thunder-bay.on.ca/water/tips.html

General Resources - whole class usage

Bouchard, D. (1996). *Voices from the wild: An animal sensagoria*. Vancouver, ON: Raincoast Book Distribution Ltd.

Cooper, S. (2002). *Green boy*. New York: Margaret K. McElderry Books.

Cullis-Suzuki, S. (1993). *Tell the world: A young environmentalist speaks out*. Toronto, ON: Doubleday Canada Limited.

Fleischman, P. (1985). *I am phoenix: Poems for two voices*. New York: Harper & Row Junior Books.

Fleischman, P. (1988). *Joyful noise: Poems for two voices*. U.S.A.: Harper & Row, Publishers.

Myers, W.D. (1995). *The story of the three kingdoms*. U.S.A.: Harper Collins Publishers.

Wood, D. (1992). *Old turtle*. Duluth, MN: Pfeifer - Hamilton Publishers.

APPENDIX IV
Instructions / Scripts for Drama
Techniques

Old Turtle Drama Activity

But the people forgot.
They forgot that they were a message of love, and a prayer from the earth.

And they began to argue...
about who knew God,
and who did not;
and where God was and was not
and whether God was or was not.
And often the people
misused their powers,
and hurt one another.
Or killed one another.
And they hurt the earth.
Until finally even the forests began to die...

...and the rivers and the oceans and the plants and the animals and the earth itself...

Because the people could not remember who they were,
or where God was.

Beginning:

And the people forgot...
Or
And the people misused their powers...

Or your choice from the story language.

Middle:
skit that includes one of the ideas from our brainstorm list
(i.e. pollution)

End:
An environmental message in your own words to sum up the ideas in your skit and help people remember.

Choral Reading Activity

The Creation: An Iroquois Myth

By Joseph Bruchac ●

Girls: Before this world came to be,

Boys: there lived in the Sky-World
         an ancient chief.

All: In the centre of his land
      grew a beautiful tree
      which had four white roots
      stretching to each
      of the four directions:

Group 1 : North

Group 2: South

Group 3: East

Group 4: and West.

Girls: From that beautiful tree,
      All good things grew.

Group 1: Then it came to be that the beautiful tree was uprooted

Group 2: and through the hole it made in the Sky-World fell the youthful wife of the ancient chief

All: a handful of seeds, which she grabbed from the tree as she fell, clutched in her hand.

Group 3: Far below there were only water and water creatures who looked up as they swam.

Girls: Someone comes

Boys: Said the duck

All: We must make room for her.

Group 4: The great turtle swam up from his place in the depths.

Boys: There is room on my back

Girls: the great turtle said
      But there must be earth where she can stand

Boys: said the duck

All: And so he dove beneath the waters but he could not reach the bottom.

Boys: I shall bring up the earth

Girls: the loon then said, and he dove too

All: but could not reach the bottom.

Boys: I shall try

Girls: said the beaver and he too dove

All: but could not reach the bottom.

Group 1: Finally the muskrat tried.

Group 2: He dove as deeply as he could, swimming until his lungs almost burst.

Group 3: With one paw he almost touched the bottom and came up,

Group 4: A tiny speck of earth clutched in his paw.

Boys: Place the earth on my back.

Girls: the great turtle said

Group 1: and as the spread the tiny speck of earth

Groups 1 and 2: it grew

Groups 1, 2 and 3: larger and larger and larger

All: until it became the whole world.

Girls: Then two swans flew up and between their wings they caught the woman who fell from the sky.

Boys: They brought her gently down to the earth where she dropped her handful of seeds from the Sky-World.

All: Then it was that the first plants grew and life on this new earth began.

Questions for Concentric Circles

Using text, Two Islands, by Ivan Gantschev

1. To person directly in front of you - what are the most interesting facts you have been learning about the environment from your text sets and class discussions. Outside circle talks to inside for 30s.

2. Same question, outside circle moves one to the right. Inside circle shares ideas (talks) for 30 s about the interesting environmental facts.

3. Inside circle moves left one person. Outside circle will be speaking. Give your best definition of civilization. What does it mean. Is it good? Can it be bad? Explain. (30s)

4. Outside circle moves right one person. Inside circle will be speaking. Do you agree or disagree with the definition of civilization given by your last partner? Explain what they said and add to it or change it until the definition suits you.

5. Inside moves left one person. Outside circle will be speaking. What things in our civilized western world are good things (example - electricity). Why are they good?

6. Stay where you are. Inside circle will be speaking. What things in our civilized western world are bad things? What makes them bad?

7. Stay where your are. Both circles will speak. Outside circle will begin. Are there some things in our civilized world that are both good and bad? For example, drugs. Explain. (20s each circle speaker, 40s total)

8. Outside moves right one person. Outside circle will speak. What is the story, Two Islands, saying about civilization? Be specific.

9. Outside moves right, inside moves left one person. Inside circle speaks. Do you agree with the message in the story , Two Islands, the message that too much civilization is harmful?

