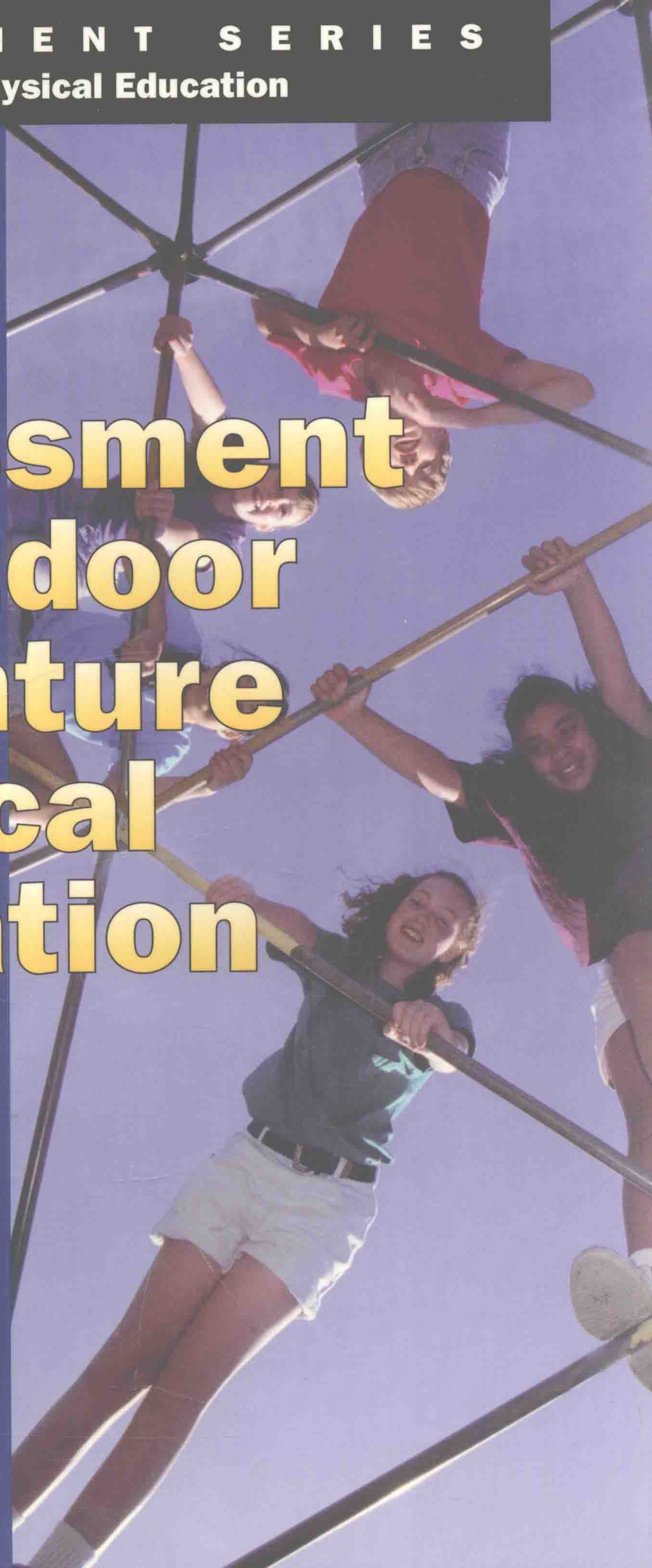
ASSESSMENT SERIES

K–12 Physical Education

Jeff Steffen, Ph.D.
Susan J. Grosse, MS

Assessment in Outdoor Adventure Physical Education



ASSESSMENT SERIES
K-12 Physical Education

Series Editor
Deborah Tannehill, Ph.D.
Pacific Lutheran University

Assessment in Outdoor/Adventure Physical Education

Assessment in Outdoor Adventure Physical Education

户外探险运动评价

Jeff Steffen, Ph.D.
Susan J. Grosse, MS

National Association for Sport and Physical Education
an association of the American Alliance for
Health, Physical Education, Recreation, and Dance

COPYRIGHT 2003
National Association for Sport and Physical Education
an association of the American Alliance for Health, Physical Education, Recreation and Dance

All rights reserved.

Reproduction of this work in any form or by any electronic, mechical, or other means, including photocopying or storage in any information retrieval system is expressly forbidden without the written permission of the publisher. Requests for permission to make copies of any part of the work should be mailed to: NASPE Publications, 1900 Association Drive, Reston, VA 20191-1599.

Address orders to: AAHPERD Publications, P.O. Box 385, Oxon Hill, MD 20750-0385, call 1-800-321-0789, or order on line at www.aahperd.org/naspe. Order stock No. 304-10218

ISBN: 0-88314-747-5

Printed in the United States of America

PREFACE

Assessment improves student learning, not just monitors it. Assessment is **on-going and continuous.** Assessments are learning experiences. Assessment provides feedback to learners. Assessment engages students in applying what they learn. Assessment motivates students to achieve. Assessment, if done well, makes teaching "to the test" desirable. Assessment involves tasks that are valued. Assessment values the process of learning. Assessment leaves room for students to monitor and self assess their own learning.

Current reform efforts focused on assessment are about curriculum and instruction as well as assessment. Selecting outcomes that are meaningful and relevant to students is as critical as selecting instructional strategies that will challenge students to strive toward achieving them. Designing assessments that allow students to demonstrate that they have achieved these important outcomes must be relevant and reflect "real" life. These authentic assessments become the link between curriculum and instruction. This suggests that changing the "how" and "what" of assessment so that it is a part of the entire teaching-learning process and provides documentation of student learning is critical -critical to student learning and their desire to learn. We know that carefully considered and well designed assessments can improve the quality of teaching and increase the amount of student learning. Assessments can track student performance progress and allow them to take responsibility for their own learning and improvement. Taking ownership will also result in greater motivation and achievement of students.

We have seen new forms of assessment that move responsibility into the hands of learners (self and peer assessment). We have also seen new tools developed to assess student performance in more authentic ways (journals, portfolios, community projects).These assessments are beginning to change the face of curriculum and instruction and the relationship between student outcomes, instructional delivery, and student achievement. Those of you designing and implementing these assessment processes are the source of these changes and the link to future reforms.

