

University of Wisconsin-La Crosse

Graduate Studies

Designing and Implementing a Universal Adventure Education Unit in
High School Physical Education

A Critical Analysis Project Submitted in Partial Fulfillment of the Requirements for the
Master of Science in Exercise and Sport Science-Physical Education Teaching
Adapted Physical Education Teaching Concentration

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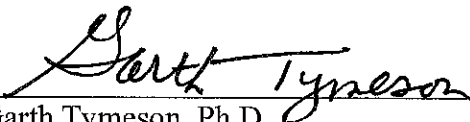
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**ADAPTED PHYSICAL EDUCATION
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Candidate: Bridget Laszewski

We recommend acceptance of this Critical Analysis Project in partial fulfillment of the candidate's requirements for the degree:

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ABSTRACT

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Adventure education (AE) is an experiential process that takes place in challenging outdoor and indoor settings where the primary focus is to build relationships, personal health, leadership skills, and environmental understanding (Havens, 1992). Adventure education is taught through a series of seven stages: acquaintance activities, dehumanizers, communications, problem solving, trustworthiness, low elements, and high elements. It is also part of the physical education curriculum and benefits students by meeting national and state standards. Physical education settings are becoming increasingly inclusive with a wide range of abilities and students with disabilities. Universal Design for Learning is a common instructional method to build an inclusive environment in AE within physical education by accommodating all abilities. Meeting the needs of all students can be accomplished through using different instructional methods such as physical accessibility and building inclusiveness. The purpose of this project was to develop resources for general and adapted physical educators to help them start a universal AE unit within physical education. The video includes practical modifications and accommodations to make for students, national organizations that can assist in the process, and a case study of an existing and successful universal AE program in Holmen, Wisconsin. Written materials in this project include teaching strategies for universal AE and many resources that teachers and facilitators can use to implement a universal AE unit within physical education.

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CHAPTER I

INTRODUCTION

Adventure education (AE) is an experiential process that takes place in challenging outdoor and indoor settings where the primary purpose is to build and strengthen inter and intrapersonal relationships, personal health, leadership skills, and environmental understanding (Havens, 1992). Participation in AE can build strong relationships and social interactions among individuals through different styles of problem solving, critical thinking, and physical activity. Adventure education has become increasingly popular to teach adolescents life-skills such as communication, problem solving, and group cooperation. These are all skills needed to become a positive and contributing member of society (Glass & Benshoff, 2002).

Adventure Education

Adventure education is most commonly delivered through a seven stage process combining both Christian Bisson and Karl Ronke's methods (Bisson, 1998). These stages include acquaintance activities, dehumanizers, communications, problem solving, trustworthiness, low elements, and high elements (Rohnke, 1989). Adventure education is not just one activity in and of itself. Adventure education is a way of doing; there is a process of learning to achieve group and individual goals. The seven stages are taught consecutively and build upon each other to ultimately achieve individual or group goals.

There are many benefits for all persons who take part in AE. Benefits include stress reduction, physical fitness, self-concept, developing social skills, and a sense of empowerment (Cross, 2002). By including AE in the physical education curriculum, the teacher is reaching many students with varying abilities. Some of these varying abilities

can include students who are apprehensive about AE, extreme extroverts, disabilities, and students with varying fears.

Adventure education promotes an increase in self-concept, more specifically physical self-concept (Gehris, Kress, & Swalm, 2010). Physical self-concept is increased through a wide variety of physical activity that AE provides. Physical activity can be seen through locomotor movements during stage 2, dehumanizers and also the low and high elements that require movement through strength and endurance. Activities in AE are also nontraditional forms of exercise, which can be very rewarding and motivating for students in physical education. Students with disabilities (SWD) often need added motivators for being physically active and AE can provide that nontraditional form of exercise that doesn't resemble walking on the treadmill or running around a track.

When teaching AE it is important to be aware of and address the needs of the group including different abilities and personalities so all students can be successful (Meyer, Monyeki, & Weilbach, 2010). Meyer, et. al (2010) realized that it is not only participation in activities that promote change and improved benefits but also the activities chosen and the processing of the experience to highlight learning. Choosing activities to do during the AE process should be based on the students that are in the class and their physical and cognitive abilities. If there are SWD in class, their unique needs should be accommodated, not just legally but also emotionally. When having students with and without disabilities in the same environment all students need to feel physically and emotionally safe at all times or they may not be successful in the AE process. The best way to do this is by understanding processes that create inclusive environments.

Adventure education is one way to promote an inclusive environment through the use of Universality. Universal Design emerged from architectural design of buildings that offer access to persons of all abilities and disabilities (Bernacchio & Mullen, 2007). Universal Design for Learning (UDL) was adapted for education settings but still incorporates the idea of access to persons of all abilities. Universal Design for Learning in education means that physical, social, and learning environments are designed to access the widest possible range of individuals (Lieberman & Houston-Wilson, 2009). By promoting different variations and modifications or accommodations for all students, those with disabilities won't feel singled out. Universal Design for Learning is an efficient way to give students access to AE.

Universal Design for Learning is very flexible. Flexibility requires variation in the modalities in which information is presented to students, the opportunities provided to students for expressing their knowledge, and through engaging students in a learning community that offers choices, supports, and learning contexts (Bernacchio & Mullen, 2007). By alternating all of these factors, UDL can foster an inclusive environment, including during AE in the physical education curriculum.

