Teaching Toward Compassion: Environmental Values Education for Secondary Students

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Research has established that gifted children often develop deep sensitivities to world issues and injustices at an early age (Piechowski, 1997; Silverman, 1993). Once provided with information, they become more intensely interested in and concerned with current environmental problems (Clark, 1992; Cullingford, 1996). Although ecology is usually part of the secondary public school curriculum, the subject is often taught in rote fashion (deBettencourt & McCrea, 2000). This article discusses why and how the moral development and affective needs of gifted students at the secondary level could be more appropriately addressed through a holistic approach to environmental studies and suggests some additional strategies that allow gifted students to advance their interest in ecological issues despite—or in deference to—the scheduling constraints imposed by the regular curriculum.

One of the well-known characteristics of the gifted is their acute sense of justice. Gifted children are questioners, keen observers, logical thinkers. They will notice inequities, unfairness, double standards, and will question instances and experiences of that sort with passion. Often, they feel helpless and powerless to make an impact, and they suffer deeply from this. They worry about the injustices of the world. They worry about peace, about the bomb, about their futures, about the environment, about all the problems they encounter.

—A. Roeper (1988, p. 12)

Fortunately for gifted students, environmental education has become an established course of study in most public and private school systems. In a survey of 1,505 secondary level teachers conducted by deBettencourt and McCrea (2000), 61% said they included environmental topics in their curriculum. In fact, starting in the first grade, students are expected to understand basic ecological concepts in order to meet the requirements for their grade levels at the end of the school year. The Web page for the Environmental Literacy Council (2002) tells us that “Environmental sciences have become an integral part of the K–12 curriculum. . . . our relationship with nature [is] shaped by environmental actions” (¶ 3). Unfortunately for gifted public school students, the educational setting rarely accommodates their intense fascination with learning (Ward, 1985). deBettencourt and McCrea’s survey also revealed that due to time limitations, 90% of teachers at all grade levels, including the 61% mentioned above, taught environmental topics through discussion only. In a typical public school scenario, two interesting conditions often exist simultaneously. One is that concepts are repeated and reinforced multiple times at the most fundamental levels, slowing the pace of learning for “quick learners” who become bored. The other is that because time is of the essence in matters of curriculum coverage, a hurried presentation of the material is a common occurrence. Through discussions with other teachers and personal experience, it seems that both conditions can have detrimental effects.
First—and most importantly—conceptual connections are never made. Students are initially taught each idea in isolation from the other, especially when an emphasis is placed on learning the appropriate vocabulary. For instance, the term ecology may be defined, and examples may be given. However, when the time comes to define natural resources or extinction, the connection between these terms—which is essentially their relationship to the first term—is left for the students to discover. There simply is no time for the kind of discussion that would pull these concepts together. This strategic failure is particularly ironic in light of the fact that ecology is a science of connections.

In addition, because instructors may feel the need to move quickly through the chapters in their science texts and the curriculum is often presented in an “overview” fashion, students may place a higher value on the assessment of their learning rather than the learning itself. They will be satisfied with the limited information they receive and the grade that presumably represents their comprehension of this information. But, a deeper conceptual understanding has not been achieved.

Gifted students in a regular classroom are often left with an uncomfortable lack of closure regarding issues that deeply affect them. They may feel the need to go beyond the preliminary learning. They understand that ecological concepts are central to the larger issues impacting their futures, and they do not have the opportunity to address these issues. They are dissatisfied with the agendas of instructors who promote a lack of interest by delivering transitory and superficial information. These students want to know more; the idea of an environment in danger, wildlife at risk, and a world that is not as good as it could be is both frightening and intriguing to them. Further study in a classroom situation that supports their deeper sensitivities can help them satisfy their curiosity and confront their fears. It might also allow them to internalize the message that there is a time and place for expressing strong feelings and, therefore, they have “permission” to react the way they do (Silverman, 1993).