The intent of the NASPE Physical Education Assessment Series is to provide resources in the form of a collection of current, appropriate, and realistic assessment tools for physical education professionals. These resources are being developed for physical educators teaching children and youth in schools and for faculty preparing prospective physical education teachers. The series will be a forum for these professionals to share their ideas and successes with innovative assessment strategies.

We intend this series to be an on-going source of ideas, applications, and strategies for assessing student performance. The format will include individually published articles that may be purchased separately or as a continuing series package. Each paper will focus on a specific assessment topic (e.g., journaling, portfolios, game play recording tool), rationale for its use, how it might be used in practice, description of its link to one or more of NASPE's standards projects, and will include an example of the assessment tool. It is our desire that this series become an invaluable tool for teachers.

Deborah Tannehill, Ph.D.

CONTENTS

Part I – Assessment, the NASPE Standards, and Outdoor/Adventure Physical Education 2
Population Parameters 2
NASPE Standards 2
Why Assess in Outdoor/Adventure PE? 3

Part II – Methods of Assessment 4
Skill Checklists 4
Combined Skills/Applications 4
Scenarios 5
Journaling 5
Written Tests 6
Application Essays 7
Cross-Curricular Assignments 7
Teach Backs 8
Self-Analysis 8
Group Feedback/Interaction 9
Fitness Tests 10
Group Process 10
Environmental Care 11
Research on the Internet 11

Part III – Implementation of Assessment 13
When to Assess 13
Where to Assess 14
Assessment Options for Special Populations 14
Conclusion 15
References 15

Appendices
Appendix A – Skill Checklists 16
Appendix B – Combined Skill Tests 18
Appendix C – Scenarios 19
Appendix D – Journaling 20
Appendix E – Teach Back Assessment Form 21
Appendix F – Teamwork Index 21
Appendix G – Group Process Survey 22
Appendix H – Environmental Care Checklist 23

Resources 24

此为试读,需要完整PDF请访问: www.ertongbook.com

INTRODUCTION

Across the country, physical educators are working to keep physical education relevant in the lives of their students. In the adult activity sector, people are seeking challenging activities, looking for risk, and are no longer satisfied with the traditional. These two efforts converge in outdoor/adventure physical education. As physical educators prepare their students for active lifestyles, taking into account current activity preferences of adults is critical. Outdoor/adventure activities are one of the most rapidly growing participatory choices of the twenty-first century. More novices enter outdoor/adventure sports every year. Recognition of the outdoor athlete is becoming commonplace.

Outdoor pursuits, within the context of education, are knowledge and skills associated with movement across and through the natural environment (Ford and Blanchard, 1993). Adventure education includes putting students in a unique environment, and through movement, addressing issues of responsibility and decision making (Rohnke and Butler, 1995). Sometimes the two fields merge and are referred to as outdoor/adventure physical education.

For students, outdoor/adventure is more than running around the track or up and down the soccer field. For adults, adventure is more than a camping trip. Adventure today means participating in an unpredictable activity, one where making decisions includes taking chances in a totally new and possibly unique environment. Outdoors is more than outside. It could be away, in wilderness usually inaccessible to the average person. Outdoor/adventure activities are challenging, unique, personal, and unpredictable. They can be fulfilling, satisfying, strengthening, and rewarding. They can also be demoralizing, demeaning, destructive, and risky to the point of hazardous. This may appear to be a very strong statement. However, it emphasizes potential intensity of affect, which characterizes outdoor adventure physical education. Quality education makes all the difference, and no education process would be complete without assessment.

Outdoor/adventure activity means a variety of things to different people. In-line skating, skateboarding, hang gliding, and parasailing may be commonplace in some areas of the country. In other areas sled dog camping, ice boating, and snowboarding predominate. For purposes of this publication, sea kayaking, indoor wall climbing, and ropes/challenge courses are the selected focus. Sea kayaking is the recreational aspect of the broader area of kayak sport in general. Specifically, although crafts and skills are very similar at the beginner level, separating kayaking for travel and camping purposes from competitive kayaking helps students realize the leisure potential in this popular activity.

These activities have in common the ability to be implemented within the regular physical education program without a complete change of venue. Sea kayaking can begin in the school pool. Wall climbing introduces the outdoor sport of climbing in the school gym. Ropes/challenge courses can be as simple as tires, low balance beams, and cones or as complex as a high-wire traverse. Although individual in implementation, these lend themselves to group activity and have a teamwork component. Each has been used in youth development programs and can be adapted for participation by individuals with disabilities.

The assessments included here, although designed for these specific activities, can be readily modified for any other outdoor adventure physical education pursuit. Implementation of outdoor adventure physical education is about process as well as about the specific activities. Assessment is a necessary part of process and as such, these assessments can be applied in any number of outdoor adventure physical education activities.

PART I

Assessment, the NASPE Standards, and Outdoor/Adventure Physical Education

Discussion examples of outdoor/adventure physical education activities are limited to indoor wall climbing, rock climbing, sea kayaking, and ropes/challenge activities. These outdoor/adventure activities are currently the fastest growing in popularity. General principles of assessment are applicable in all outdoor/adventure activities. Most of the assessment examples found here are easily adaptable to other outdoor/adventure activities.

Population Parameters

Assessment in outdoor/adventure physical education does not need to be grade-level specific. As of yet, there has been no attempt to establish a developmental model in outdoor/adventure physical education. Rather, because of the unique nature of the activities themselves, assessment is more directly related to the knowledge and skill level of participants. Particularly, higher level climbing and sea kayaking seem to be somewhat self-limiting to middle and high school students. Lower climbing walls and ropes and challenge courses attract a wider age of participants, including elementary students. Assessments included here may need adaptations for spoken and/or written language level. However, that should not change the general type of assessment or its purpose. For example, if journaling is used for assessment, the topic "How have your skills improved?" is a viable topic for almost any grade level. It is the depth and sophistication of response, particularly during academic activities, that should correspond to each grade level.

NASPE Standards

Education in outdoor/adventure activities not only supports each of the NASPE Standards but does so in a unique way. The natural and/or highly specialized environment is often an entirely new activity venue for participants. This makes it easier for students to develop new behaviors rather than relying on existing behavior patterns. Outdoor adventure activities are highly influenced by the immediacy generated from having to take risks. Outdoor/adventure activities are distinctive in their contribution to youth development. Consider the following examples—

Standard 1 – *Competency/Proficiency in Movement Forms.* Climbing and sea kayaking require learning-specific motor skills, with venue opportunities directly related to skill level. For example, beginning kayakers can learn capsize procedures in a pool. Once oriented to safe capsize and armed with basic paddling skills, kayakers should move to open, sheltered water, such as a small inland lake. Proficient small-lake paddlers may hone their skills on a large lake or in the ocean. Ropes and challenge course participation, although more generalized in terms of skills, requires proficiency in motor skills of daily living. Low-level challenges generally precede high-level challenges. Assessing skills in climbing and kayaking validates movement competency. Appendices A, B, and E provide examples of skill checking, combined skill testing, and assessment by means of teach backs, respectively.

