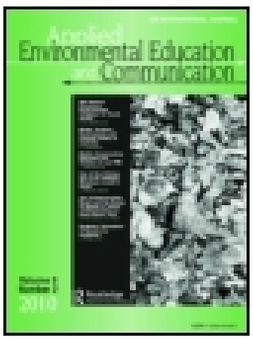

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How do Wisconsin environmental educators perceive a potential, professional certification for individual environmental educators?

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ABSTRACT

The North American Association for Environmental Education encourages state environmental education associations to develop professional certifications for individual environmental educators. To understand perceptions in Wisconsin, the authors distributed an online survey. Survey questions encompassed participant demographics; certification benefits and challenges; perceived need for certification; leadership of the certification process; and components, costs, and timing of certification and recertification. Results were mixed on the need for a professional certification. However, if developed, respondents suggested certification should focus on professional development opportunities, fit within the educator's career path at any time, take less than 80 h to complete, and cost $51–100.

Introduction

Multiple states have developed a professional certification for individual environmental educators and/or are considering developing certifications. Although certification is not required at the national or state level in the United States, the North American Association for Environmental Education (NAAEE) encourages certification due to individual and community benefits. At the individual level, NAAEE lists benefits of certification as enhancing the professional's content and pedagogical knowledge, providing professional development opportunities, helping to increase competitiveness for sought after positions and offering recognition. At the community level, NAAEE identifies the following benefits: promoting respect

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for environmental education, enhancing the credibility of the field, offering guidelines for professional development, and supporting continued professional development opportunities (NAAEE, 2017a).

Professional certification costs, timelines, and components differ from state to state, but state certification programs that are accredited through NAAEE must adhere to the NAAEE's *Professional Development of Environmental Educators: Guidelines for Excellence*. The guidelines include the following six themes: environmental literacy, foundations of environmental education, professional responsibilities of the environmental educator, planning and implementing environmental education, fostering learning and promoting inclusivity, and assessment and evaluation (NAAEE, 2017b). Current states with professional certification for individual environmental educators include Arizona, Colorado, Georgia, Kentucky, Maryland, Michigan, Missouri, New Mexico, North Carolina, Ohio, Pennsylvania, Texas, and Utah (NAAEE, 2017c).

Published research of professional certification for individual environmental educators is minimal. Bennett and Matthews (2005) reviewed characteristics and perceptions of teachers who participated in the North Carolina Environmental Education certification program. Their findings demonstrated that teachers often wait to take additional learning required for certification until they have spent a considerable amount of time in their careers. Thus, if teachers do not receive pre-service training, they may not seek out additional training for multiple years (Bennett & Matthews, 2005). Similarly, an evaluation of the Utah Master Naturalist training program found that although the training course was designed for amateur naturalists, the majority of participants were professionals with experience (Larese-Casanova, 2011).

With little peer-reviewed research regarding professional certification for individual environmental educators, considering factors that influence the success of environmental education centers, values that communities hold that appear connected to positive outcomes for environmental education programs may be relevant to developing an effective, professional certification scheme.

Erickson and Erickson (2006) surveyed factors that directors regarded as pertinent to the success of environmental education centers, which focus on delivering outdoor programs for the public. The results showed that directors thought good staff (e.g. caring, dedicated, knowledgeable, interested, committed, belief in the mission), strong curriculum, and excellent facilities led to successful environmental education centers. Ivey and Bixler (2013) found that members of the National Association for Interpretation viewed a combination of strong knowledge of field ecology, strong communication skills, and an understanding of human development and learning

as important qualifications for entry-level interpretive naturalists. Browning et al. (2017) investigated the sets of values that community members held towards local nature centers by surveying communities surrounding successful nature centers. Their data demonstrated the importance of centers for providing an environmental connection, leisure provision, community resilience, and civic engagement. By considering what potential employers and communities find valuable as environmental education focus areas, states can develop more effective professional certification schemes for individual environmental educators.

Additionally, researchers can consider what makes professional development opportunities successful – this will help ensure individuals who seek certification will become better environmental educators. Garet, Porter, Desimone, Birman, and Yoon (2001) recognized content knowledge focus, opportunities for active learning, and connections with other learning activities as core features of professional development opportunities that positively influenced teacher's knowledge, skills, and behaviors. Similarly, Velardi, Folta, Rickard, and Kuehn (2015) recommended the following framework for successful teacher professional development workshops: in-person, subject-focused, audience specific, and the inclusion of online supplements.

