

Introduction and Purpose

What do Wisconsin K-12 school administrators know, feel, and do about supporting environmental education in their schools? In order to gain insight into this question, the Wisconsin Center for Environmental Education (WCEE) conducted an assessment of over 1,100 principals and directors of curriculum across the state.

The goal of the assessment was to provide the Wisconsin Environmental Education Board, the Wisconsin Department of Public Instruction, and the WCEE with information on the administrative support or barriers to offering and improving environmental education in Wisconsin's schools.

Development of the Assessment

The development of the administrator assessment involved an extensive research, writing, evaluation and implementation process. An environmental education specialist from the WCEE served as the staff person for the project. The project was guided by a statewide advisory council made up of thirteen individuals including four university education professors, four principals, two directors of curriculum, two school superintendents, and one practicing teacher. Ultimately, the survey instruments were also reviewed and endorsed by the Wisconsin Association for Supervision and Curriculum Development and the Association of Wisconsin School Administrators. After extensive deliberation, the assessment staff and the advisory council determined that the following guiding questions would be used to direct the development of the assessment instrument.

1. What are school administrators' attitudes toward incorporating the content and process of environmental education in their schools?
2. To what degree are school administrators personally knowledgeable about EE and aware of the status of EE in their schools?

3. To what degree do school administrators provide support for EE in their schools?
4. What do school administrators identify as barriers to offering EE in their schools?
5. What do school administrators perceive as needs or incentives related to initiating, improving, or increasing EE in their schools?

Based on the above "guiding questions" and as a result of several reviews and pilots, a final assessment was developed (Appendix D). The assessment was designed to be administered by mail. It consisted of 40 questions and involved a response time of about 20 minutes. The assessment was divided into four sections. Each section addressed one or more of the guiding questions developed by the advisory committee.

Population and Survey Administration

It was decided to send the assessments to all the state's public school principals and directors of curriculum. The Department of Public Instruction provided the mailing list for the principals which totaled 1,818. Because the DPI did not have a mailing list of curriculum coordinators, all 427 school districts in Wisconsin were contacted by phone to identify who was filling the role of curriculum director. It was determined that, in many cases, it was the principal who was filling the role. However, in 308 cases directors of curriculum were identified as distinct positions. Thus, a total of 2,126 assessments were sent out in February of 1994. A total of 914 assessments (50%) were returned by principals and 209 (68%) were returned by directors of curriculum (grand total 1,123 or 53%).

Results of the administrators' assessment are herein presented relative to the "guiding questions" that were identified by the advisory council.

What are school administrators' attitudes toward incorporating the content or process of environmental education in their schools?

"Positive" or "very positive" would be the best way to describe administrators' views toward incorporating the content and process of EE.

An overwhelming majority (80-90 %) believe that schools should provide students with experiences that will achieve the goals of environmental education (Figures A.1, A.2, A.3, A.4, and A.5). Approximately 70 % of school administrators agree that environmental education should be considered a priority (Figure A.6), and that school districts should be required to develop and implement an environmental education curriculum plan (Figure A.7). Over 90 % of both principals and directors of curriculum either agreed or strongly agreed that environmental education should be infused into existing curriculum (Figure A.8). There was not much support for the statement that environmental education should be taught as a separate subject (Figure A.9), although principals who work with secondary teachers were more likely to agree to the statement than principals who work with elementary and middle school teachers (Figure A.10). Finally, when asked to identify personal barriers which prevent them from including or increasing environmental education in their school or school district, close to 60 % of both the principals and directors of curriculum indicated they harbored no personal barriers but they also indicated time was a particular concern. Only 11 % of the principals and 8 % of the directors of curriculum indicated they do not have the personal interest in including or increasing environmental education in their school (Figure A.11).

Figure A.1 Schools should build student awareness and sensitivity to the total (human and natural) environment and its associated problems.