Standard 2 – *Application of Movement Concepts to Development of Motor Skills.* All outdoor/adventure activities require participants to take what they know and apply it to movement in the natural or uniquely challenging commercially made activity environment. Solving problems as they are presented, particularly those presented by nature, forces individuals to continually adapt motor patterns and apply basic skills. Assessing combined skills documents application of movement concepts in the physical sense. Assessment by scenario adds the component of knowledge application. Examples of each are in Appendices B and C, respectively.

Standard 3 – *Physically Active Lifestyle.* Outdoor/adventure activities are, by their very nature, active. Because participation is usually avocational, interest spans more than the period of time spent in an actual class. Due to the physical demands of the activities, staying in a fit and healthy condition is necessary to continue safe participation. Maintenance of personal fitness becomes a lifestyle as participants plan their lives to include these activities. Assessments using the Internet allow students to plan for carryover of activity into adult life. Journaling helps make the class experiences personal by relating them to the daily lives of students. Internet addresses for further information are provided in that assessment section. Appendix E contains examples of assessment via journaling.

Standard 4 – *Physical Fitness.* Outdoor/adventure activities are not easy. Nature is the taskmaster rather than a person. The environment determines the physical demands placed on the participant. People must be fit to participate. Outdoor/adventure physical education develops the recreational leisure participant as well as the outdoor athlete. Strength and flexibility are needed for climbing, as is endurance. These fitness components also contribute to skilled kayaking. Actual participation influences each component as climbers and kayakers use the fitness they have and, in doing so, increase these same components. Assessment through administration of fitness tests is discussed as one means of integrating fitness with the assessment process.

Standard 5 – *Responsible Behavior.* There can be no higher responsibility than responsibility for your own safety as well as the safety of others. Outdoor/adventure activities place one person's safety in the hands of another. Climbers must stabilize each other. Kayakers are trained in rescue of each other. Even participants on a ropes challenge course provide spotting and assistance for each other, the negation of which could result in serious consequences. Responsible behavior also means taking actions appropriate to safeguarding the natural environment. By their very nature, outdoor/adventure physical education activities foster responsibility for the world in which we live. Appendices F, G, and H provide examples of ways for assessing group process, teamwork, and respect for the environment.

Standard 6 – *Respect for Differences among People in Activity Settings.* Although outdoor/adventure activities are highly individual in nature, they are not solitary. Climbers work in pairs or groups. Kayakers can paddle solo but also in tandem. Travel in groups is common. Ropes challenge course participation is often individual movement but with group support and cooperation in problem solving and accomplishment. Appendices F and G provide examples of assessing teamwork and group process.

Standard 7 – *Opportunities for Enjoyment, Challenge, Self-Expression, and Social Interaction.* Self-esteem is built through accomplishment. Climbing a cliff, paddling a crossing, traversing a high wire, riding a zip line, and traversing a wall are all accomplishments. People enjoy what they do well, what they do successfully. The goal of participation in outdoor/adventure physical education is to empower each person to gain the confidence, skills, and abilities to create his/her own movement experiences and to learn more about himself/herself. Journaling, one of the ways of assessing personal growth, is discussed with examples in Appendix D. Actual attainment of the summit, completion of a traverse, arrival at a destination, or just a successful attempt of a difficult or fearful task may not be truly assessed. However, outdoor/adventure physical education certainly can contribute greatly to the self-actualization these experiences can provide.

Why Assess in Outdoor/Adventure Physical Education?

Because assessment is a means of evaluating success as well as improvement, and because assessment is a way of communicating progress toward and achievement of success to participants, assessment is a very important part of outdoor/adventure physical education. Assessment does the following:

- Helps ensure all appropriate safety measures are in place.
- Provides teachers and students with information regarding existing/entry-level skills.
- Provides teachers and students with information on progress in development of new knowledge and skills.
- Helps determine readiness, which may be based on entry-level skills or a combination of entry-level skills and acquired skills.
- Helps determine progression in the learning process.
- Assists in the decision-making process for determining appropriate instruction.
- Provides documentation for competency and readiness.
- Documents experiences for future reference.
- Validates feelings, emotions, and opinions.
- Provides a means of comparing present and past.
- Helps provide rationale for why experiences turn out as they do.
- Helps determine future goals.
- Identifies what additional knowledge and skills are necessary.
- Provides documentation that might be necessary for legal purposes.
- Provides an assessment and leaves a record of quality physical education, which can serve as a model for future programming and instruction.

PART II

Methods of Assessment

Each type of assessment presented has a place in outdoor/adventure physical education. Selection can be determined by the goals and objectives of the program as well as by the needs and interests of the students. For each assessment, typical implementation is discussed, with examples from wall climbing, sea kayaking, and/or ropes/challenge activities. Sample assessment documents discussed can be found in the Appendices.

Skill Checklists

Because skill accomplishment is often advisable before participation in the natural environment can be undertaken safely, assessment of skills is an important part of outdoor/adventure physical education. Individuals venturing into the natural environment without appropriate skills can be seriously injured or killed. A strong statement? Yes, but that is the nature of the specific outdoor/adventure activities under consideration here. This statement is not meant to deter participation. Rather, its purpose is to emphasize the need for quality assessment of skills in order to help insure safe and successful participation.

Equally dangerous is entering that environment with a false perception of one's skills and/or a false sense of security based on faulty assessment feedback. For example, a student who is told he passed a deep water swim test prerequisite to open water kayaking when, in fact, he grabbed the pool wall many times to rest, is in danger. He might capsize in deep water, be thrown from his craft, and not have sufficient endurance to regain his craft or sustain himself until rescue. Assessing skills and providing feedback to students helps ensure safety when that student continues outdoor/adventure participation outside the education setting.

A skill checklist is just what its name implies, a list of skills that can be used as either a formal list of items to be tested or an informal list of items used for check-off purposes. Having a list of skills for assessment reinforces planned accomplishment. That list clearly defines what is to be learned.