While UDL is a process that includes people of all abilities, inclusion is the process of integrating students with and without disabilities. Inclusion is recognized as providing opportunities for all individuals to develop skills and attitudes required to live, learn, and work together in society (Schleien, McAvoy, Lais, & Rynders, (1993). In education, inclusion is the process of educating students with and without disabilities together at all times (Lieberman & Houston-Wilson, 2009). It has been found that when teachers have a more positive attitude towards SWD, the SWD had a better learning

experience (Combs, Elliot, & Whipple, 2010). Teachers who have a more positive attitude are better prepared to fully and appropriately include SWD and are more open to learning methods to include these students in their classes. If the teacher has a positive attitude to help include SWD then it is also important for the students' same aged peers to have a positive attitude.

Positive attitudes among peers can help SWD feel included and not excluded. Students who feel a sense of belonging express more positive attitudes towards school and attain higher academic achievement (Bendu, Epp, Katz, & Porath, 2012). These attitudes also help facilitate more positive social interactions, which can assist SWD increase their socialization. An increase in socialization is not just a benefit of an inclusive typical classroom but can also be emphasized in physical education during AE. Adventure education includes stages that focus on socialization and getting to know other people. This is an extremely important part of AE so that all students feel included and important.

By creating an inclusive environment, educators include more and more SWD. Inclusion is a way to enhance the relationships between students with and without disabilities (Bendu, et. al, 2012). It can also be created by addressing the needs for students of all abilities and can be done by using UDL. Using UDL to create an inclusive environment can easily transfer to AE. Adventure education is an excellent way to include a wide variety of students and to help them with individual and group success.

Need for the Project

Adventure education is part of the physical education curriculum (SHAPE, 2013). There is also an increase of SWD in the general physical education setting with their peers without disabilities. Students without disabilities also have a wide range of abilities in physical education that could include excessive shyness or fear of heights. However, with the increase of inclusive environments in physical education and the increase in AE in the physical education curriculum, teachers need to know how to foster relationships between students of all abilities. The relationship between AE and inclusion needs to benefit students of all abilities and not just SWD.

Teachers need to know how to include all students in the AE process. There are currently limited resources available for educators to help develop and implement universal AE programs that can provide students with many benefits mentioned earlier. Despite all the benefits, there are few programs to model or replicate in the PK-12 public schools.

Purpose of the Project

The purpose of this critical analysis project was to develop an instructional video for general and adapted physical education teachers on how to design and implement a universal AE unit in the high school physical education curriculum. It includes the definition of AE, universal strategies for students of all abilities, design and implementation of an AE unit, universal equipment modifications, and a case study reviewing an established universal AE program. Universal equipment covered includes the 3:1 pulley system and booty bag. The case study highlights the Universal Adventure

and Outdoor Pursuits class at Holmen High School, in Holmen, WI. In addition, content includes teaching strategies used for universal AE and many resources that an educator can use to develop a universal AE unit within physical education.

Definition of Terms

For the purpose of this project, the following operational terms were used.

Adventure Education (AE)

Adventure education is an experiential process that takes place in challenging outdoor and indoor settings where the primary purpose is to build and strengthen inter- and intra-personal relationships, personal health, leadership skills, and environmental understanding (Havens, 1992).

Inclusion

Inclusion is defined as providing opportunities for all individuals to develop the skills and attitudes required to live, learn, and work together in society (Schleien et al., 1993). In education, inclusion is defined as the process of educating children with and without disabilities together at all times (Lieberman & Houston-Wilson, 2009).

Stages of Adventure Education

Stages of AE are the steps that a facilitator follows to ensure that participants have positive experiences in the adventure setting. The stages are: acquaintance activities, ice breakers, dehumanizers, communications, problem solving, trustworthiness, low elements, and high elements (Bisson, 1998).

Universal Design

Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without adaptation or specialized design (The Center for Universal Design, 1997). In education, universal design means that the physical, social, and learning environments are designed so diverse learners are supported through powerful possibilities for teaching and learning (Lieberman & Houston-Wilson, 2009).

Summary

Adventure education is one technique to foster an inclusive environment through the use of Universality. General and adapted physical educators can use the instructional video and other resources created in this project as references when designing and implementing an AE unit in the physical education curriculum. The information, strategies, and equipment modifications will help educators facilitate an inclusive environment. The case study involving Holmen High School is an excellent example of how universal AE is being implemented in high school physical education. Also included are professional organizations and contacts so educators can obtain more information on specifics pertaining to their school and situation.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

Adventure education (AE) brings students of all abilities together to learn and share experiences. Universal Design for Learning (UDL) is a method to help facilitate an inclusive environment among all students including those with disabilities. This review of related literature includes the following topics: benefits of adventure education for students, UDL, teacher attitudes towards inclusion, and student's attitudes towards inclusion. This first section includes related research supporting the benefits of AE for people of all abilities and attitudes towards inclusion. The second section includes practical teaching literature about AE, UDL, and equipment modifications used in AE for people of all abilities.

Research Literature

Benefits of Adventure Education

Adventure education encourages individual growth and development through intentional planning and implementation of educational processes that often include perceived or actual risk and typically use the natural environment as a program setting (Ewert & Voight, 2012). Adventure education has the potential to enhance many variables such as stress reduction, trust, development of social networks, self-concept, physical fitness, a sense of empowerment, and resilience. Adventure education is most commonly delivered through a seven stage process. These stages include acquaintance activities, dehumanizers, communications, problem solving, trustworthiness, low elements, and high elements (Rohnke, 1989). Adventure education is not just one

activity. Adventure education is a way of doing; there is a process of learning to achieve group and individual goals. The seven stages are taught consecutively and build upon each other to ultimately achieve individual and group goals.