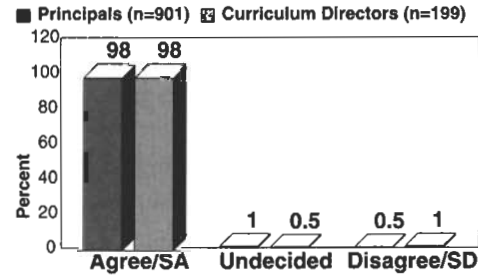


Figure A.2 Schools should provide opportunities for students to acquire a basic knowledge and understanding of the environment and our human relationship to it.

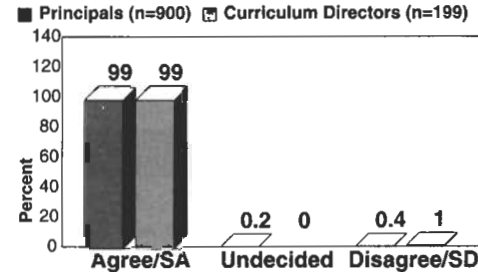


Figure A.3 Schools should provide opportunities for students to develop attitudes and feelings of concern for the environment.

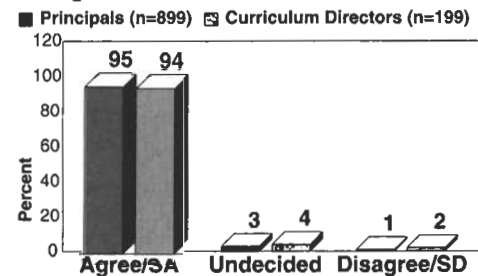


Figure A.4 Schools should provide opportunities for students to develop skills ... (relating to) the resolution of environmental issues and problems.

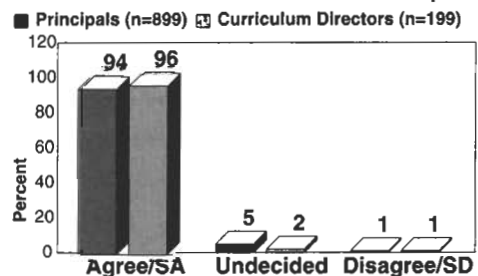


Figure A.5 Schools should provide opportunities for students to gain actual experience in resolving environmental issues.

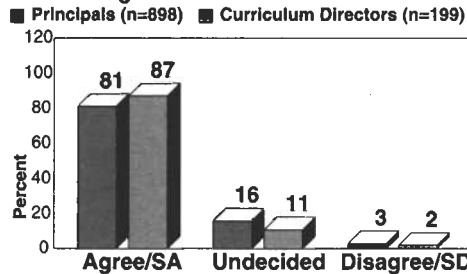


Figure A.6 Environmental education should be considered a priority in our K-12 educational system.

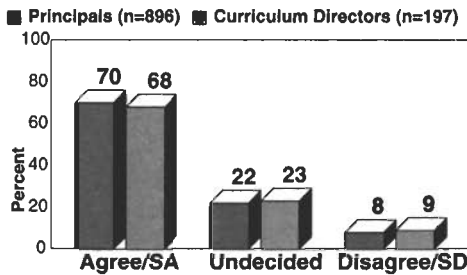


Figure A.7 It is important that school districts be required to develop and implement an EE curriculum plan.

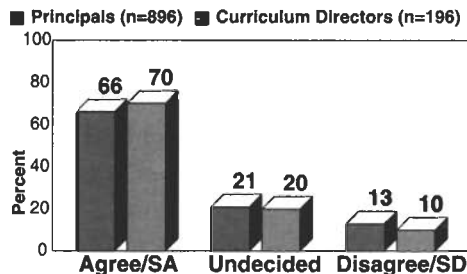


Figure A.8 Education about the environment should be infused into the existing curricula in my school.

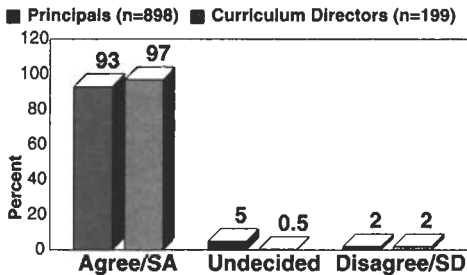


Figure A.9 Education about the environment should be taught as a separate subject in my school.