There are a variety of uses for skill checklists. Asking students to review a skill checklist prior to formal instruction and to check skills in which they think they are already proficient provides the teacher with a preliminary overall picture of the abilities of the group. A skill checklist can also be provided to students at the start of skill instruction to assist them in understanding progression from unskilled performance to skilled performance. That same list can be given to students following instruction for the purpose of documenting accomplishments and certifications for determining future goals.

In some cases, assessment of skills is necessary to determine proficiency. This might be the situation if several levels of courses are available, if certification from an outside agency is desired, and/or if a course grade is determined based on skills accomplished. Formal testing might also be required as a prerequisite to application of class-learned skills in a more natural environment, e.g., a pool capsize test prior to a river kayak trip. A **Skill Experience Checklist** for sea kayaking can be found in Appendix A. Appendix A also contains a skill checklist for **Belay Certification,** one step in a progression of climbing assessments that can be used for students using a climbing wall.

Following the completion of the course, skill checklists should be kept on file for future reference, particularly when used for certification purposes. For example, students beginning a sea kayaking class might be given a list of skills to be learned in the course (Appendix A). As skills are mastered, they can be tested by the teacher. Both student and teacher can keep a record of accomplishment. When all required skills are passed, the student might then qualify for certification by an agency such as the American Canoe Association or the American Red Cross. All students who certify might then be eligible for an open water kayak trip.

Informal use of skill test checklists can take a variety of forms. If such a list is provided to students at the beginning of a course, the teacher might add additional questions regarding prior experience and ask students to self-assess, indicating on the form their prior accomplishment (Appendix A). This document can then be used by the teacher in planning lessons and can be used by students to keep track of additional accomplishments.

Skill test checklists can also be used for consensus building between student and teacher. They provide a concrete documentation for both individuals. Students can self-assess and, at the same time, teachers can do the same assessment. The assessment by the teacher can validate that of the student, thus increasing the accuracy of student self-perception. Combined assessments can also clarify any grading process.

Combined Skills/Applications

Linking two or more skills together in a sequence requires students to not only know one skill but also to be able to transition from that skill to another. This is particularly useful because outdoor/adventure skills are rarely used in isolation. Safety and success in the natural environment depend on skill combinations. When climbing, for example, a student might have to safely

maintain one position of hand/footholds while planning a subsequent course of movement, readying equipment, and spotting the safety of a fellow climber. In sea kayaking a paddler must combine a water exit with self-rescue should she tip over. River paddling requires use of a combination of strokes—forward, sweep, draw, and brace—to successfully avoid obstacles and efficiently move in a forward direction of travel.

Skill sequences are also appropriate for assessment by measuring time and/or distance. Sea kayaking and wall climbing both lend themselves to this type of assessment. Increasing the speed at which an individual can cover a specific distance requires proficiency at a combination of skills. Traveling a greater distance also requires a more complex combination of skills, as rest and/or alternative positions and skills must be used to avoid fatigue. On a climbing wall, assessment can be made more interesting through use of color-coded routes of increased difficulty or attainment. Actual routes can be plotted and traversed for speed and/or proficiency. Fictional scenarios can be devised (and even painted on the wall) and/or additional obstacles can be added (such as a hula hoop positioned on the wall) to simulate climbing through specific environments (i.e., a high terrain in a forest) or to particular locations (i.e., the top of a cliff).

Teachers must create skill combinations based on the skill level and application environment of the students. Start with short combinations of easy skills and gradually work up to longer combinations of more difficult skills as easier combinations are mastered. Obstacle courses are an excellent way to assess combinations of skills. Appendix B contains a kayak obstacle course and a climbing wall obstacle course. Playing follow the leader to traverse a climbing wall involves students in determining combinations. Points can be awarded for course accuracy, with deductions for missed obstacles or shortcuts taken. Adding time as a performance factor may initially decrease movement efficiency. Focusing on learning correct motor patterns and skills, will, ultimately, improve that same efficiency and performance time. The student with the shortest time in ascending a climbing wall will have shown a higher level of physical fitness, as well as greater skill development, than a student with a slower time.

Scenarios

A scenario is an application "what if," a short story establishing a problem situation. The student must then decide how he would solve the problem presented by the scenario. Some scenarios are appropriate for written analysis (Appendix C). The student reads the scenario and then writes her planned response.

Scenario reporting can also be done verbally. One individual can report her response to the scenario, or a small group can brainstorm a group scenario response. Both methods are useful in meeting challenges of the outdoor/adventure physical education environment. Individuals must learn to evaluate situations and plan actions. Groups must be able to use the brainstorming group process to solve problems. Scenarios are particularly useful because the same scenario can be approached from an individual or group point of view and assessed by written or oral means.

Discussion can follow any type of assessment, or the teacher can do individual report reviewing. For each scenario, the teacher needs to have a list of all factors students should bring out in scenario analysis. Then, the points awarded for each appropriate response and/or contribution become the more formal assessment score.

A second type of scenario is one in which students actually play roles in acting out events. Whereas writing or discussing a scenario validates the thought process, actually carrying out actions provides a more realistic assessment of student capabilities.

Many students can tell what should be done because they can think and process ideas well. Low elements and initiatives lend themselves well to this type of activity. Low elements can be conducted in a relatively safe environment. However, in the natural environment, it is particularly important to determine whether or not ideas can actually be carried out. In emergency situations, safety and survival may depend on how well a climber or kayaker can do what he thinks should be done. For example, a scenario might be centered around a kayak capsize. Students might be able to tell—verbally explain or write—that they should signal their safety, wet exit, check for fellow paddler safety, secure gear, wet enter the craft, bail, and resume paddling. However, telling is not the same as actually doing each of these things—all necessary for successful completion of the capsize scenario.

An old saying expresses the belief that hindsight is better than foresight. Following an accident, people can usually tell what they might have done differently to avoid the accident. All of the scenarios in Appendix C include death and/or serious injury. In discussing these scenarios in class, students can see that each has a fatality. It is better for students to recognize the danger potential while analyzing a scenario rather than recognizing it only in hindsight following an accident.