The Nature of Values and Beliefs

Answers to the question of how we can most effectively provide older gifted learners with the opportunity to address their deeper interests in world issues and, in particular, the state of the environment cannot be offered unless we first have a clear understanding of the nature of our value and belief systems. Even before this, a brief clarification should be made regarding the difference between values and morals. If a value is a personal belief that an individual or society considers to be worthwhile, then a moral is the particular code of conduct used to demonstrate that belief.

Rokeach (1976) defined a belief as a simple proposition, inferred from an observation, that begins with the phrase “I believe that. . . .” A belief can be perceived as either true or false, but more significant is the effect it will have on the believer. For instance, it is likely that if one believes that wood storks are endangered, this belief will have greater influence than the fact that wood storks can fly, although both of these are descriptive. A prescriptive belief, such as “Wood storks should be protected,” will also have greater impact. Beliefs are formed and retained very early in a child’s life. Later on in his or her development, a child will maintain a group of beliefs that focus on one particular object or situation; this will lead to the formation of an attitude.

Attitudes take beliefs to the next level because they contain elements of emotion and potential behavior (Caduto, 1985). For example, an attitude would be that letters should be sent to government officials, urging them to protect the clear cutting of rain forests. Some underlying beliefs that support this attitude are that government officials can get things done, that protecting rainforests will protect fragile habitats, and that it is our duty as citizens of the planet to act on behalf of rainforests and their wildlife.

The sum total of a person’s beliefs and attitudes creates a belief system the formation of which is an ongoing, life-long process. A belief system is subject to continuous revision as a person’s socialization style changes.

When a person’s lifestyle begins to reflect an adherence to a set of very closely aligned attitudes, he or she is said to have incorporated a value system (Hennessy, 1979). Values are convictions that a certain level or mode of conduct is personally or socially preferable to the opposing one. The converging nature of the belief/attitude/value system means that by the time a child reaches adulthood, he or she may have thousands of beliefs, hundreds of attitudes, and only a few dozen values. Rokeach (1976) found that there are significant and consistent differences in value orientation among different segments of American society. The socialization process determines our values almost from the moment of birth, and our place in society has a great influence upon our beliefs. Well-informed individuals participating in a recycling program, for example, have a very different set of values than the less informed who don’t—or won’t—recycle. Some of the “components” of society responsible for the proliferation of an individual’s value system include the parents and the home environment,
teachers and other school staff, peers, religious personalities, government, the media, and the work environment (Caduto, 1985). Although values are closely related to self-concept, they are dynamic, and there are several motivating factors that can change them over time. The underlying factor is explained by Maslow (1964) as the need to achieve a sense of self-worth and fulfillment—what he refers to as self-actualization.

Three major theories of value formation differ with regard to how values originate and become an established guideline in the lives of those who possess them. The first two theories will be mentioned briefly, but the third is of primary interest to educators.

First, the psychoanalytic theory of values formation was developed from the work of Erikson (1950). It says that our superego—our “unconscious conscience”—allows us to suppress or neutralize urges that would otherwise violate moral rules. At every stage of development, students are dealing with ego conflicts that have not been resolved. This conflicted state is what leads to the formation of values.

The social learning theory simply states that values are learned through the direct positive and negative reinforcement of behaviors (Bandura, 1976). The formation of a child’s value system depends on a great extent on the control exerted by society as that child is exposed in turn to feelings of guilt and temptation, punishment, reward, role models, and other determiners of moral judgment.

Finally, Kohlberg’s (1964) model of moral development recognizes six stages. Stages one through four are characterized by an adherence to forms of conduct that have positive consequences, regardless of their inherent value or meaning. At stage five, an individual begins to appreciate the societal definitions of right and wrong and to adopt the standards of the society as his or her own. The final stage, one of full moral autonomy, sees the individual moving away from “rules” toward an obligation to what is ethically just, with the placement of a high value on human rights. It is at this stage of self-actualized moral reasoning that older students begin to seriously consider consequences of actions (theirs or other’s), discover the inherent value of ideas (both abstract and tangible), and with the right guidance from parents and educators, develop an abiding respect and compassion for life.