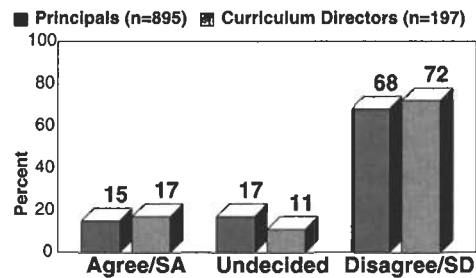


Figure A.10 Education about the environment should be taught as a separate subject in my school (n = 833) (Principals, grouped by grade level of teacher population work with most)

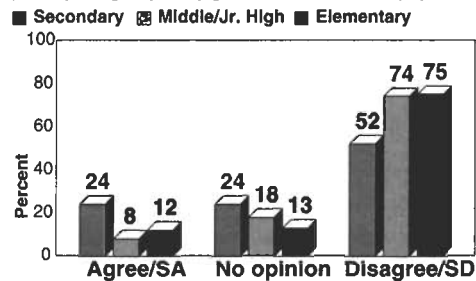
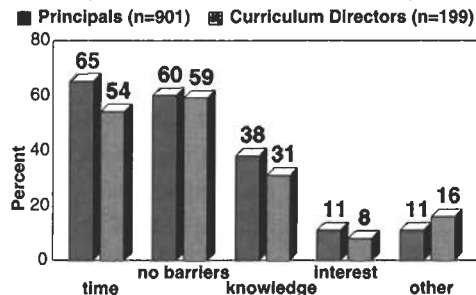


Figure A.11 Personal barriers to including or increasing environmental education.

(note: respondents could select more than one response)



To what degree are school administrators personally knowledgeable about EE and aware of the status of EE in their schools?

School administrators, as a group, might best be described as having an “awareness” and “some training” in EE; however, the scope and depth of their experience remains hard to determine.

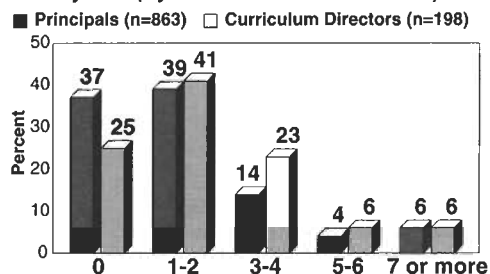
When asked to estimate the number of environmental education courses, workshops or in-services they have attended, over 75 % of the school administrators reported having had at least one

course in environmental education (Appendix D, item #4). However, 41 % of the principals and 48 % of the directors of curriculum reported having attended one to two in-services, courses or workshops in environmental education and 23 % of the principals and 20 % of the directors of curriculum indicated they have not attended any courses or workshops in environmental education. Although it is encouraging that most school administrators have had some training in environmental education, this finding does not give an indication of the quality of the environmental education training. No parameters were established for the word “attended” and no specific definitions were given for “environmental education courses, workshops, or in-services.” While some respondents may have interpreted this question as relevant to their college courses in biology or a one hour workshop on environmental education at a professional conference, others may have felt they had attended an environmental education in-service if they observed some of the activities during a staff meeting.

Approximately a third of the school administrators in each population indicated they did not have the knowledge or background to feel comfortable promoting environmental education (Figure A.11). This finding is of special concern in the case of directors of curriculum, who are supposed to provide curriculum leadership in the area of environmental education, yet may not feel they have adequate training to do so effectively. This study also found that school administrators with less than 3 years of experience appear to have attended approximately the same or more environmental education courses, workshops or in-services than their peers with 3-10 years of experience. Several possible conclusions can be drawn from this information. It may be that pre-service school administrators are receiving more training in environmental education than their peers did more than 3 years ago. There are no direct requirements for environmental education to be included in pre-service training for school administrators, but school administrators are required to have a teaching certificate and since 1985 individuals applying for a teaching license in certain areas must demonstrate competencies in

environmental education. Another explanation may be a result of a greater interest in the environment and environmental education since 1990. The increase in public attention may have generated a greater interest on the part of school administrators in obtaining training in environmental education. Indeed, over 60 % of both the principals and directors of curriculum indicated their school or school district has offered at least 1-2 environmental education courses/in-services in the past 3 years (Figure A.12).