Journaling

Just as assessment of skills is important in outdoor/adventure physical education, so is assessment of emotions and attitudes. One of the attractive attributes of outdoor/adventure physical education is the adventure. Perceived risk, as well as real risk, is inherent in these activities. Taking place in the natural environment, sea kayaking, climbing, and ropes/challenge courses include unknown components. Weather, natural conditions, animal life, natural nutrient supply, and climate are not within control of teachers or students. Meeting challenges posed by factors outside of participant control requires more than just skills. Courage, acceptance or rejection of challenge, judgment, responsibility, fortitude, emotional stability, and positive attitude are just a few of the many complex, intangible areas of student growth teachers of outdoor/adventure physical education have a responsibility to assess as part of the educational process.

But how does a teacher know what is in the heart and mind of a student? How does a student develop intangible qualities appropriate to the specific adventure activity? Journaling can play an important part in resolving both of these questions. In a journal students can express their innermost thoughts. They can express fear, opinion, desire, anger, grief, joy, query, observation, fact, fiction, verse, and confidence. The journal becomes a record of intangibles. As students grow in skill, through journaling they can also grow in self-realization. Unexpressed thoughts and emotions can be fleeting, forgotten before any comparisons can be made. A journal, as a written document, is lasting, available for reflection and/or future study, analysis, and comparison.

A journal can be an open-ended diary, with students writing whenever and whatever they want. Teachers then assess whether or not students actually write. However, this type of journal has less value for assessment, particularly assessment in outdoor/adventure physical education, than a journal written with guided writing prompts provided by the sensitive teacher. Journal writing can have new and exciting twists. A journal with writing prompts can guide the writer through not only the writing process itself, but also through a process of self-discovery and self-actualization. Writing prompts can be preplanned or spontaneous. A sample of both types of prompts can be found in Appendix D. These prompts guide students through self-assessment.

Journaling should be a regular part of outdoor/adventure physical education. Although students can be told to write whenever they want to (and they should be able to do that), scheduling time for journaling gives this activity a priority within the overall educational process. Writing at the start of classroom sessions allows reflecting back on past activities. Writing at the completion of a day's activity provides for summary and closure following difficult and/or challenging events. Writing after meal cleanup, at a campfire, or just before bed at night enhances experiences at overnight outdoor/adventure physical education events.

The teacher must exercise professional judgment as to whether or not it would be appropriate to make journal contents public. If journal contents have potential to be highly personal, a teacher might choose to only assess whether or not the journal is maintained. If the journal is predominantly task oriented, a teacher may obtain student permission to read actual entries. If a teacher feels it's important to read journal entries, students should know ahead of time that entries will be read, by whom, and for what purpose. Journals are personal documents, and the sensitive teacher will respect the privacy of the student, recognizing that not all students will use their journal for the purpose intended.

If journals are to be formally assessed, teachers can do the following:

- Compare the number of entries with the number of journaling entries assigned and/or journaling times provided.
- Read to determine whether or not students have written on the assigned journaling topic.
- Read to determine depth of thought/rationalization of thought process.

Obviously, comparing entries with requirements is a more concrete assessment than judging content.

Written Tests

Because outdoor/adventure activities take place within the variability of nature, a teacher cannot present every practical situation necessary to access student knowledge. For example, if a storm appears to be on the horizon, participants can then work on identifying clouds, determining storm path, taking shelter, and other safe weather-related competencies. However, if the weather is sunny and clear all the time, some other way must be used to assess knowledge about weather. Written tests provide for comprehensive assessment of knowledge.

In addition, most national certification programs require a written assessment of knowledge. Often, the national certifying agency sets the score for passing certification. This score may or may not coincide with the grading scale of a particular school. If this is the case, teachers must be careful to explain the discrepancies and how scoring will be accomplished in relation to course grade. If a teacher is implementing a certification program of another agency, it is important for the teacher to carefully follow the guidelines of that agency. Particularly for reasons of legal liability, a teacher should not alter certification requirements of any outside agency or organization.

If test content and format are at the sole discretion of the teacher, it is important for the teacher to remember to include safety information and hazard warnings. In addition to assessing student knowledge, of which safety is a critical component, written tests document inclusion of warnings regarding risk and consequences of unsafe behavior. Failure to warn students of participation risk and consequence can put teachers and others at risk for negligence. Consequences can become a legal issue. Because real as well as perceived risks are inherent in outdoor/adventure physical education, students must learn not only safe procedures but also possible consequences of participation (safe or otherwise). Assessment documentation of risk warning includes assessment content regarding the following:

- Appropriate attire for participation.
- Level of personal health and wellness associated with safe participation.
- Skills necessary for safe participation.
- Equipment handling for safe participation.
- Peer assistance/spotting techniques.
- Self-rescue in an emergency.
- Assistance/rescue of others.
- Contraindicated behavior.
- Possible consequences of contraindicated behavior.

此为试读,需要完整PDF请访问: www.ertongbook.com

- Severity of potential injury resulting from contraindicated behavior. If death and/or debilitating injury can result, students must be warned.

Assessment by written test documents student knowledge of each of these factors. Assessment also brings to light any areas needing additional instruction.

Written tests can be given at any time. Including written tests following classroom/gymnasium/pool instruction and prior to any outdoor environment excursion can help identify any knowledge gaps prior to encountering outdoor risk. Written tests can also be given at the conclusion of major instructional course sections as a bridge between instruction and application and at the conclusion of the entire experience to assess total knowledge gained.

As with any written test assessment, a variety of question formats (multiple choice, short answer, true/correct the false, essay) are important to provide an accurate knowledge picture for all students. If students with disabilities are included in the group, a written test might need to be provided in a different medium for students who do not read/write. Having a test read to students for oral response or taping a test for taped response are two alternatives.

Application Essays

Writing an essay can be part of a written test or an assessment instrument in and of itself. Essays allow for students to explain answers. They also are more appropriate assessment tools for circumstances where a variety of answers might be appropriate, depending on the rationale of the student. This is particularly true of essay topics requiring students to apply their knowledge to a specific situation set by the instructor. For example, an essay question asking "What would you do if you were climbing a fairly easy terrain and your climbing partner slipped and cut a deep gash into his thigh?" might be answered in a couple different ways: one focusing on taking care of the victim and then assisting that victim out of the environment to obtain aid and the other focusing on stabilizing the victim but leaving him there while going for aid.

Essays can be used to assess the following:

- Emergency response.
- Planning for excursions/trips.
- Evacuation protocols.
- Understanding steps of a complex skill.
- Describing feelings and attitudes.
- Venting anger.
- Analyzing personal growth.
- Setting goals.
- Analyzing qualities of equipment.
- Evaluating resources.
- Providing rationale for decision making.
- Documenting experiences.