For some students traditional forms of exercise are not motivating or exciting. One way to be physically active is through AE. Gehris, Kress, and Swalm (2010) investigated physical self-concept and how it relates to AE. Physical self-concept is all the views a person holds concerning the physical part of him or herself (Gehris et al, 2010). The demanding nature of many AE activities may enhance specific components of physical self-concept.

Gehris and colleagues studied a class of 27 students, ages 15 and 16. Students completed an AE program during physical education. The students completed multiple weeks of AE activities including trust activities, climbing apparatuses, and prusik climbing. The AE unit was part of the school's physical education curriculum taught by a certified physical educator.

The students were interviewed to collect qualitative data at two different times. The first was during class meetings and the second was after the adventure unit ended. Out of the 27 students, only 10 were interviewed. All interviews were tape recorded. The purpose of the interviews was to obtain students' views regarding physical affects of the adventure activities and to obtain their reactions to the activities as soon as possible after completion.

Once interviews were completed, the researchers open coded the data and arrived at two main themes. The themes were adventure physical education is a different way to

exercise and adventure physical education is physically demanding. The students also expressed that because adventure activities were different from traditional exercises, one may be more motivated to be physically active. The students also mentioned that their muscle strength improved from all the climbing. A few students also mentioned that learning how to climb in school could lead to them climbing outside of school for physical activity which is part of leading a healthy lifestyle (Gehris et al., 2010).

Experiencing an AE program with a group is far more productive than if a person does it individually. Adventure education can be implemented in physical education, work settings, and summer camps. Small group experiences can be critical for adolescents because of the increasingly important role peers play in their lives. Peers have a powerful impact on adolescent behaviors and decision making. Being part of a group is an important part of being an adolescent and searching for acceptance and identity (Glass & Benshoff, 2002).

There are seven stages of adventure that a group completes with the last two stages being low elements and high elements, or challenge courses. Challenge courses facilitate positive group cohesion needed to make any group successful in accomplishing tasks, jobs, or assignments. Challenge courses can also help adolescents with life skills such as communication and problem solving techniques. The purpose of Glass and Benshoff's (2002) study was to examine the effect of a one day, low element challenge course experience on the perception of group cohesion among participants.

The study took place on an outdoor challenge course in North Carolina. There were 167 participants, ages 11-14 years. There were eight group leaders for the program. To qualify as a group leader the person had to attend a leadership training program

administered at the participating facility. The training prepared leaders to work with all populations. The study took place during six days of data collection. There was only one group studied per day. Prior to the beginning of the day's activities the students filled out the Group Cohesion Evaluation Questionnaire (GCEQ) as a pretest. At the end of the day the lead researcher administered the GCEQ to the participants in an effort to assess participant's perceptions of group cohesion. The GCEQ was designed for this study and contained nine items. These nine items used a Likert scale. Items included statements like, 'We get along well together' and 'I feel like my group will keep me safe' (Glass & Benschhoff, 2002). A statistically significant increase in mean scores from pre- to posttests was found which suggests that participants did perceive increased group cohesion as a result of participation in the one day low element challenge course program. Developing group cohesion allows members to be "free" to engage in other behaviors such as self-disclosure and interpersonal feedback (Glass & Benschhoff, 2002).

As stated earlier there are many more benefits besides positive group cohesion derived from AE, including personal effectiveness. Some constructs that relate to personal effectiveness are self-confidence, time management, open thinking, and external locus of control.

Meyer, Monyeki, and Weilbach (2010) designed a study to determine the effectiveness of AE in developing personal effectiveness in adolescents. Twenty three participants were enrolled in the study ranging in ages 19-22 years and the study lasted five days. The participants were in two groups, control (11) and experimental (12). The size of the groups were small but typical AE programs are 8-12 participants so the small number is appropriate for the study. Prior to completing the AE program participants

filled out the Review of Personal Effectiveness and Locus of Control (ROPELOC). The ROPELOC instrument measures personal effectiveness by means of 14 scales, including self-confidence, self-efficacy, stress management, time management, active involvement, and others. After the completion of the program the participants filled out the ROPELOC again to determine the impact of the AE program on personal effectiveness.

The results showed that medium to large improvements in personal effectiveness were achieved through AE. The constructs that resulted in the biggest changes were external locus of control, time management, and self-confidence. One possible conclusion from these findings is that it is not necessarily the duration of a program that contributes to its effectiveness but rather the application of correct activities that will address the needs related to personal effectiveness within the group. Addressing the needs of the group in AE is very important to the success of the group. Facilitators should realize that it is not only participation in activities that promote change but also the activities chosen and the processing of the experience in order to highlight the learning and insights gained (Meyer, et. al, 2010).

Addressing the needs of the program participants, making sure all populations are gaining a positive experience, and reaping all the benefits AE has to offer are vital steps to a successful AE program. By understanding processes that create inclusive environments and methods for accommodating individual differences, outdoor adventure educators can successfully integrate SWD into programs (Dillenschneider, 2007). Adventure education benefits apply to students of all abilities including SWD.