Figure A.12 Number of environmental education in-services offered for teachers in the past three years (by school or school district).



Administrators also reported that the infusion of EE is not a planned practice in all schools. Over 40 % of the principals and 20 % of the directors of curriculum report that their district does not have a written curriculum plan for environmental education (Figure A.13). Of those districts that have EE plans, 39 % of the principals and 49 % of the curriculum directors were either dissatisfied with the plan or unsure of how they felt about the plan (Figure A.14).

Figure A.13 Does your school have a written curriculum plan for environmental education?

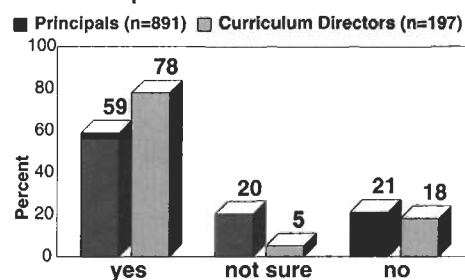
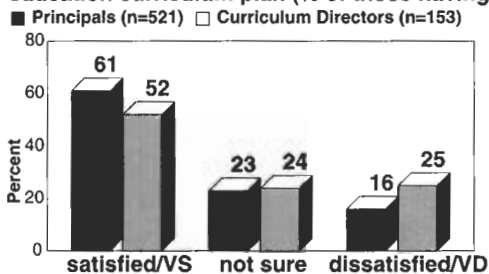


Figure A.14 Degree of school administrator satisfaction with the implementation of their district's environmental education curriculum plan (% of those having a plan).



To what extent do administrators perceive that they provide administrative support for EE in their schools?

School administrators do take actions to support environmental education, however, the majority of actions might be described as passive.

Both principals and directors of curriculum reported on the extent to which they support environmental education in their school or district through their personal actions. Results suggest that although both populations take action to support environmental education, most of the actions require relatively limited time commitment on the part of the school administrator. A majority of the principals and directors of curriculum reported they distribute environmental education information, give encouragement to teachers for their efforts to teach about the environment, and support or authorize teacher requests to attend environmental education workshops outside of district-sponsored in-services. School administrators were less likely to report spending much time writing grants, making arrangements for staff training or in-services in environmental education or making arrangements or requests for resources and materials needed for environmental education programs or projects (Appendix D, Section III). The majority of the administrators (65 % of the principals and 54 % of the directors of curriculum) indicated they do not have the time to promote environmental education (Figure A.11).

An interesting finding, however, was that principals with more experience in environmental education

show a higher degree of support for environmental education than administrators who have not attended any courses, in-services or workshops in environmental education (Appendix J).

When asked to estimate the amount of money in the school budget allocated specifically for environmental education (excluding personnel costs), 38 % of the principals reported that their school does not specifically fund environmental education and an additional 34 % indicated their school allocates less than \$500 (Table A.1). Some principals, however, wrote on their survey that the budget for environmental education was infused into the budgets for other subject areas and not considered a separate line item.

Table A.1 Principals' estimation of the amount of money in their school budgets specifically for environmental education (n =798*)

Response option	(n)	(%)
Not funded	306	38
\$ 1 - \$250	135	17
\$ 251 - \$500	139	17
\$ 501 - \$1000	102	13
\$1001 - \$1500	40	5
\$1501 - \$2000	16	2
Over \$2000	60	8

*103 principals did not give a response to this item

Personnel support in the schools for environmental education is very limited if available at all. Over 50 % of the principals reported their school has no one designated as the environmental education specialist, coordinator, or chairperson (Figure A.15), and the majority of the principals and curriculum coordinators reported that their school/district does not have an active environmental education committee (Figure A.16). Of those schools that do have a person designated to work with environmental education, over 55 % of the principals described the position as voluntary with no release time (Table A.2). Less than half of the schools/districts with active environmental education committees provide committee members with release time and/or financial support (Figures A.17, A.18).