Environmental Values Education and Gifted Students

Almost all young people have an innate enthusiasm for studying natural systems. But, environmental education is particularly important for students in secondary gifted programs; it has a “built-in” potential for addressing the greater commitment to and fascination with global concerns that these students demonstrate, often at an earlier age than the general population. In addition, it allows these students to make use of their enhanced critical thinking skills by introducing elements of point/counterpoint (Winocur & Maurer, 1991). Furthermore, gifted secondary students who have greater proficiency in mathematics and probability—subjects that at first seem removed from ethical consideration—often find that these skills are a convenient vehicle for further understanding of environmental problems (Lemin, Potts, & Welsford, 1994).

Gifted students are good futurist thinkers and are therefore more keenly aware of the implications of negative environmental change in their own futures and the lives of their predecessors. Tannenbaum (1975) observed the perceived need gifted students have for a “closer link between the intellect and the conscience” (p. 22). Environmental education provides these students with an outlet for their intensified perceptions and their tendency toward divergent ways of thinking (Lovecky, 1993). Moreover, gifted students are frequently characterized by their strong sensitivities (Silverman, 1993). They are both passionate in that they are endowed with great depth of feeling, and compassionate in that they are committed to alleviating suffering in the lives of all living things. They often have greater levels of empathy; they can imagine what others are feeling to the point where those feelings are transferred to their personal experience. These emotions remain strong even indirectly through outside observation, reading written material, or discussion. As a result, these students often develop a strong sense of moral commitment to righting the wrongs and correcting the injustices that befall all citizens of the planet. Their high sensitivities direct them to work toward the singular goal of creating “an alliance with the universe” (Lovecky, p. 39). But, dedication to this goal at such a young age can bring on strong feelings of helplessness and confusion as students struggle to make sense of the senseless.

Holistic Education and the Confluent Model

In 1984, Michael Caduto was among a small group of researchers who provided educators with guidelines for helping students deal more effectively with their feelings about global environmental problems. The philosophy behind his “holistic program” (Caduto, 1985, p. 5) in environmental values education is simple: Values are an essential and legitimate part of any learning experience.
Environmental education is laden with implicit value statements at the outset; students walk into a classroom having been instilled with values during every stage of development. If these moral attitudes are ignored in favor of lessons based solely on the giving of information—which Caduto believed would be nearly impossible—we would be denying highly reactive gifted students the opportunity to come to terms with their feelings about their relationship to the natural world. We would also be denying them a chance to consider alternatives to the issues that make them uncomfortable and to arrive at a potential solution as a form of closure.

Caduto (1985) used the word holistic to describe that aspect of his program in which values and actions would work together toward individual self-fulfillment. This, he felt, would ultimately lead to a population of caring, action-oriented people who would be “able and willing to look beyond their own lives and to work for the welfare of society and the environment” (p. ix). A holistically based program such as this allows gifted students to find real-world applications for an unusually strong set of convictions. It allows them to more fully explore their compassionate, unselfish sides and to develop a sense of ethics that will eventually characterize them as socially responsible young adults.

Similarly, the confluent model of moral education (Vare, 1979) is a teaching strategy that is closely aligned with the philosophy of holistic education; the needs of gifted secondary students are compatible with the concept of moral autonomy upon which the model is based. In essence, the confluent model proposes that cognitive and affective education are inseparable, and that the primary goal is to educate the whole person—the thinking and the feeling person. Thus, there is compelling justification for its use in light of the gifted child’s greater need for emotional and cognitive fulfillment.

No other teaching strategies rely as much on the student’s commitment to an internal system of moral ideals as do the holistic and confluent models. Other valuing strategies, if used alone, force students to be guided primarily by the instructor’s belief system, which, parenthetically, gives greater credence to parental arguments against values education.