A person without a disability that interacts with a person with a disability can foster an improved capacity for compassion and kindness while enjoying AE (Schleien,

et. al, 1993). To better understand outcomes of AE and how they relate to persons with disabilities, Farnham and Mutrie (1997) designed a study to examine multiple aspects of AE but is referred to as outdoor development programs in the research.

There were 19 participants in the study, ages 13-17 years. All subjects had special educational needs and some emotional/behavioral difficulties. The study was carried out over a 3 month period. The students participated in an outdoor development program away from their school's campus for four days. Data were collected using questionnaires adapted from their original versions to accommodate the special needs of the students. The questionnaires were the Unipolar Profile of Mood State (POMS), the Physical Self-Perception Profile (PSPP), and the Group Environment Questionnaire (GEQ).

The quantitative results indicated an increase in group cohesion over the four day program (Farnham & Mutrie, 1997). There was also a decrease in anxiety and tension in the group as found in the POMS. Along with the questionnaires there was a 6 week follow up interview of the teachers of the students who participated. The teachers expressed there was still a definite improvement in group cohesion among the students who participated.

It is interesting to note that the results of this study are similar to other studies carried out with a variety of groups without disabilities. This is a meaningful result for this population because persons with disabilities derive the same results and benefits as their nondisabled peers and are not being looked at differently because of their disability. One population that has much potential to be looked at negatively are at-risk youth (Cross, 2002). At-risk youth are children who, for various reasons, are not fitting in with school or society (Cross, 2002). Adventure education provides an atmosphere in which

students experience a sense of belonging or group cohesion and this may lead to more balance in the at-risk youths' lives, which could enhance perception of self-reliance and personal control over their lives. Cross (2002) designed a study to determine whether an intervention using AE would affect a change in students' sense of alienation and sense of control over their lives.

A total of 108 participants from an alternative high school ranging in age from 12-19 participated in the study. Of the 108 participants, 17 volunteered to participate in the AE program that focused solely on rock climbing. The program was a five day intensive rock climbing trip. Data were collected using two scales. One was the Dean Alienation Scale and the other was Connell's New Multidimensional Measure of Children's Perceptions of Control. The scales were administered pre and post program to identify if there was an affect on the at-risk youths' sense of alienation or sense of control over their lives. The findings revealed that at-risk youth who participated in an outdoor intervention program demonstrated significantly lower perceptions of alienation as compared to their counterparts who did not participate in the program (Cross, 2002). It was also found that the at-risk youth who participated in the outdoor intervention program demonstrated significantly greater perceptions of personal control. One aspect of AE is the sense of belonging or group cohesion and SWD (at-risk youth) are in great need of dissipating their feelings of powerlessness and social isolation. Adventure education is one method to help improve these feelings.

Teacher Attitudes Towards Inclusion

Some students in the classroom will be SWD and teachers need to know how to build the AE environment to allow participation and success by all students. General

physical educators would be the most likely candidates to implement an AE program in a school or district. By properly training the teachers in inclusion practices and methods, there will be more positive attitudes from the teachers towards SWD. These positive attitudes can help lead to a healthy and inclusive learning environment. Combs, et. al, (2010) designed a study to identify teachers with positive attitudes towards inclusion of students with mild to moderate disabilities and to investigate through interviews, how their attitudes were formed and how their attitudes affected their teaching.

To determine attitudes towards inclusion in general physical education the Physical Educators Attitude Towards Teaching Individuals with Disabilities - III (PEATID-III) was used. The PEATID-III consists of a series of statements that require teachers to express their beliefs about teaching individuals with disabilities in their general physical education classes. There were 150 PEATID-III questionnaires mailed and 26 were returned to the researchers. Out of the 26 returned, the researchers placed all participants on a continuum ranging from the most positive attitudes towards inclusion to the most negative attitude towards inclusion. Further, the top two scoring participants were selected to interview and investigate how their attitudes were formed and how it affected their teaching. Qualitative data analysis procedures were used to explore the participant's views, opinions, and teaching practices regarding the inclusion of children with disabilities into their general classes.

Results revealed that the two teachers with the most positive attitudes towards inclusion in general physical education had completed formal adapted physical education courses in their preservice education program. This shows that there is a positive relationship between teachers' attitudes towards inclusion and the amount of educational

preparation (Combs et al., 2010). By having this formal preparation the two teachers with positive attitudes viewed students' success in physical education as progress in student motor performance compared to if the student was busy, happy, or good. The teachers positive views about the student's success is a factor in effective teaching in physical education (Combs et al., 2010).

Several factors play roles in the process of including SWD into general education settings. Some of these factors are attitudes of teachers towards inclusion, class size, type of disability, and the attitudes of typically developing peers (Boer, Pijl, & Minnaert, 2012). When all of these factors are present and include positive attitudes towards SWD, the student with a disability has a greater chance of being successful.

Peer Attitudes Towards Inclusion

Adventure education is designed to make students of all abilities, including SWD, successful and create a meaningful experience. To best lead all students, the teacher or facilitator needs to have a positive attitude towards SWD and know how to include all students. In addition to teachers having a positive attitude, it is extremely important for peers to also have a positive attitude towards SWD. A positive attitude is needed because it will lead to more positive social interaction and an eagerness to help other students when needed.