Figure A.15 Does your school have a person designated as the environmental education specialist, coordinator, or chairperson?

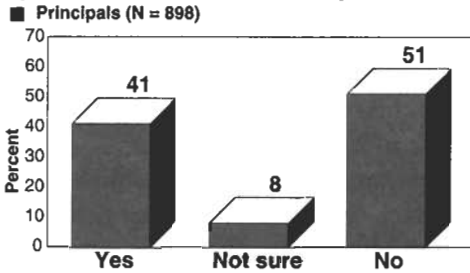


Figure A.16 Does your school/district have an active environmental education committee?

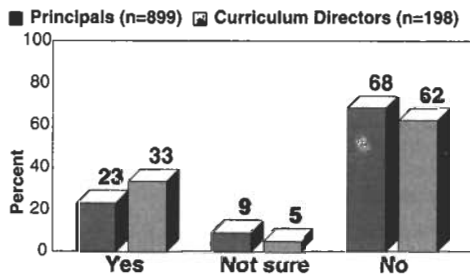


Table A.2 Principals' description of school environmental education specialist (n=364)

Position description	(n)	(%)
Full time, paid position	32	9
Part time, paid position	70	19
Voluntary position with release time	62	17
Voluntary position with no release time	200	55

Figure A.17 Does your school/district provide 'release time' for the environmental education committee to meet? (percent of those reporting having an EE committee)

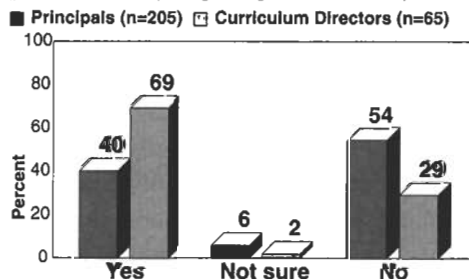
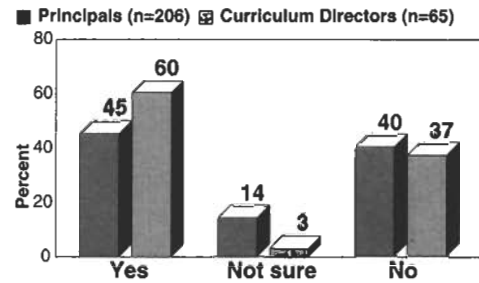


Figure A.18 Does your school/district provide financial support for the environmental education committee to meet (percent of those reporting having an EE committee)



What do school administrators identify as barriers to offering EE in the schools?

Lack of funding and time were consistently reported among the top barriers to environmental education by principals and directors of curriculum (Figures A.19, A.20). Both principals and directors of curriculum indicated there was not enough funding at both the school and district levels. The kind of funding, the amount of funding needed, and the purpose for the funding were not specified in this study. Administrators may feel more funding is needed to hire personnel, cover the costs of additional teacher in-services, pay for field trips, or purchase equipment to be used for environmental education. Administrators reported that they personally did not have the time to promote environmental education (Figure A.11). Although they overwhelmingly indicated that environmental education should be infused into the curriculum, close to 50 % of both populations of administrators believe that there is not enough class time (Figure A.19). One principal commented on his/her survey: "You can't put 10 lbs. of potatoes in a 5 lb. bag, unless you mash them."

Figure A.19 School-related barriers to including or increasing environmental education in school or district. (Each respondent ranked top 3; top 4 ranked out of 13 choices are shown.)