The objective of this study was to understand perceptions regarding a potential, professional certification for environmental educators in the state of Wisconsin. By understanding perceptions regarding a potential, professional certification for environmental educators in the state of Wisconsin, agencies and organizations focused on environmental education at the state level can better understand whether to develop a professional certification for individual environmental educators. If a professional certification for individual environmental educators is warranted, the survey helps states know how the professional certification should look and how it should be promoted.

Methods

Survey instrument

The authors developed questions and responses for the survey by reviewing benefits and challenges to a potential, professional certification for environmental educators with participants at a Wisconsin Association for Environmental Education (WAEE) Winter Workshop session in January 2017. Additionally, the authors reviewed NAAEE requirements and other states' requirements for professional certifications for individual environmental educators and requested input from an advisory group of WAEE members, who also reviewed the final survey. The Institutional Review

Table 1. Questions compared for statistical differences using Chi-square.

Demographic questions	Certification questions
• Organization	• Perceived need for individual environmental education certification in Wisconsin
• Current position	• How much time an individual should invest in first becoming certified [if Wisconsin moves forward with environmental education certification]
• Level of education	• Perceived most appropriate initial cost for certification [if Wisconsin moves forward with environmental education certification]
• Time in environmental education	
• Gender	

Board for the Use of Human Subjects at the University of Wisconsin-Stevens Point reviewed the final survey, which consisted of 24 questions, including one question on the participant's willingness to take the survey, eight closed-ended demographic questions, 14 closed-ended certification questions, and one open-ended certification question for further comments. Demographic questions sought responses for a participant's agency/organization, position type, education and training, employment status, and gender. Respondents could select only one answer for each demographic question, except for one question regarding training. Certification questions focused on participants' perceptions related to benefits and challenges of certification; need for certification; leadership of certification; and components, costs, and timing of certification and recertification. Exact questions can be reviewed in Appendix A.

Survey administration

The authors developed and distributed the online survey using Qualtrics, a web-based tool for building, delivering, and assessing surveys. The survey targeted environmental educators and environmental education agencies and organizations across the state of Wisconsin using a list developed for a statewide 2015–2016 status and needs survey of environmental education related organizations in Wisconsin (Hougham, Kerlin, Liddicoat, Ellis, & Crampe, 2017). Potential participants received one introductory email and up to two reminders requesting input on a potential, professional certification for environmental educators in the state of Wisconsin over a one-month period between August 16, 2017 and September 15, 2017.

Survey analysis

The authors utilized SAS software (SAS Inc., Cary, NC) to run Fisher's exact tests to consider non-response bias (Lindner & Wingenbach, 2002). Early and late responders were compared for the categorical questions regarding the current position, time in environmental education, and

Table 2. Demographic characteristics of survey respondents to a potential, professional certification for environmental educators in the state of Wisconsin.

Characteristic	No. of participants
Gender	
Female	98
Male	40
Highest level of education	
Graduate	73
Undergraduate	60
Some college	3
Other	2
Time spent working in environmental education	
10+ years	89
5–9 years	21
Less than 2 years	19
2–4 years	9
Environmental education training[a]	
On the job training	99
Professional development	79
College classes	69
Degree	46
Other	18
None	7
Organization/agency	
Nongovernmental organization non-formal educator	58
Governmental non-formal educator	38
Other	18
Higher education	14
School system formal educator	10
Current position	
Educator	57
Administrator	30
Supervisor	25
Other	12
Volunteer	10
Consultant	4

[a]Totals are not additive because participants were able to select multiple categories.

gender. Early respondents were individuals who responded before the third email, while late respondents were individuals who responded to the survey after the third e-mail.

For comparison purposes, the authors summarized results using descriptive statistics and then utilized SAS software (SAS Inc., Cary, NC) to run Chi-square analyses to investigate differences across the demographic variables and the categorized responses to survey questions listed in Table 1.

Additionally, the authors worked together to review survey comments to identify common themes using keywords/example qualifiers found in the actual survey responses.