10. Outside moves right, inside moves left, one person. Outside speaks. Do you think the names Greenel and Greynel were good names for the two cities? Explain why or why not.

11. Outside moves right, inside moves left, one person. Inside speaks. Is there anything about this book that reminds you about our real world? What is it that you find similar? Explain.

12. Stay where you are. Outside speaks. Think of another similarity between the world of the story and our world. If you can't think of another one, add to what your partner just said.

13. Outside moves right two people. Inside moves left two people. Inside speaks. Is it okay to keep growing technologically - more computers, more robotics, bigger buildings, faster transportation, more fast foods and on and on? Is it exciting? Is there a cost to all this growing?

14. Outside moves right two people. Inside moves left two people. Outside speaks. What did you think of this drama activity, concentric circles? What was easy about it? What was hard? Did you like it?

15. Last move. Outside move right one person. Inside moves left one person. Take turns speaking. Did the concentric circles and the hot seating help you think about civilization and technology in a critical way? How?

Journal writing about concentric circles and hot seating and/or about civilization and technology.

APPENDIX V
Group Project Organizer

GROUP PROJECT ORGANIZER

RESPONSE GROUP MEMBERS _____

TEXT SET _____

Instructions: The purpose of the organizer is to assist the response group in planning the group project. Please complete each section as your work on the theme progresses.

1. **Develop a plan for reading the books in the text set.**

   ■ *name*

   ■ *resources to read*

   _____

   _____

   _____

   _____

2. **Response Group Discussions**

   a) group members have assigned roles

   ■ *name*

   ■ *role*

   _____

   _____

   _____

   _____

   b) group members participate in group discussions

   Comment _____

   _____

   _____

c) group members select a theme

■ *theme*_____

3. Research on Theme

a) group members decide what questions they need to research and assign group members to particular tasks

■ **what we know**

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

■ **what we want to know**   ■ *name*

i) _____   _____

_____

ii) _____   _____

_____

iii) _____   _____

_____

iv) _____   _____

_____

■ **what we learned**

_____
_____
_____
_____
_____
_____
_____
_____
_____

_____

_____

4. Project

a) group members decide on the drama approach which is best suited to sharing what they learned with others (e.g., monologues, panel discussion, skit, tableaux, readers' theatre etc.)

- drama approach_____ ●_____

- explain how the group will prepare for the dramatic performance

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

- group members meet with the teacher to discuss the plan and have it approved

_____

APPROVAL OF PLAN

_____   _____
Signature of Teacher   **Date**

APPENDIX VI
Schedule – Weeks I to V

Initial Three Week Schedule For Implementation of Study

Day	Week1	Week 2	Week 3
Day 1	-introduction to theme / learning center / process drama unit -read aloud of first key text -commission of inquiry, role play / introduce goals -response groups -journal writing in role -sharing / debriefing	-read aloud of key text #4 -role playing- interviews -response group planning -journal writing -sharing	-read aloud key text #6 -response groups -journal writing -sharing
Day2	-read aloud of key text #2 -drama - tableau to monologue -journals -KWL response groups -sharing	-tableaux -response groups -webbing / summarizing -journal writing -sharing	-read aloud key text #7 -practice -journal writing -sharing
Day3	-read aloud of key text #3 -review goal -action plan for research -inquiry skits -journal writing in role -sharing	-read aloud key text #5 -inquiry -hot seat -response groups -types of presentations -journal writing -sharing	-presentations -journal writing -follow-up -closure / debriefing

Revised Schedule of Meetings with Students / Timetable

Pre-unit Meeting with Students   **May 1, 2002**
- Read *Children of the Earth - Remember* (MCC)
- Drama techniques - imaging, voice in the head (MCC)
- Verbal explanation of research to students (MCC)
- Respond to student questions regarding study (MCC)
- Distribute Letter of Consent (to be signed by parents) (MCC)
- Brainstorm individually their ideas about humane education / environmental issues (LL)

Week #1: Introduction
May 6 - 10, 2002

Day #1   **Monday**
- Begin in role - environmental club
- Brainstorm environmental issues
- Paraphrase context of Severn Cullis Suzuki's (1993) *Tell the world: A young environmentalist speaks out*
- Read text of speech
- Brainstorm who might have heard the speech (groups in attendance)
- Assign students to groups of 3/4. Each group will select a role (i.e. group of delegates) and brainstorm issues from their point of view :
  What is our position on the environment? (resources for all? need to be more responsible? committed to helping earth?)
  What is our reaction to the context of Severn's speech? (does it help / hinder our cause/ business?)
- Report group findings / beliefs regarding key issues (in role)
- Discuss issues (whole class)
- Overview project
- Introduce **8 possible text sets** (Animal Protection, Aboriginal Worldviews, Civilization and the Environment, Production and Consumption, Local Environmental Issues, Forest Conservation, Water Issues, Humanitarian Efforts)
- Invite students to select a text set by prioritizing on paper their top 3 choices
- Journal (open ended - thoughts on today's class, on unit, on text set, ideas of what they hope to learn)
- Meeting of club (closure)