The practice of inclusive education and difficulties experienced by SWD in social participation led to an expansion of studies focusing on the attitudes of students without disabilities towards those with disabilities (Boer et al., 2012). Negative attitudes may result in low acceptance by peers, few friendships, loneliness, and even being excluded from the group. If these situations happen, SWD will not have a successful educational

experience and possibly a negative outlook on AE. This negative outlook on AE could lead to nonparticipation or being unsuccessful.

Bardon, Parker, Siperstein, and Widaman (2007) conducted a national survey of middle school students and their attitudes toward the inclusion of peers with intellectual disabilities (ID). The authors reasoned from previous studies that contact with and exposure to SWD would influence how youth view their peers. This discovery led to their hypothesis that youths' expectations about the ways that inclusion could affect them personally would also influence their beliefs about inclusion.

The 5,837 students from all demographic areas and levels of education who took part in this study were surveyed to identify their attitudes towards the inclusion of peers with ID. The survey included questions assessing the students' prior contact with persons with disabilities and exposure to SWD. There were five attitude scales that the students answered. These scales included topics pertaining to perceived capabilities of students with ID, impact of inclusion on the student's class, behavioral intentions to interact with peers with disabilities, academic inclusion beliefs, and nonacademic inclusion beliefs.

Results indicated the students' believed that inclusion of peers with ID would teach other students that being different is acceptable and believe that students might become more acceptable of others through this contact. Another aspect was that youth who perceive students with ID as being more competent are also more positive about the inclusion of those students in the academic classroom (Bardon et al., 2007). The only way to see these kinds of attitudes in nondisabled students is to have the youth get more interaction with SWD. The best way to do that is to foster a positive inclusive environment so that both students with and without disabilities can benefit socially.

Bendu, et. al, (2012) conducted qualitative research by interviewing middle school students to obtain their perspective regarding academic and social inclusion of SWD. While inclusion extends beyond just serving the needs of SWD, they remain one of the populations being excluded both socially and academically. Students who feel a sense of belonging express more positive attitudes toward school and higher academic engagement (Bendu, et. al, 2012). Katz wanted to further investigate students' perspectives/attitudes towards inclusion because student attitudes directly impact the social inclusion of SWD.

The 31 students who were selected for this study were from British Columbia and in grades 5-7. The students were given two case study scenarios and then answered questions about them. The questions focused on social awareness, respect for other, and barriers to and facilitators of inclusion. The students were asked what they thought the SWD was thinking/feeling, and whether the group should include or work with the SWD and in what way/using what strategies.

The willingness and effort from students without disabilities to engage socially with students with disabilities is necessary for the social inclusion of SWD to be successful. The students who answered the questions regarding the scenarios expressed a need for strategies that enable them to successfully include a SWD. The students also expressed an interest in implementing more disability awareness and the importance of friendship and belonging. These areas of interest for the students who participated could be because they have grown up in diverse, inclusive classrooms giving them the experience of living and learning with SWD (Bendu et al., 2012).

The inclusion of SWD shouldn't be limited to K-12 schools but transfer to higher education and other areas of life. In recent years, a movement has developed to provide inclusive postsecondary education to young adults with ID (Day, Griffin, Hodapp, McMilan, & Summer, 2012). By extending inclusion to higher education, it provides SWD the opportunity to continue learning academic material, expand their social circles, gain employment experience, and develop independence all alongside their same-aged nondisabled peers.

Day et al. (2012) assessed attitudes by surveying 256 college students about their attitudes toward students with ID in their classes. Because the main goal was to gain a general understanding of the attitudes of enrolled students at the university level, students who have previous interaction with students with ID and students who had no previous interaction with students with ID were surveyed. The survey was composed of 35 items. Most of these items were multiple choice or used a Likert scale. There were 5 categories addressed: demographic information, perceptions of abilities of students with ID, interaction with people with ID, willingness to interact with students with ID, and positive and negative attitudes toward including students with ID in college.

Overall, the students indicated positive attitudes toward students with ID. The students who had previous experience interacting with students with ID had a more positive attitude towards inclusion at the higher education level, were more willing to interact with them, and thought more benefits were associated with their inclusion. If those who have had previous experience with students with ID hold positive attitudes towards inclusion, then there should be more interaction between students without disabilities and SWD to foster the most successful inclusive environment.

From the reviewed research literature, results indicate that if there is more interaction between students with and without disabilities then there would be more positive attitudes towards SWD leading to more involvement and inclusion. In AE or education in general, the goal is to have students of all abilities participating and being successful. The best way to do this is through using Universal Design for Learning to help foster an inclusive environment for all students.

Practical Teaching Literature

Universal Design for Learning (UDL)

Adventure education is one method to include people of all abilities and backgrounds whether they are at-risk students, SWD, reserved and shy students, or loud and extrovert students. One way to make sure all students are included appropriately is to utilize Universal Design for Learning (UDL). UDL is an extension of UD, which is universal design. Universal design emerged from architectural design of buildings to offer access to all who entered (Bernacchio & Mullen, 2007). Universal design is required in all public buildings to allow full accessibility by all as required by federal regulations.

Universal Design for Learning is a framework that helps educators to remove barriers and provide supports while also challenging students (Harte, 2013). Universal Design for Learning in education means that physical, social, and learning environments are designed so that diverse learners are supported through teaching and learning (Lieberman & Houston-Wilson, 2009). Universal design works best when the curriculum is flexible. Flexibility requires variation in the way information is presented to students, opportunities for students to express their knowledge, and student engagement, which

could include choices, incentives, and supports. By promoting these variations for all students, UDL minimizes attention to disabilities among students. Flexibility in the curriculum and in instruction delivery can increase supportive interaction and socialization among same aged peers (Bernacchio & Mullen, 2007).