Results and discussion

The authors distributed 960 online surveys using Qualtrics. However, 70 surveys could not be delivered due to e-mails bouncing; thus, only 890 surveys were delivered. Of the 164 surveys returned, seven surveys were removed, as the participant did not specifically note that s/he agreed to

Table 3. Benefits and challenges of survey respondents to a potential, professional certification for environmental educators in the state of Wisconsin.

Characteristic	No. of participants
Perceived benefits of certification[a]	
Enhanced legitimacy	108
Maintained professionalism	107
Enhanced state to state marketability	60
Increased salary	44
Do not see benefits	20
Other	12
Perceived challenges of certification[a]	
Increased time	104
Increased costs	94
Increased resource commitment	75
Overlap with other certifications	44
Other	14
Do not see challenges	5
Benefits considered necessary for individual to seek certification[a]	
Networking opportunities	82
Increased job opportunities	79
Increased salary	54
Marketability outside of Wisconsin	48
Benefits would not interest me in certification	25
Other	15
Benefits necessary for organization/agency to preferentially hire certified individuals[a]	
Increased professionalism	104
Increased or maintained number of professionals	43
Does not significantly increase salary costs	38
Other	24
Increased opportunities to hire outside of the state	17
Not interested in hiring certified individuals	17
Perceived need for certification	
Maybe	71
Yes	38
No	28

[a]Totals are not additive because participants were able to select multiple categories.

participate in the study, and 19 surveys were removed because the participant had completed less than 1/2 of the survey. This left 138 surveys, and a response rate of 16%. The Fisher's exact tests used to consider non-response bias showed that early and late responders were not statistically different ($p > 0.05$) for the current position, time in environmental education, and/or gender. Therefore, the authors do not expect the non-response rate to affect the external validity of this study.

Demographic questions

The participants varied in terms of gender, level of education, time spent working in environmental education, environmental education training, organization/agency, and current position (Table 2). Reviewing the mode for each of the categories, the typical respondent was a female, non-formal educator who possessed a graduate degree and more than 10 years of experience and who had received some environmental education experience through on the job training. Additionally, a majority of respondents noted

that on an average, they work a quarter or more of their time in environmental education focused areas.

Certification questions

The respondents perceived both benefits and challenges to a potential, professional certification for educators in the state of Wisconsin (Table 3). Benefits most often identified by respondents regarding certification included enhanced legitimacy and maintained professionalism of environmental educators in the state, whereas the most noted challenge was an increased time commitment to becoming an environmental educator in the state. Participants most often cited increased networking and job opportunities would be necessary for them to seek certification, whereas organizations/agencies noted that professionalism of individuals would need to increase for them to be interested in preferentially hiring certified individuals. As expected by the number of both benefits and challenges participants perceived for a potential, professional certification for environmental educators, the majority of participants were not sure whether certification was needed or not.

In addition to the questions identified in Table 3, respondents answered questions regarding who should lead the certification effort, who should be included in such an effort, and perceptions regarding the components, costs, and timing of certification and recertification. The majority of respondents indicated that the WAEE should lead the effort, if the state moved forward with a professional certification for environmental educators, but respondents also supported a very collaborative effort, which would include the Wisconsin Center for Environmental Education, state agencies, nature centers, universities, and others.

Participants most often responded that if a professional certification for environmental educators was developed, it should include professional development, followed by field trips, and professional portfolios and that the professional certification for environmental educators could fit anytime within an individual's career path. Respondents most often selected professional development as a component of recertification, too. For the appropriate initial cost of certification, respondents most often selected the $51–100 category, followed closely by the $101–150 category. The most noted category for number of hours an individual should invest to become certified was the 0–80 h category, followed by 81–160 h. Categories with more hours received fewer responses. Additionally, the majority of respondents thought that recertification should be required, but recertification periods should be longer (five or more years) and less costly ($0–50).

A review of other state certification schemes shows both commonalities and differences among survey responses and actual certification schemes. For example, North Carolina's certification is led by a state agency and requires a program portfolio with six criteria, which includes approved instructional workshops (70 h), outdoor instructor led experiences (50 h), knowledge of environmental education resources and facilities (30 h), teaching experiences (30 h), community partnership project (20 h), and continuing education (50 h/5 years). Overall, North Carolina's certification requires 200 h, while recertification requires 50 h/5 years (North Carolina Environmental Education, 2018). Thus, North Carolina's certification requirements are at least 120 h more than the most frequently selected survey category regarding number of hours an individual should invest to become certified. However, the timeline for recertification was more similar between North Carolina and Wisconsin with Wisconsin survey respondents most frequently selecting the recertification category of 5 or more years.