Grading an essay can take a variety of forms. Due to the environment, grading solely for content is usually more practical than also grading for English standards (spelling, grammar, etc.). Students in the natural environment will not have ready access to dictionaries and other resources. Writing may be inhibited if English standards are evaluated. That does not mean errors should not be called to the attention of the student. Corrections on the paper and/or comments in the margin can be made without these factors counting in the assessment process.

Cross-Curricular Assignments

A cross-curricular assignment uses a different subject area as the focus for learning in outdoor/adventure physical education. As cross-curricular assignments usually involve application of acquired knowledge, they are an excellent means of assessment. Examples of cross-curricular assessments include the following:

- Applying learned information on weather to arithmetically calculate the travel of a storm.
- Reading an autobiography of a climbing or kayaking expedition and then analyzing the success of that expedition.
- Designing in shop or art design class a low ropes traverse using two beams, rope, and six tires.

Movies provide excellent opportunities for cross-curricular assessments. Viewing a movie with a story line set in the outdoor/adventure environment and then assessing, through oral discussion or written essay, student analysis of the experiences of the characters in the movie is another example of application of knowledge.

Specific subjects and appropriate areas for cross-curricular topics useful as application assessments include the following:

English	vocabulary, terminology, journaling, essay writing, poetry writing, poetry reading, autobiographical/biographical reading
Math	measurement of travel, calculation of weather, food planning/cooking quantities, participation heart rate.
Science	biology of the natural environment, human body functioning in extreme conditions, health and wellness during participation, calorie expenditure, water hydraulics, mechanical and physical concepts/properties.
Social Studies	environmental geography, local history, previous exploration, living conditions dependent on the environment, survival skills, social interaction, cultural differences, psychological response.
Art	ropes/challenge course design, personal expression of experience, documentation of flora and fauna.

Music	music of early voyagers, pocket instruments, musicians as storytellers.
Dance	balance, flexibility in meeting physical demands of ropes/challenge courses and climbing activities.
Physical Education	conditioning for outdoor/adventure physical education, physical fitness, lead-up skills (climbing ropes lead up for climbing, pool small craft for kayaking, obstacle courses for ropes/challenge)
Health	wilderness first aid, human body systems functioning in extreme environments, nutrition, rest/activity ratios, human body response to extreme situations.

Teach Backs

One of the best ways to assess how well a student understands a skill or concept is to observe as they teach that skill or concept to another person. When that teaching occurs as part of the initial instructional process, it is called a **teach back**. As skill and knowledge instruction in outdoor/adventure physical education is usually progressive, moving from beginning level skills and stable venues to harder skills in the natural environment, review sessions are important. Those review sessions can easily become teach backs. A teach back actively involves students in the learning process and provides an assessment opportunity for the teacher.

A teach back assessment provides an opportunity for a teacher to evaluate the knowledge and skills learned as well as the ability of the student to communicate that content to others. The purpose of assessing content is fairly obvious. Students should have assimilated what they have been taught, particularly prior to **application** of skills and knowledge in the more risky natural environment. However, just as important is the ability to communicate that information to others. Climbing and sea kayaking are rarely solitary activities. Rather, safety in particular depends on interaction with others. Participants must be able to communicate with fellow participants, including providing information on performance of skills as well as sharing experiential knowledge. Communication in an emergency is particularly critical. A sample teach back assessment form can be found in Appendix E.

Appropriate times/circumstances for teach backs might include the following:

- At the conclusion of basic skills instruction, prior to application of those skills.
- At times when other students appear uncertain or confused.
- At the end of a practice session, before going on to a new skill.
- During practice time, to assist a weaker student.
- Between class sessions, to assist a student who has been absent.
- At the conclusion of instruction, prior to an application field trip.
- When a student seems to not be paying attention.
- To assist a student with a disability.
- To assess comprehension, before going on to the next topic.
- To provide review for an entire group.

Self-Analysis

Self-analysis gives students an opportunity for active involvement in the process of their own assessment. In this instance, not only are they assessed, but they are also in the role of assessor. Self-analysis is often used to help students understand their feelings and opinions by clarifying circumstances. As previously noted, self-analysis can be a part of the journaling experience. It can also be accomplished through a more formal, question/answer format.

Journaling questions requiring students to reflect on themselves are an example of self-analysis assessment. Topics/questions appropriate for self-analysis through journaling include the following:

- Progress in learning skills – "What new skills have you learned today?"
- New concepts learned – "What do you know today that you didn't know yesterday?"
- Feelings and emotions regarding experiences – "What part of this experience has made you the most happy?" (or sad, confused, angry, gratified, etc.)
- Contributions to the group – "How have you helped our total group accomplish goals?"
- Goal setting – "What have you not yet accomplished that you would like to do?"
- Fear/self-confidence – "What have you been most afraid of and why?" (or most confident of)
- Growth in understanding the natural environment – "What about our natural setting came as a complete surprise to you and why?"

More formal assessment tools can also be used to aid students in self-analysis. Appendix F is a **Teamwork Index**. By answering questions regarding working with other people, students can obtain a picture of their own preferences related to, in this case, teamwork. In self-analysis there are no right or wrong answers. The purpose of the assessment is to acquire information, which can then lead to greater understanding of self and others. Participation in outdoor/adventure physical education activities requires working with other people. Often, individual safety is dependent on group interaction. Knowing how comfortable a person is in working with other people can help them to better understand what they need to do to increase their comfort level.

In addition to teamwork, several other self-analysis methods and topics are appropriate to assessment in outdoor/adventure physical education. Skill checklists can also be used for self-analysis. Other additional topics include the following:

- Adaptability to a new living environment – comfort or discomfort living outdoors.
- Sharing – comfortable or not comfortable sharing.
- Cooperative effort – valuing or not valuing group task accomplishment.
- Goal setting – preferring individual goals or goals set by many people.
- Planning for an event – plans best using group process or plans best alone.
- Motivation – is motivated by internal factors or by external factors.
- Decision making – makes individual decisions or relies on decisions made by others.

When designing a self-analysis instrument, it is particularly useful if the pattern of answers can be used to picture the results. In the Appendix F Teamwork Index, if most of the checks are in the left column, the individual most likely is used to working alone. A predominant number of checks in the right column indicates preference for working with others. A balance of checks in both columns indicates an individual comfortable working with others or working alone.