To increase student engagement socially and academically, Katz (2013) developed and tested the Three Block Model of UDL. The Three Block Model of UDL provides teachers with a method for creating an inclusive environment and improving student engagement (Katz, 2013). The teacher implements this model in three stages or blocks: Social and Emotional Learning, Inclusive Instructional Practice, and Systems and Structures. In Social and Emotional Learning the teacher and students build a compassionate learning community and a democratic classroom management system. The second block, Inclusive Instructional Practice is a step-by-step planning and instructional framework that outlines how to build an environment where differentiated learning opportunities take place as well as giving teachers the tools to plan units that incorporate evidence based practices. In Systems and Structures policy, divisional implementation requirements, and school based service delivery models are outlined.

The Three Block Model supports the idea that UDL can be used to increase social and academic engagement among students. Another way to implement UDL is through PAL (planning for all learners) procedures. PAL is a four step process for designing and implementing a curriculum that is accessible and effective for all learners (Meo, 2008). In response to the ever growing level of diversity in classrooms today, the Center for Applied Special Technology (CAST) developed PAL. PAL can be applied to various content areas in and out of the classroom, which makes it very versatile and flexible. The

PAL process provides teachers with practical steps that can be used in planning curriculum that improve learning outcomes for all students (Meo, 2008).

Prior to starting the PAL process, a PAL team needs to be established and include regular and special education teachers and any other professional who focuses on the foundation of instruction. Once the team has been established they can go ahead and get started with step one which is to set goals. The team needs to determine what they want all students to learn and the aspects of the goals that must be held constant for all students. The team must provide background for the unit and align goals with state and federal standards. The next step is analyzing the current status of curriculum and the classroom. The team must collect current instructional methods, assessments, and materials used in the curriculum. To help in the process they must also understand the diverse nature of their classroom and the students in it. If you do not know your students it will be extremely difficult to meet their learning needs. This gathering of information will be used to identify existing curricular barriers that could prevent access, participation, and progress for all learners. The third step in the PAL process is applying UDL to lesson or unit development. Now that the team has clear goals, an understanding of student population, and an understanding of currently used materials they can apply the core principles of UDL to their unit. The team should identify methods, assessments, and materials that align with UDL and develop a unit that align with the principles of UDL to teach. The final step is to teach the UDL lesson or unit to the students.

After the final step of teaching the unit to the students, it is very important for the team to self-assess the unit and see if it was applicable to all learners in the class. If the lesson needs to be revised then the team should take the time to revise and improve, to

reduce barriers and make the material accessible for all. Once the material is accessible for all then the team can move on to the next unit.

Universal Design for Learning is an efficient way to provide students access to the curriculum (Lieberman & Houston-Wilson, 2009). There are more instructional methods that employ the principles of UDL. These methods can be used in both the above mentioned delivery models, PAL and the Three Block Model. Some instructional methods can include physical access by ensuring the classrooms, gyms, fields, and pools are accessible for students of all abilities including those with disabilities (Lieberman & Houston-Wilson, 2009). Physical access would include equipment use and making sure there is a wide variety of equipment for students to use. In AE for example, a student with a physical disability could use a specialized pulley system to be lifted onto the high ropes elements. Another instructional method is specific feedback. Teachers should provide effective prompting during activities and also provide specific feedback after an assignment (Lieberman & Houston-Wilson, 2009). By providing specific feedback, the student will know what skills need improvement and what skills they are doing well. Inclusiveness is another instructional method that employs the principles of UDL. To build an inclusive environment, the teacher and students work to build a classroom that respects and values diversity. Students and teachers should avoid stigmatizing or segregating any student (Lieberman & Houston-Wilson, 2009).

To help in making the inclusive environment in AE more beneficial for all students, equipment modifications are needed. Zimmerman, (2012) developed a manual that will help teach both general and adapted physical educators how to modify equipment or use specialized equipment for high and low elements in AE. Adventure

Education already provides physical and emotional challenges and successes so it is important to ease the physical challenges for SWD who need extra assistance (Zimmerman, 2012).

It is extremely important for the facilitator and teacher to recognize and be responsible for the safety of all participants. The facilitator and teacher should also be highly trained and qualified to run both low and high elements from an accredited AE organization. While performing low and high elements, it is important that safety precautions are followed at all times for every student.

The first piece of equipment that could assist SWD in AE is the hand crank. The hand crank can be used to assist the student with a disability up from the ground to the challenge course. The hand crank is a device the SWD turns with their hands to help them ascend to the high elements.

Another piece of assistive equipment for AE is a gait belt with loops attached. This piece of equipment can be used for students who need assistance standing or moving independently. The gait belt would be beneficial for SWD because it will ease in the physical challenge that comes with high elements. The loops on the gait belt can be connected to another student without disabilities to help physically support the SWD navigate the high element.

The arm pulley system (APS) is a piece of assistive equipment used most often for wheelchair users. The APS is attached to the student's harness and is secured to an anchor above the student. The APS is very easy for the SWD to use. The APS is used when a student has use of their upper body but not of their lower body. The student would need to lift up on the APS and then pull down. The motion of pulling down is

needed because the APS is attached to an ascender and the ascender will stop hold the system in place and the student will not fall or slip.