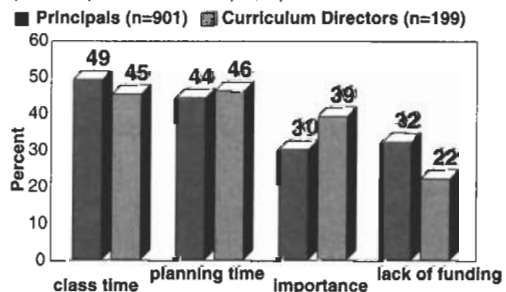
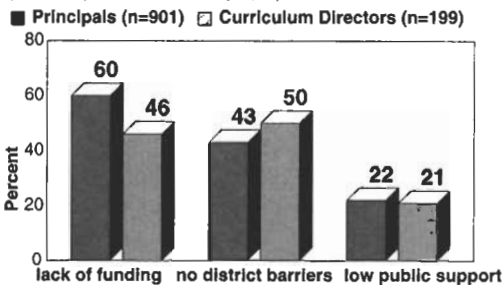


Figure A.20 District-related barriers to including or increasing environmental education in school or district
(Each respondent ranked top 3; top 3 ranked out of 8 choices are shown.)



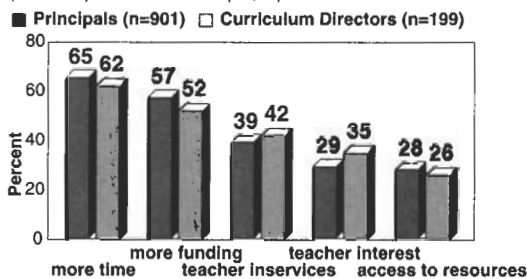
In addition, more than 40 % of the principals and the directors of curriculum believe that teachers do not have enough planning time. Teachers may also feel this is true, but time was not one of the top two reasons indicated by Wisconsin teachers for not infusing environmental concepts into their classroom teaching (see Table T.4 in the previous section of this report). Only 14 % of the teachers reported they did not have enough class time and only 7 % felt they did not have enough planning time. Teachers were more likely to indicate they did not have the knowledge or background to teach about the environment effectively (24%) or that environmental concepts were unrelated to their subject area (25%). However, since teachers were asked to identify only one main barrier, it may be that a perceived lack of time was a secondary barrier.

Over 30 % of the administrators in this study indicated that in their opinion, teachers feel there are things other than EE that are more important to infuse into the classroom. The survey of Wisconsin teachers found this to be true for only 7 % of the teachers who do not infuse environmental concepts into their classroom teaching (Table T.4 in previous section).

This discrepancy between administrators' and teachers' responses suggests that there is a difference of perception as to the barriers to environmental education. Administrators appear to believe environmental education takes extra time and that environmental education is not perceived by teachers as a high priority. Indeed, 29 % of the principals and 35 % of the directors of curriculum

indicated more teacher interest in environmental education would encourage them to include or increase environmental education in their school or district (Figure A.21).

Figure A.21 Perceptions of what would most influence administrators to include or increase EE in school/district.
(Each respondent ranked top 3; top 5 ranked out of 10 choices are shown.)



What do school administrators perceive as needs or incentives related to initiating, improving, or increasing EE in their schools?

When asked to identify the top three situations that would most influence them to include or increase environmental education in their school or district, both principals and directors of curriculum identified a need for more time, more funding, and more teacher in-services in environmental education (Figure A.21). They also felt teachers needed to express more of an interest in environmental education. These responses confirmed the perceived barriers that were discussed above.

Summary

The Wisconsin School Administrator Assessment of Environmental Education was conducted to determine what the state's principals and directors of curriculum know, feel, and do about supporting EE in their schools. Findings indicate that the state's school administrators feel education about the environment is important and that school districts should be required to develop and implement environmental education curriculum plans. However, approximately a third of the respondents felt they did not have the knowledge or background to feel comfortable promoting environmental education. School administrators

report they do take actions to support environmental education, however, most actions were considered relatively passive. That is, administrators provide verbal support to the development of EE, but personnel and financial support were relatively lacking in many schools. Implications and strategies related to these findings are presented in Section IV of this document.