When working with a student group in outdoor/adventure physical education, a teacher can benefit from assessing individual attitudes as well as group perspectives. By having students complete self-analyses ahead of time, the teacher can get a better picture of the group as a whole. Then, planning for the group can include activities strengthening specific personal interactions needed for the activity involved. For example, ropes/challenge course activities whose purpose is to develop teamwork often begin with simple group games. These games have neither a winner nor loser but instead emphasize working together for a common goal. On the other hand, physical education activities planned to increase individual self-reliance and confidence might begin with games stressing individual accomplishment against a standard, such as simple fitness tests.

Group Feedback/Interaction

Group feedback and interaction allow members of the group to discuss their experiences compared to educational objectives. For therapeutic or other purposes, processing of adventure experiences implies a greater depth of discussion. Each is a viable approach, based on the needs of the individual and/or group. However, within this text we are referring to group feedback and interaction as related to educational goals.

Another term relating to feedback, commonly used in outdoor/adventure physical education, is debriefing. Many people use debriefing and group feedback/interaction interchangeably. However, debriefing also has a somewhat different meaning in the field of trauma counseling, where a more specific process is indicated. In the event of a serious accident during outdoor/adventure physical education, debriefing would be used. However, group feedback in this context is for purposes of assessing ongoing activity. Therefore, group feedback/interaction will be the terms used here.

Although most assessment is individual in nature, it is possible to assess an entire group at one time. Using assessment for consensus building can foster personal interaction as well as enhance the learning environment. Group assessment might begin with goal setting and decision making, or it might be solely a culminating activity. If goal setting and/or decision making is involved at the start of the activity, the topic might include what the group wants to accomplish or where the group wants to go. Climbing and sea kayaking can be destination oriented. The goal can be getting there, and learning the skills and acquiring the knowledge are the process an individual goes through to accomplish the destination goal. Participation in a ropes/challenge course is process oriented. Although individual students might have personal goals (such as a high-wire traverse or a successful trapeze grab from a pamper pole), the group as a whole must have a successful process experience in order for individuals to reach their specific goals.

However, remember individual goals might not be readily apparent. Assessment of the process as well as the end result is an assessment of the group. The following discussion questions can be used to assess group feedback/interaction following goal setting.

- What do you think the group goal was and how well do you think that goal was met?
- What helped the group meet its goal(s)? How?
- What hindered the group from meeting its goal(s)? How?
- How did you help or hinder the group in meeting its goal(s)?
- Was the goal of the group a "good" goal(s)? Why?
- Did the natural environment help or hinder reaching the group goal(s)? How?
- How did your personal goals fit into those of the group?

Assessing group feedback and interaction can also occur without any prior goal setting or decision making. Sometimes teachers or facilitators are the primary decision makers for future experiences. The group then participates. A ropes/challenge course is an example of this. Assessing the group following the activity can not only help determine the results of the experience but also can assist in planning future events for the same group. This type of assessment is reflective rather than judgmental. Students should feel free to answer questions honestly and express themselves in an emotionally safe environment. Teachers should receive the information with an open mind. For adventure physical education to be successful in the intent to foster lifelong

participation, programs need to be responsive to the ideas of students. This type of assessment facilitates communication for this purpose. The following questions can be used for this type of assessment. Many of the questions are suitable for response by teachers as well as students.

- What was your favorite part of this experience? Why?
- What was your least favorite part of this experience? Why?
- Did you learn anything during this experience? If so, what, and why is it important?
- If you were to do this again, what would you do differently? Why?
- If you were to do this again, what would you like to repeat? Why?
- How important is it for students like yourself to have this experience?
- What was the hardest thing you had to do? Why?
- What was the easiest thing you had to do? Why?
- Would you do this again? Why?
- If we do this again, should it be exactly the same or should we change things in some way? How?

Notice that, in addition to the basic questions, follow-up "why?" and "how?" queries are included in many instances. Thoughtful assessment requires more than single-word answers. Adding qualifiers aids students in thinking through their answers. Again, there is no correct or incorrect response. Rather, assessment focuses on the thought process and feedback information provided. Often in adventure activities there is no one correct/absolutely true response.

Fitness Tests

Physical fitness is an important part of participation in outdoor/adventure activities. By the very nature of these activities, participants must be fit. Outdoor/adventure physical education encourages students to define and develop their fitness as directly related to success in the outdoor environment. This can be quite different from the environment of the gymnasium. Although kayaking, ropes challenge activities, and wall climbing may begin inside, their ultimate goal is engagement in the natural environment outdoors. Physical education students become outdoor activity participants, which can lead to becoming outdoor adventure athletes. Strength, endurance, balance, and flexibility are crucial aspects of skill acquisition as well as survival in the natural environment. Maintaining a healthy level of body fat contributes to personal fitness. Assessing physical fitness, as it relates to outdoor/adventure activities, is an important part of the educational process.

Students have probably taken fitness tests in the past. The purpose here is not to just repeat standard tests. The teacher must relate any particular test to specific fitness needs of participants. For example, a climber needs arm/hand strength. Although push-ups could be used for this assessment, doing pull-ups or assessing with a hand dynamometer would more closely approximate the arm strength needed for climbing. Remember, it is important for students to know how specific fitness components directly relate to the specific skills being developed.

Sea kayaking requires some degree of flexibility for entry and exit of craft. Using a sit and reach for assessment relates directly to the flexibility needed for wet exit. Using the Ball State Water Run (Grosse, 2001) to assess cardiovascular fitness in kayakers rather than a land run not only assesses the function intended, but it does so in the activity-specific environment—water.

Students encountering difficulty in application of skills in the natural environment may also benefit from fitness testing. When a student knows a skill and can demonstrate that skill adequately in the teaching setting of a gym or pool but later has difficulty implementing that same skill under actual conditions, the student may have fitness weaknesses. Fitness assessment can help in identifying these deficiencies. Then the teacher and/or student must develop a plan for fitness remediation. Although it may be educational to learn outdoor/adventure skills in the gymnasium/pool environment, the ultimate goal of outdoor/adventure physical education is natural environment application. Physical fitness is critical to the success of that application and should be a part of any outdoor/adventure physical education process.