In contrast to progressive education, in which values take on an ambiguous quality as students are left to explore a broad range of feelings in any manner they wish, holistically based education uses guided inquiry and logical judgment as a means of promoting autonomous thinking (Caduto, 1985; Vare, 1979). Students are neither restricted to the set of standards imposed by the instructor, nor are they left completely without rules of conduct. Rather, they have an opportunity to develop the skills necessary to make responsible decisions and establish a “dialogue of justice” (Kohlberg, 1981, p. 47) according to a unique set of ethical principles.

The Role of the Teacher

The teacher has an especially important role in promoting the metacognitive skills of gifted students early in their quest for global understanding. An exploration of values is an opportunity to increase students’ awareness of their own sense of morality and that of others. Providing a classroom atmosphere that is conducive to an analysis—or reinforcement—of value systems is the first step in helping students feel confident enough to risk openly expressing their views (Hersh & Paolitto, 1979). Teachers can ensure that this will happen by being aware of the group dynamics of the class when asking questions and eliciting responses from individuals, encouraging students to listen to one another even if they do not agree with what is said, guiding a discussion in which issues are challenged and individuals are not attacked, and dealing with inappropriate responses in a positive way.

Teachers should remember that they are teaching values clarification skills, not the values themselves. They should therefore resist the urge to make judgments about which values are better or worse. They must instead act as facilitators of the process, encouraging participants to follow through with developing ideas, as mediators of disputes arising from differing viewpoints, and as assessors of their students’ progress with analyses (Lemin et al., 1994).

Above all, students should acquire a perception of their instructor as a caring individual who is dedicated to promoting self-growth. The teacher must also be comfortable with the “skill” of taking on the perspective of individual students. If the teacher fails to understand the reasoning behind a student’s point of view, then each might question the other’s ability to listen, which could result in a communications breakdown.

Sometimes, even if the teacher has clearly indicated that environmental values education is part of the gifted curriculum, parents will often “discover” after the fact that their child is involved in ethical discussion and will ask for an explanation. At this point, the teacher may have to play the role of arbitrator. The concern is, of course, that the child is being indoctrinated with the moral principles of the teacher, which may differ from those of the child’s family members. Parents deserve and expect information that allows them to distinguish between indoctrination
and guidance. Should parents allude to the idea that teachers are, in effect, practicing psychiatry when they focus on their students’ affective responses to issues, they can be reminded that the purpose of an environmental values education program is to provide students with an opportunity to analyze their own thinking, with teachers serving only as facilitators.

Preparation the Soil: Instructional Strategies and Delivery Methods

In *Silent Spring*, her hallmark book for raising environmental consciousness, Rachel Carson (1962) wrote,

> The years of early childhood are the time to prepare the soil. Once the emotions have been aroused—a sense of the beautiful, the excitement of the new, a feeling of sympathy, pity, admiration, or love—then we wish for knowledge about the object of our emotional response. Once found, it has lasting meaning. (p. 7)

“Preparing the soil” for elementary-level environmental education usually focuses on examining the implications of actions that do and do not address the common good (Cullingford, 1996). For example, littering has a degree of visibility that other problems such as global warming and ozone depletion do not have. This makes it a good topic for beginning a discussion about pollution with elementary students. However, for the secondary level gifted student, teaching strategies can focus on enhancing self-awareness of individual beliefs about littering and applying one’s value system toward solutions that could be beneficial to society and nature (Milbrath, 1996).

There are several effective ways to provide secondary gifted students with opportunities to explore their responses to global environmental issues more fully and deeply. One way is through a resource model in which students from a single grade level can be pulled out of their regular classes for 40 minutes to an hour of environmental enrichment activity each day. This delivery method has one important advantage: Because students are at similar levels of moral and cognitive development, it is possible to design a unit of environmental study with far greater breadth and depth (Hersh & Paolitto, 1979), which in turn provides an opportunity for these students to make use of their advanced value systems and affective behaviors. In addition, the smaller size of a pull-out resource group allows teachers to interact more often with students and to focus more fully on their needs.