In Colorado, the state professional organization for environmental educators leads their certification scheme. For certification, participants must also submit a portfolio, but Colorado's certification process is a competency-based program where the applicant demonstrates what they know and can demonstrate through a portfolio at either the certified environmental educator level or the certified master environmental educator level. The applicant must demonstrate proficiency in five themes (environmental literacy; foundations of environmental education; professional responsibilities of the environmental educator; planning and implementing environmental education; and evaluation and assessment), which are aligned with NAAEE's *Professional Development of Environmental Educators: Guidelines for Excellence*. Competency may be demonstrated through evidence such as essays, lesson or program plans, articles, and/or videos (Colorado Alliance for Environmental Education, 2018). Similar to Colorado, Texas's certification scheme is led by the state professional organization and requires applicants to demonstrate the core competencies for NAAEE Certification Programs. In Texas, applicants are rated as master, developing, or novice through their responses to reflective, short, and in-depth activities. Similar to Wisconsin survey respondents, Texas has selected a five-year re-certification period, a re-certification fee of $50, and a re-certification requirement of professional development hours (150 h). Texas requires a certification fee of $150 (Texas Association for Environmental Education, 2018), which was the 2nd most frequently selected category by Wisconsin survey respondents. Furthermore, although research by Bennett and Matthews (2005) and Larese-Casanova (2011) showed that participants took training later in their careers, survey respondents noted that the certification could be anytime within one's career.

Table 4. Chi-square analyses to investigate difference across demographic variables and categorized responses to survey questions regarding a potential, professional certification for environmental educators in the state of Wisconsin.

Variables	Degrees of freedom	Chi-square value	Chi-square probability
Organization/agency by need for an individual environmental education certification in Wisconsin	4	4.7851	0.3101
Organization/agency by time an individual should invest in first becoming certified	4	1.4143	0.8417
Organization/agency by most appropriate initial cost for certification	6	8.2162	0.2227
Current position by perceived need for an individual environmental education certification in Wisconsin	4	2.5760	0.6311
Current position by time an individual should invest in first becoming certified	4	5.5431	0.2360
Current position by most appropriate initial cost for certification	6	4.8916	0.5578
Highest level of education by perceived need for an individual environmental education certification in Wisconsin	2	4.0865	0.1296
Highest level of education by time an individual should invest in first becoming certified	2	0.5137	0.7735
Highest level of education by most appropriate initial cost for certification	3	2.3748	0.4984
Time spent working in environmental education by perceived need for an individual environmental education certification in Wisconsin	2	1.3051	0.5207
Time spent working in environmental education by time an individual should invest in first becoming certified	2	0.0321	0.9841
Time spent working in environmental education by most appropriate initial cost for certification	*3*	*9.2530*	*0.0261*
Gender by perceived need for an individual environmental education certification in Wisconsin	2	1.6986	0.4277
Gender by time an individual should invest in first becoming certified	2	1.7527	0.4163
Gender by most appropriate initial cost for certification	3	2.0500	0.5621

Chi-square analyses

Utilizing the demographic and certification questions in Table 4, the authors only found one statistically significant relationship–between time in environmental education and initial certification cost (df=3, n=138, X2=9.253, $p = 0.03$). To explore the statistically significant relationship, a graph was developed to compare responses by time in environmental education, and Chi-square values for specific cells were reviewed. Chi-square values provide more insight into possible differences. The categories contributing most to the overall Chi-square value for time in environmental education and perceived most appropriate initial cost for certification are the over $150 (48%) and $51–100 (26%) categories. Respondents with less than 10 years of time in environmental education more frequently selected the $51–100 and $101–150 categories, whereas respondents with 10 or more years selected the less than $50 and more than $150 categories. It is

Table 5. Common themes utilizing survey respondents' comments regarding a potential, professional certification for environmental educators in the state of Wisconsin.