Group Process

Assessment of group process is not always a part of traditional physical education. However, particularly in ropes/challenge activities, how a group of students function together can determine the outcome of the entire outdoor/adventure physical education process. Due to the unique properties of outdoor/adventure ropes/challenge courses, student participation is, in many instances, planned so that improving group process and interaction is the main goal (as opposed to specific knowledge or skill acquisition).

There are several ways of assessing group process. One method is by using the **Teamwork Index** (Appendix F) as a pre/post-test. In this case, if the group process is successful, each student would show a balance of checks in group and individual preferences at the conclusion of the activity. Students who show an increase in group preferences could be inferred to have increased their valuing of group process, based on successful activity experiences.

Another quick and informative means of assessing group process is by asking the group to first close their eyes. Then, pose the question of how well they would rate the group process on a 1 to 10 (high) scale. Participants then raise their hands accordingly (eyes remain closed). Results are then discussed without identifying individual student responses. It is also possible to use a

separate assessment instrument to assess group process. A sample **Group Process Survey** is included in Appendix G.

Environmental Care

Because of the unique setting for outdoor/adventure physical education, is it also appropriate to assess how well individual students, as well as the group as a whole, show care for the environment in which the activity takes place. Because the natural environment can be easily damaged and made inhospitable for safe participation and enjoyment, students must learn environmental care just as they learn activity-specific knowledge and skills. The **Environmental Care Checklist** (Appendix H) is an example of an assessment tool used to teach environmental care. Giving it to all students and discussing the results prior to outdoor participation will inform students about what is expected. Periodically reviewing the checklist with the group and comparing the checklist with actual group behavior will foster conscientious behavior. For students who are unable and/or unwilling to exercise appropriate care of the environment, the checklist can document specific behaviors for further remediation and/or education. Obviously, all behaviors checked in column A indicate a need for improvement.

Research on the Internet

Outdoor/adventure activities are one of the fastest growing forms of adult leisure. Assisting students to cross the bridge from school participation to adult lifestyle activity is very important. Research on the Internet, when done as an assessment tool, can facilitate this for the student. At the school level, the teacher is the person who does the major decision making related to staging and carrying out outdoor/adventure activities for educational purposes. Once leaving school, a student no longer has a teacher/group leader readily accessible. The student must take over control of his/her own adventure activity destiny. Internet research can be used to assess how ready and capable a student is to make this transition.

Assessment via Internet research assumes student access to the Internet, along with knowledge of how to use an Internet browser. To obtain information, students can either use a search engine or access data by going to specific sites recommended by the teacher. Both systems have advantages. If using a generic search engine, students will have to work through a search process and evaluate relevant information to obtain needed information. This is probably the most realistic type of Internet research. However, if time and/or computer access is limited, a teacher might want to supply students with activity-specific site addresses. This allows a student to go directly to an appropriate site and then seek out necessary information. Site-specific examples include the following:

Climbing

Climbing Instructors Association Useful Links
http://www.northnet.com.au/~cia/links.htm
Rock Climbing Risk Assessment Criteria
http://www.education.qld.gov.au/corporate/doem/healths8/hs-10092/procedur.htm
U.S. Mountain Guides Association
http://www.usmga.net

Sea Kayaking

GLASKA (Great Lakes Sea Kayaking Association)
http://geocities.com/Yosemite/Gorge.4657
Kayak Forum Bulletin Board
http://www.guillemot-kayaks/
Main Association of Sea Kayak Guides & Instructors
http://www.mainseakayakguides.com
Sea Beagle's Theory Questions
http://www.seabeagle.shetland.coluk/start.htm
Sea Kayaker Magazine
http://www.seakayakemag.com
Sea Kayaking FAQ
http://siolibrary.ucsd.edu/preston/kayak/sfaq/
Sea Kayaking Instructional Videos
http://www.seakayakvideo.com
SEE Kayaks
http://www.seekayak.com
Storm Steiger's Weather & Kayak Page
http://seakayaker.tripod.com/index.htm
Trade Association of Sea Kayaking
http://www.viewit.com/wtr/TASK.html

Ropes/Challenge

Adventures Unlimited
http://www.adventureropes.com
Adventure Experiences Incorporated
http://www.aei@advexp.com
Association for Challenge Course Technology
http://www.acctinfo.org
Challenge Course with Thumbnails
http://www.moonshadow.net/chalcourse.html
Corporate Team Building Assessment Tools
http://www.learningunlimited.com/services/corporate_train
High Five Adventure Learning Center Inc.
http://www.high5adventure.org
Pickering Creek Challenge Course
http://www.pickeringcreek.org/challenge
Project Adventure, Inc.
http://www.pa.org
Ropes Challenge Course-History
http://www.e-teambuilding.org/ropes_history.htm
Signature Research
http://www.kidscamps.com/marketplace/signature-research
Team Building Assessment
http://www.thechallenge-neb.com/team.htm
West Texas Boys Ranch Ropes Challenge Course
http://www.westtexasboysranch.org/ropes.html

Assessment topics and questions appropriate for Internet research in outdoor/adventure physical education include the following:

- Equipment sources – Locate two on-line catalogs of equipment suppliers for sea kayaking (climbing). Compare them for items offered for sale and prices. Which one would you purchase from and why?
- Consumer sources – Locate a site providing consumer guide information for the activity you are interested in. Evaluate the site, writing a review including information provided, authority of provider, comparison with other sources, timeliness of information, and general usefulness.
- Activity locations – If you wanted to participate in sea kayaking (climbing) outside of class, within 60 miles of home, where could you go?
- Activity providers – If you wanted to participate in additional lessons on sea kayaking (climbing) outside of class, what organization/agency/company could you join or go to?
- Activity-related travel – If you could travel anywhere in the world, where would you like to go to participate in sea kayaking (climbing)? Why?
- Skill improvement resources – Find information on the Internet to help you improve your skills. Print at least three pages and explain why this information is useful for your purpose.
- Knowledge improvement resources – Find two informational articles on your chosen activity. Print each and write a paragraph explaining how this information is useful.
- Biography/autobiography – Locate information on a noteworthy participant in your selected activity. Explain why this person is noteworthy and how he or she came to be noteworthy.

In assessing the results of Internet research, a teacher needs to consider not only the specific content located but also the discussion and/or rationale the student uses to explain the value of that content. Because the Internet is a major information source, linking specific outdoor/adventure activities to Internet research can be an important part of the transition from school to lifestyle participation.

此为试读,需要完整PDF请访问: www.ertongbook.com