The most beneficial piece of assistive equipment is the bootie bag. The bootie bag is a soft chair that is flexible and is clipped to a rope from above. The bootie bag can be utilized by having two, 3 to 1 pulley systems running at the same time. The student with a disability using the bootie bag would be someone who has severe physical limitations or has little strength in either their upper or lower body. The majority of the effort to get the student up to the high element is not the responsibility of the student with a disability. It is on the responsibility of the people pulling the 3 to 1 pulley system.

SWD that are involved in AE need physical assistance when participating in low and high elements. By modifying or using specialized equipment, along with emotional support, will make SWD successful in AE.

Summary and Conclusions

The Americans with Disabilities Act (ADA) legally provides access to universal AE and ensures that people with disabilities have the opportunities that are similar to those persons without disabilities (Sugarman, 1993). As more individuals with disabilities become involved in AE through school programs, it becomes the responsibility of facilitators and teachers to foster a safe and effective inclusive environment (Sugarman, 1993).

One way to develop an inclusive environment is through the use of UDL. Teachers can apply the principles of UDL to AE to produce an inclusive environment for students of all abilities. Universal Design for Learning is a framework to help educators remove barriers and provide supports while also challenging students (Harte, 2013).

There are many ways to implement UDL such as the Three Block Model and Planning for All Learners, which can be easily applied to AE.

It also helps to ensure that teachers or facilitators are comfortable with and have positive attitudes towards UDL and building an inclusive environment for students of all abilities. If the teacher or facilitator is not familiar with how to include SWD, then the student is not going to benefit from all that AE has to offer. It is also key to have positive peer attitudes towards students of all abilities so that all students are included and feel encouraged to participate and be successful in AE.

Adventure education has many physical and emotional benefits for students of all abilities including SWD. These benefits are gained through group interaction during an AE unit or program. Creating an inclusive environment in AE allows for a greater focus on each participant's ability and not their disability.

CHAPTER III

CRITICAL ANALYSIS

Introduction

Adventure education (AE) is flexible in the ways it is taught and experienced by teachers, facilitators, and students. More specifically, universal AE can be best achieved through Universal Design for Learning (UDL). The following sections describes teaching models used for AE, instructional strategies used for AE, highlights of the accompanying instructional video, summary of the Holmen High School Universal Adventure and Outdoor Pursuits class, resources for teachers and facilitators, and recommendations for future research and projects.

Teaching Models for Universal Adventure Education

Universal Design for Learning

Universal Design for Learning in education means that the physical, social, and learning environments are designed so that diverse learners are supported through powerful possibilities for teaching and learning (Lieberman & Houston-Wilson, 2009). To help build an inclusive environment within universal AE, UDL can be used by applying different teaching models. These models include the Three Block Model for Universal Design, Planning for All Learners (PAL), physical access, interaction, and others.

The Three Block Model

The Three Block Model provides teachers and facilitators with a method for creating inclusive environments and improving student engagement (Katz, 2013). The Three Block Model can be used to implement UDL. The first block of the model examines social and emotional learning. This block involves building compassionate learning communities and democratic classroom management. The compassionate learning communities can be built through the seven stages of AE. Knowing other students' names, building group cohesion, and group dynamics can help build a compassionate environment because the students know they are being thought of and feel like they are part of the group. For a SWD it may be hard to communicate with others and by creating a compassionate environment, SWD can feel more comfortable communicating with their peers.

The second block in the Three Block Model is inclusive instructional practice. This block outlines planning and instructional frameworks. The physical and instructional environments are designed so that students have access to differentiated opportunities to learn. By planning for different learning styles the teacher and facilitator are making AE accessible to all students. Within this block there is regular and frequent feedback and assessment so that teachers and facilitators can assess learning as well as physical and emotional needs. The students' physical and emotional needs are extremely important in AE. If students are not physically and emotionally safe they will not be able to fully participate in AE and group cohesion, a goal of AE, will not exist.

One way to assess students' physical and emotional needs is through debriefing. Debriefing is done at the end of each activity or each stage of AE. Debriefing is

recommended so students have a chance to reflect on their experiences and to express their likes and dislikes. Debriefing usually takes place as a group but can be done in other ways. The answers and discussion that happens during debriefing can be used to evaluate how the students are feeling. If the students have negative feelings or experiences then the teacher's future lessons can be modified to change the negative feelings to positive feelings. These changes are based solely on the group dynamic and what would best suit the group. This is a time when teachers need to be flexible and make sure they are meeting student needs.

During a debrief a teacher or facilitator can ask the group questions to elicit a discussion such as, "what style of communication did you use to complete the activity?" or "were there any obstacles your group encountered in completing the problem solving activity. If yes, how did you fix them?" If there is little discussion among the students then maybe a different debriefing option would be best to accommodate the group of students. Other forms of debriefing are journal writing, solo reflection then share with the group, drawing their experiences, and duoing. Duoing is when students are paired together and share their experiences with a partner instead of sharing with the entire group. It is important that the teacher listens and communicates carefully with each student to assess their physical and emotional needs. One way to apply this to universal AE is to pair a SWD with a student without a disability. The student without a disability can prompt the SWD to answer questions and elaborate on situations they have experienced.

The final block of the model is a focus on student autonomy. Student autonomy has been shown to increase student engagement and achievement (Katz, 2013). Student

engagement is needed in AE so students of all abilities have access to the many benefits of AE. In universal AE student engagement can be seen throughout all seven stages of adventure when the students are interacting. For example, students are highly engaged during problem solving because the entire group is working together to solve a problem.