Common theme	Example response
Concern about who will be able to receive certification	• "I wouldn't want to see a certification be available to individuals who get limited training, such as Master Naturalists." • "My concern is that this mountain of good people could be shut out or deflected from participating in environmental ed[ucation]." • "I would hope the certification would only be granted to those who complete a degree in the field."
Concern about overlap with other certifications and degrees	• "How does this program relate to WI Master Naturalists? … will those with this Environmental Education Certification be able to compete with those that have the undergraduate degree?" • "We already have NAI [National Association of Interpretation] … " • "Because I hold an EE degree, certification probably wouldn't help me much."
Questions about need for certification and funds to pay for certification in a field with low salaries	• "I do not believe that the salary of a professional environmental educator justifies further education/certification or cost above that of a BS degree." • "Jobs that pay well enough for those in EE are few and far between … would certification really make any difference?" • "Additionally, salaries are already dreadfully low in the sector. We do not need more training costs to educators when sites will likely not have budgets to pay additional salary for the training."

possible that respondents with more years of experience either felt that they had enough training and were not as willing to pay for certification and/or realized the value of training and were more willing and able to pay for certification, whereas respondents with less experience felt that they still needed training but were unable to pay as much for training with their current salaries.

Qualitative analyses

A review of the survey comments demonstrates some common themes including whether individuals who obtained limited training would be able to receive the professional certification; whether a professional certification for environmental educators would overlap with other certifications or degrees; and budget/supply concerns. Table 5 displays the themes using quotes from participants.

The responses appear to indicate that individuals may be willing to consider a professional certification for environmental educators, but they see many challenges. Specifically, who should be able to apply for certification, at what point in their career, and will the certification be redundant or useful? If certification is developed, respondents recommended it be collaborative, provide networking and/or job opportunities for the individual and not be overly burdensome in terms of time and/or money.

Characteristics of North Carolina's, Colorado's, and Texas certification schemes align well with some of the feedback received from the survey

respondents. North Carolina's integration of multiple instructional workshops, knowledge of environmental education resources and facilities, along with the community partnership project, focuses on professional development and collaboration, whereas Colorado's and Texas competency-based schemes would help ease the burden in terms of time and/or money for certification.

Study limitations

There are limitations to this study. The results from this survey were obtained through a purposive sampling of environmental educators in Wisconsin but are not all-encompassing. Furthermore, survey questions may not have included all potential responses. This survey only provides a starting point to better understanding perceptions of Wisconsin respondents regarding a potential, professional certification for individual environmental educators. Future research is necessary.

Conclusion

With the NAAEE encouraging state associations to develop a professional certification for individual environmental educators due to individual and community benefits, associations should be aware of the perceptions of impacted individuals and entities in regard to a potential, professional certification for environmental education, as these perceptions could influence success. The objective of this study was to understand perceptions regarding a potential, professional certification for environmental educators in the state of Wisconsin. At the time, this survey was developed, the WAEE was considering a certification scheme but was not sure on whether environmental educators within the state were interested and if there was interest, how the scheme should look. Before WAEE moved forward with this type of certification scheme, WAEE hoped to understand perceptions of environmental educators within the state. With this information, WAEE could be more successful in determining whether to develop a certification scheme. The results of the survey connect well with benefits listed by NAAEE including respect for the field, helping to maintain professionalism, and enhanced marketability, as survey respondents most frequently noted enhanced legitimacy, enhanced professionalism, and enhanced state-to-state marketability as the benefits of certification. However, the respondents noted multiple concerns such as increased time, cost, and resource commitments. Furthermore, respondents were apprehensive about how the certification would work in terms of whether the certification would decrease the inclusiveness of environmental education, whether it would overlap other

certifications or a college degree, and whether certification would make a difference in a career field that is underfunded and already has a pipeline of applicants.

By connecting the literature review to the results of the survey, a practical Wisconsin certification scheme might look similar to Colorado's and Texas association led competency-based certification schemes. This type of scheme could potentially alleviate respondents' concerns regarding increased time and costs, as participants would be able to demonstrate their competency using their current work. Furthermore, by allowing individuals to connect their current experience to required NAAEE competencies, this type of scheme would connect well with research highlighted as effective in the literature review. This research includes enhancing staff and curriculum (Erickson & Erickson, 2006), increasing knowledge of field ecology and communication skills (Ivey & Bixler, 2013), and encouraging opportunities for active learning and to connect with other learning activities (Garet et al., 2001). Furthermore, Wisconsin could work with NAAEE to enhance legitimacy and marketability of certified individuals from multiple states through the development of a searchable database. By listing the certified environmental educators, along with their current careers, legitimacy and certification could be connected. Additionally, employers could search this database to find certified individuals throughout the country, which would enhance marketability.