Day #2   **Tuesday**
- Introduce, begin new read aloud text - *Green Boy*
- Discuss **Expectations (individual / group)**
- Distribute text sets
- Share **themes** generated as springboard for research (students welcome and encouraged to explore other themes related to their text sets)
- Response group planning time
  * look over texts in set
  *decide on plan for reading texts (reading to be completed by Week2, Day3)
- Journals
- Meeting of club (whole class discussion / debriefing)

Day #3   **Wednesday**
- Read aloud, *Old Turtle*
- Stop reading story at line "And began to hear..."
- Groups to select one issue from chart paper and one from text to prepare a short skit to perform for the class (**Old Turtle Activity**)
- Rehearse
- Perform skits
- Journal (open-ended or about Old Turtle Activity)
- Response groups (use **Advance Organizer** to plan who reads what)
- Meeting of club (give suggestions for club name)

Day #4   **Thursday**
- Read aloud, *The People Who Hugged the Trees*
- **Poetry activity** (descriptive words / phrases) (poems to be recorded in journal)
- Brainstorm variety of journal entries (prose, poetry, song, diagram, list, etc.)
- **Tableaux** of favourite scene from our read aloud
- Use of **Voice in the Head** to make tableaux come alive (I am Amrita. I am hiding behind the tree, trying to avoid the stinging sands from the storm...)
- Response groups - reading plan, time to read
- Meeting of club (discussion of name, feedback on progress to date)

Day #5   **Friday**
- students work with classroom teacher reading text set materials
- groups report interesting details (from text sets) to whole class

* Collect, read, and comment in Journals

> ### Week #2 - May 21 to May 24
> (note time lapse due to EQAO testing)

Day #1 • **Tuesday**
- Read aloud, *The Creation* (Joseph Bruchac)
- Drama Activity, **Choral Reading** (parts = boys, girls, and mixed groupings 1,2, 3, and 4)
- Journal (on choral reading or other topic of choice)
- Meeting of club to select name
- Response groups - reading time with text sets

Day #2 **Wednesday**
- Read aloud, Green Boy
- 10 students at a time to practice parts for Readers' Theatre while remaining students share facts learned by reading text sets
- Drama: **Readers' Theatre**
- Response groups - reading time
- Journal

* Suggestion: have different materials for each of the groups performing

Day #3 **Friday**
- Read aloud, *Two Islands*
- Drama: **Hot Seating - Concentric Circles**
- Whole class discussion of drama technique
- Journal (on hot seating activity, or text sets, or student choice)
- Response groups - reading text sets, beginning to plan final performance
- Meeting of club - feedback on progress, discussion of interesting facts, answer queries about final performance

* Collect, read, and comment in Journals

> ### Week #3 - May 27 to May 31
> (Preparing Performances)

Day #1 **Monday**
Read aloud, *The Story of the Three Kingdoms*
- Introduce concept of Anthropocentrism (focus on humans as superior)
- Response groups - work period on **KWL Organizer** and text sets
- Fill in K section on Organizer, brainstorm list of questions for W section in Journal
- Journal - ideas from text set, or thoughts about questions generated for KWL, or ideas regarding messages students hope to convey in their performances

Day #2   **Tuesday**
- Read aloud, *The Lorax*
- Response Groups - **Organizer** - select 4 questions (KWL) from journals to include on group Organizer
- Use extra time to **research into the 4 questions**
- Journal - ideas about types or content or general theme of performance students might suggest for their group presentation
- Meeting of club - share, discuss ideas about drama performances for sharing info.

Day #3   **Thursday**
- Group response time - discussion of **forms of drama** on television (news, documentaries, game shows, interview panels, plays, role plays, etc.)
- Group Project Organizer / Independent reading time for research (related to W/L on KWL sheet - **What I Want to Know / What I Learned?**)

Day #4   **Friday**
- Response Groups / Independent research / Planning performance
- **Handouts on group expectations** (2) - reminders to help focus students
- Teacher-group conferences on performance contents / messages

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Week #4 - June 3 to June 7
(Preparing Performances,
Performing)
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Day 1   **Monday**
- Performance planning independently and with teacher support
- Assignment of MC roles, overview of order of performances
- Journal writing

Day 2   **Thursday**
- Performance planning, skit writing, rehearsals
- Sharing of **brochures, Earth Pledge** (on mural paper) and **Earth Prayer**

Day 3   **Friday**
- Rehearsals (morning), with feedback for improvement
- Dry run through of entire performance
- Dry run through of possible parental questions to performers
- Performance (afternoon)

> **Week #5 - June 10**
> (Interviews, Debriefing)

- Post unit
  interviews with classroom teacher and response groups
- Informal farewell to Grade 6 class