Another teaching method that has been particularly effective for middle and high school gifted students is in-class facilitation or collaboration (Tomlinson, 1999). In this situation, identified gifted students remain in their regular classes for one of the following reasons: a gifted program instructor is providing enrichment activities on-site; this instructor has been conferring with the regular classroom teacher prior to the delivery of the week’s lessons so that the regular classroom teacher can provide gifted students with advanced content or an opportunity for further study; or the gifted program instructor has assigned independent projects that require further research into one or more topics that are minimally addressed in the regular classroom. In one or all of these cases, the students meet with the gifted program instructor for briefings and periodic evaluations.

Personal experience has indicated that this method has several advantages. First, it removes the disruptive component of a pull-out program. By assigning values clarification exercises and assessments, gifted program teachers can still respond to the affective aspect of student. Also, it has the support of most teachers who feel comfortable with the idea that all of their students will be benefiting from lessons that were once reserved only for the identified gifted population. Finally, academically oriented middle and high school students are more willing to buy into a gifted program format that dispels their concerns about missing information given in the regular classroom.

However, one disadvantage of the collaborative delivery model is that it may not allow for daily contact with students, or there may be only brief contact periods. If meeting times are too quick and sporadic, there may be a loss of the consistently supportive atmosphere that students need to feel secure with their responses.

Another more informal method of exposing gifted students to environmental values education is through an extracurricular ecology club. As with any after-school program, infrequent meeting times and student absences can disturb the “flow” of the learning experience. But, clubs are a powerful medium for applying student values to community and world issues. Ideally, an ecology club includes many students who have not been identified as gifted, but this does not diminish its beneficial role for the identified gifted. In fact, the outcome of various club activities should reflect the value system of all club members who will provide each other with the moral support needed to accomplish some highly-focused objectives. For instance, an implied goal of all ecology clubs would be to promote a deeper understanding, respect, and compassion for living things. There are literally hundreds of ways to apply the set of values that incorporates this philosophy,
from “adopting” a member of an endangered species, to planting trees or making a donation to a rain forest relief effort. Although it is possible to do this as part of a gifted program curriculum, the setting of an ecology club unifies individual values and gives the intended goal greater focus and impact. It is assumed that the outcome reflects the value systems of all club members who will work together toward the resolution of environmental problems.

A common ethical goal can also be the focus of a group of students who meet for the express purpose of analyzing and describing solutions to difficult problems. The Future Problem Solving Program, developed by E. Paul Torrance (Torrance & Torrance, 1981), takes participants through a six-step process that will ultimately lead them to one “best solution” to a potentially large-scale societal problem. The competitive aspect of the program requires that topics for discussion change each year, but a noncompetitive version could be utilized for an intensive look at several environmental issues. As with the formation of ecology club goals, the aim is to arrive at an answer that will reflect the moral standing of the team as a whole. Individual team members may not be consciously aware that their own ethical principles are guiding the choices they make; this provides the instructor with a perfect opportunity to approach the problem-solving process by way of the holistic/confluent model so that students can acknowledge that a combination of critical thinking and affective attitudes have played a role in forming a solution.

**Conclusion**

If environmental education is to become one vehicle, among others, for developing the moral character of secondary gifted students, it must be much more than an exercise in pedantic teaching. It must move beyond scientific content superimposed upon cognitive skill development. It requires that the gifted program teacher or facilitator make a commitment to providing the setting and the “moment in time” during which these students can fully—and freely—express their confusion or sadness, their helpfulness, and their strong desire to understand the uncomfortable realities posed by a troubled world. An environmental values program at the secondary level offers a chance for students to synthesize new ways of thinking, or analyze and reevaluate beliefs about their place in the natural world. In accordance with the strategies suggested by holistic and confluent education, students can prepare themselves for a future of good decision-making by arming themselves with a basic understanding of the way the world works and acknowledging that good environmental choices are most often the result of good value judgments and a compassionate nature. Lester Milbrath (1996) makes this point quite clearly in his book, *Learning to Think Environmentally: While There is Still Time*:

We must change the way we think as quickly as possible. We need to clarify our values and adopt new priorities. In the process, we should clarify our responsibilities, so that people see their part of the overall task as well as the necessity to do their share. All of us must learn to think systematically, holistically, integratively, and in a futures mode. We should strive for reflective consciousness. [We must] affirm love, or caring for others, as a primary value. [We must] love not only those near and dear, but those in other lands, future generations, and other species. (p. 47)

**References**


Hersh, R. H., & Paolitto, D. P. (1979). The teacher as moral educator. In T. C. Hennessy (Ed.), *Value/moral
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education: The schools and the teachers (pp. 7–10). New
York: Paulist Press.
Kohlberg, L. (1964). Development of moral character and
Kohlberg, L. (1981). The philosophy of moral development:
Moral stages and the idea of justice. San Francisco:
Harper & Row.
Lemin, H., Potts, H., & Welsford, P. (1994). Values strat-
egies for classroom teachers. Victoria, Australia: The
Australian Council for Educational Research.
Lovecky, D. V. (1993). The quest for meaning: Counseling
issues with gifted children and adolescents. In L. K.
Silverman (Ed.), Counseling the gifted and talented (pp.
Maslow, A. H. (1964). Religions, values, and peak experi-
ences. Columbus: Ohio State University Press.
While there is still time. Albany: State University of
New York Press.
measure of intrapersonal intelligence. In N. Colangelo
& G. Davis (Eds.), Handbook of gifted education (2nd
Roeper, A. (1988). Should educators of the gifted and tal-
eted be more concerned with world issues? Roeper
Rokeach, M. (1976). Beliefs, attitudes, and values: A theory
of organization and change. San Francisco: Jossey-
Bass.
Silverman (Ed.), Counseling the gifted and talented (pp.
Tannenbaum, A. J. (1975). A backward and forward glance
at the gifted. In W. B. Barbe & J. S. Renzulli (Eds.),
Psychology and education of the gifted (pp. 21–31). New
Tomlinson, C. A. (1999). The differentiated classroom:
Responding to the needs of all learners. Alexandria,
VA: Association for Supervision and Curriculum
Development.
Torrance, E. P., & Torrance, J. P. (1981). Educating gifted,
talented, and creative students for the future. American
Middle School Education, 4(1), 39–46.
Vare, J. W. (1979). Moral education for the gifted: A con-
Ward, V. S. (1985). Giftedness and personal development:
and gifted students: Using impact to improve teach-
ing and learning. In N. Colangelo & G. Davis (Eds.),
Handbook of gifted education (pp. 308–317). Boston:
Allyn & Bacon.

Appendix

A Partial Resource List for Teaching
Environmental Values Education

Grant, T., & Littlejohn, G. (2004). Teaching green—the
middle years: Hands-on learning in grades 6–8. Toronto,
Canada: Green Teacher.

This is a comprehensive “green teaching” resource
for educators of upper elementary and middle school
students. It contains student-friendly ideas and practical
projects from educators across North America, covering a
vast array of environmental topics.

Palmer, J. (2008). Environmental education in the 21st cen-

The author addresses impediments to the develop-
ment of rigorous programs in environmental education.
The history of environmental activism is also discussed.
Palmer draws on her own experience and research, as well
as the testimony of 15 other educators, to provide an inte-
grated model for planning environmental education pro-
grams of the future.

Palmer, J., & Neal, P. (1994). The handbook of environ-

The authors provide practical ideas for establishing
a whole-school environmental education plan, including
strategies to motivate faculty members who implement
it. Teachers will also find practical ideas for planning and
assessing environmental education lessons.

Greenville, WV: The Institute for Earth Education.

The premise of this book is that there is a distinction
between educating students to simply “protect the envi-
ronment” and educating them in such a way that they will
develop an enduring compassion for Earth and its life.
Therefore, it focuses more strongly on the affective dimen-
sion of environmentalism. This book offers a plan for
developing an Earth Education program, which includes a
series of creative immersion exercises for students.