Future research should consider where a professional certification and/or professional development makes the most sense in an environmental educator's career (e.g. early, mid, late, continuous). It is worth noting the demographics of the group surveyed; the email list used for distribution was built to include at least one person in a leadership position at each environmental-education-related organization in Wisconsin. Thus, nearly half of the people who completed the surveys were supervisors/administrators and a large majority of respondents had been working in the field for five or more years. Capturing the perspectives of emerging professionals – the very people who might benefit from a training <80 h and a certification on their resume in a future study would be valuable.

Additionally, researchers should evaluate whether states who offer current professional certifications for environmental educators are improving the effectiveness of individuals and whether certifications could connect with the need for nature centers to enhance community resilience and/or civic engagement. As noted in the responses of this survey, a professional certification scheme can be seen as very collaborative; thus, certification could be utilized to enhance more than an educator's content knowledge.

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Appendix A

Survey instrument

1. Drs. Gharis, Liddicoat, and Franzen of the College of Natural Resources at the University of Wisconsin-Stevens Point are conducting a study, which aims to better understand perceptions regarding a potential, professional certification focused on environmental education for individuals for the state of Wisconsin. You are being asked to participate in this study.

As part of the study, you will be asked whether you are interested in this type of certification and if so what you would like the certification to look like. This online survey is expected to take less than 15 min to complete. Your responses are beneficial to better understanding whether Wisconsin should develop an individual professional certification focused on environmental education, and if so, what this certification should look like.

Participating in this survey should pose no risks to you. Your responses in this survey will be anonymous, and individual responses will be combined before any work is published. Your participation is voluntary. You can choose not to participate in the survey without being penalized or disadvantaged in anyway. However, if you chose to participate, you must be 18 years or older. In addition, if you choose to participate, the researchers will be unable to remove data collected through your participation, as responses are anonymous.

Once the study is completed, you may receive the results of the study. If you would like these results, or if you have any questions in the meantime, please contact:

Dr Laurie Gharis
Wisconsin Center for Environmental Education
College of Natural Resources
University of Wisconsin – Stevens Point
Stevens Point, WI 54481
(715) 346-3528
lgharis@uwsp.edu

If you have any complaints about your treatment as a participant in this study or believe that you have been harmed in some way by your participation, please call or write:

Dr Debbie Palmer, Chair
Institutional Review Board for the Protection of Human Subjects Department of Psychology
Science Building, D240
University of Wisconsin-Stevens Point Stevens Point, WI 54481 (715) 346-3953
irbchair@uwsp.edu

A. I agree to participate in this study.
B. I do not agree to participate in this study.

2. Please select the best category for your organization/agency.
A. School system formal educator (e.g. PK-12, private or public)
B. Higher education formal educator (e.g. university, Extension)
C. Non-governmental organization non-formal educator (e.g. non-government owned nature centers, sanctuaries, arboretums)
D. Government organization non-formal educator (e.g. government owned parks, forests, museums)

E. Other, please specify

3. Please select the best category to describe your current position.
   a. Supervisor
   b. Administrator
   c. Educator
   d. Consultant
   e. Volunteer
   f. Student
   g. Other, please specify
4. Please select the best category for your highest level of education.
   A. High school degree (includes GED)
   B. Some college
   C. Undergraduate degree
   D. Graduate degree
   E. Other, please specify
5. Please select the environmental education training(s) you have received. Select all that apply.
   A. None
   B. On the job training focused on environmental education
   C. Professional development focused on environmental education (e.g. Master Naturalist, Project Learning Tree, etc.)
   D. College classes focused on environmental education
   E. Degree (undergraduate/graduate degree focused on environmental education)
   F. F. Other, please specify
6. Please select the best category for how much time you have spent working in environmental education.
   A. $<$ 2 years
   B. 2–4 years
   C. 5–9 years
   D. 10 + years
7. Please select the best category for your current employment.
   a. Not currently employed
   b. Part-time or seasonally employed
   c. Full-time employed
8. Please select the category that best describes your current employment status:
   a. On average, I work in environmental education focused areas at least 32 h per week.
   b. On average, I work in environmental education focused areas 20–31 h per week.
   c. On average, I work in environmental education focused areas 10–19 h per week.
   d. On average, I work in environmental education focused areas 1–9 h per week.
   e. I do no work in environmental education focused areas normally at work.
9. Please select the best category for gender with which you identify.
   a. Male
   b. Female
   c. Other
10. Please select all benefits, which you perceive might apply to an environmental education certification for an individual.
   a. Enhanced legitimacy of environmental educators in the state
   b. Maintained professionalism of environmental educators in the state
   c. Increased salary for certified environmental educators

d. Enhanced state to state marketability (e.g. certified environmental educators in Wisconsin can also be certified in another state)
e. I do not think there will be any benefits to an environmental education certification
f. Other, please specify

11. Please select all challenges, which you perceive might apply to a state environmental education certification for an individual.
a. Increased costs to environmental educators in the state
b. Increased time commitment to become an environmental educator in the state
c. Overlap with other state certification schemes
d. Increased resource commitment for state certification agency/organization
e. I do not think there will be any challenges to an environmental education certification
f. Other, please specify

12. Please select all benefits, which would be necessary for you to seek certification as an individual.
a. Certification increases my job opportunities b. Certification enhances my salary
b. Certification fosters networking opportunities
c. Certification provides opportunities to jobs outside of the state (e.g. marketability)
d. I do not think environmental education certification benefits would make me
e. interested in becoming certified
f. Other, please specify

13. Do you perceive a need for an individual environmental education certification in Wisconsin (select one)?
a. Yes
b. No
c. Maybe

14. Please select all benefits, which would be necessary for your organization/agency to be interested in preferentially hiring individuals certified in environmental education.
a. Certification increases the professionalism of the individual
b. Certification increases or maintains the number of environmental education professionals in the state
c. Certification does not significantly increase current environmental education salary costs
d. Certification increases opportunities to hire professionals from other states
e. I do not think we would be interested in hiring certified individuals
f. Other, please specify

15. Please select the best category for whether or not the Wisconsin Association for Environmental Education should lead the effort, if the state moves forward with environmental certification for individuals.
a. Yes, the Wisconsin Association for Environmental Education should lead the effort.
b. No, the Wisconsin Association for Environmental Education should not lead the effort.
c. Other, please specify

16. Please select all agencies/organizations that should be included, if Wisconsin moves forward with environmental education certification for individuals.
a. Department of Natural Resources
b. Department of Public Instruction
c. Nature Centers
d. Universities

e. UW-Extension
f. Wisconsin Association for Environmental Education
g. Wisconsin Center for Environmental Education
h. Wisconsin Master Naturalists
i. Other, please specify

17. Please select all items that apply, which you perceive should be included in a practical certification scheme, if Wisconsin moves forward with environmental education certification.
a. Professional portfolio (e.g. a portfolio with specific components)
b. Professional development (e.g. a set number of professional development opportunities with specific components)
c. College credit (e.g. a college degree)
d. Field trips (e.g. a set number of collaborations with nature centers)
e. Other, please specify

18. Please select where you envision an environmental education certification fitting within a professional educator's career path, if Wisconsin moved forward with certification.
a. Between high school and undergraduate degree
b. As part of the undergraduate degree
c. As a bridge between an undergraduate degree and master's degree
d. After a master's degree
e. Anytime
f. Other, please specify

19. Please select how much time you think an individual should invest in first becoming certified, if Wisconsin moves forward with environmental education certification.
a. 0–80 h
b. 81–160 h
c. 161–240 h
d. 241–320 h
e. More than 320 h

20. Please select what you perceive to be the most appropriate initial cost for certification, if Wisconsin moves forward with environmental education certification.
a. $0–50
b. $51–100
c. $101–150
d. More than $151

21. Please select how often recertification should be required, if Wisconsin moves forward with environmental education certification.
a. It should not be required.
b. Every year
c. Every other year
d. Every 3 years
e. Every 4 years
f. 5 or more years
g. Other, please specify

22. Please select all that should be included in recertification, if recertification is required.
a. Updated portfolio
b. Professional development
c. College credit

d. Demonstrations of collaboration
e. Other, please specify

23. Please select what you perceive to be the most reasonable cost for recertification per recertification period, if recertification is required.
a. $0–50
b. $51–100
c. $101–150
d. $151 or more

24. Please provide any further comments.