Planning for All Learners

The Three Block Model is one way to apply UDL to AE but not the only one. There are other options such as Planning for All Learners (PAL). PAL is a process for developing curricula that addresses the diversity of today's classrooms (Meo, 2008). PAL provides teachers and facilitators with practical steps that can be used in planning curricula to improve learning outcomes for students of all abilities. PAL is best followed by using a four step process.

The first step in PAL is setting goals. In this step, the teacher or facilitator decides what they want their students to learn during the AE unit in physical education. What specific goals do they want the students to meet? For example, one specific goal would be, by the end of the unit the students will demonstrate an understanding of and respect for, differences for students with and without disabilities. The teacher might want to include learning objectives for physical, personal, and social responsibility. Some of the goals set by using the first step of PAL could align with IEP goals for SWD. For example, if the IEP goal was to demonstrate more social interaction among same aged peers, the inclusive environment in universal AE can help in achieving this IEP goal.

The second step of PAL is to analyze the current status of the curriculum and classroom. The teacher uses this step to collect baseline information about current

instructional methods, assessments, and materials used in the content area (Meo, 2008). This baseline can be used to identify existing barriers in the curriculum that could prevent students from accessing and participating in AE. The teacher or facilitator needs to identify barriers so they can be removed or changed to allow students of all abilities the opportunity to participate in AE. These barriers could be a range of factors such as lack of materials needed for AE or physical barriers for a SWD. An example of a physical barrier for a SWD would be no ramp to a low element for a wheelchair user or an unsafe challenge course for use by all students.

The third step in PAL is to apply UDL to unit development. This simply means that the teacher or facilitator needs to be mindful and flexible when designing the AE unit for their students. This requires them to be aware of alternative methods of instruction, delivery of instruction, materials/equipment needed for student population, and assessment methods (Lieberman & Houston-Wilson, 2009).

The final step in PAL is teaching the UDL unit. This step includes teaching the AE unit, evaluating student success, and revising the AE unit to better suit future students. The debriefing process previously mentioned can help the teacher evaluate the AE unit. The teacher has access to student work through journaling or discussion and can use what the students say to modify or change the AE unit in the future.

Instructional Strategies for Universal Adventure Education

In addition to PAL and the Three Block Model, there are other ways to use UDL to create student success and build an inclusive environment in AE. Lieberman and Houston-Wilson (2009) use six instructional strategies to employ the principle of UDL.

These instructional strategies are inclusiveness, physical access, delivery methods, interaction, feedback, and assessment.

Inclusiveness

To build inclusiveness the teacher or facilitator needs to create an environment that respects and values students' differing educational needs. The seven stage process of AE helps create this environment because the students learn how to communicate effectively with each other, problem solve as a group, get to know each other deeper, are having constant interactions among one another, and are always looking out for each other's physical and emotional safety. All of these planned events help to create an inclusive environment.

Physical Accessibility

To ensure physical accessibility for students of all abilities, teachers and facilitators need to assess their physical environment prior to starting an AE unit in physical education. The physical environment, including the gymnasium, classroom, fields, climbing facilities, locker rooms, challenge course, and other areas should be accessible to individuals with a wide range of abilities. Some of these physical abilities and disabilities may include obesity, wheelchair users, physical impairment, cognitive disability, visual impairments, and others. To ensure physical accessibility, a wide range of equipment options can be used.

Delivery Methods

Delivery of instruction and methods are another way to use UDL in AE. By alternating methods of delivering instruction the teacher is increasing the learning of

curricular content, and in this case, AE. Some ways to modify delivery are through picture icons, simplified rules, physical demonstrations prior to activity, and videos. Each method should be accessible to a wide range of abilities, interests, disabilities, and previous experience. In AE an example would be a student with previous AE experience leading a dehumanizer activity for the group.

Interaction

Interaction among peers is an effective way to implement the principles of UDL within AE. The teacher or facilitator should create situations where students are in groups, partners, class discussions, and individual or group demonstrations. Interaction among peers is integrated within each stage of AE. By providing opportunities for peer interaction, the teacher is helping to build an open and inclusive environment for students of all abilities. In universal AE, one way to facilitate interaction is to establish pairs that include one SWD and one student without a disability during any stage of AE.

Interaction between the teacher and students is also very important. If one of the focuses of AE is group success then the teacher should be a part of that as well. One way to allow students to feel as though the teacher is involved in the group success is to always debrief or discuss in a circle. This allows no one person to be 'above' others in the group. If everyone is standing/sitting in a circle then everyone is on an even playing field and no one person is more important than another. Every student or teacher is an equal member of the group.

Feedback

Giving feedback to students is an effective way to let them know their progress throughout an AE unit. During AE it is important to give feedback to students about how they are interacting with the group. A focus of AE is group success and if students decide they no longer want to be part of the group then the group success will suffer. This is not fair to other students in the group who are working hard. Students giving the teacher and facilitator feedback is also beneficial in AE. This way when the unit is progressing the teacher or facilitator can modify activities that meet the specific and unique needs of the group.

Assessment

Providing multiple assessment methods lets students demonstrate knowledge, understanding, and skills learned throughout AE. Beyond traditional assessments like rubrics and checklists, provide students the opportunity to be creative in demonstrating their understanding and knowledge. These alternative assessments could include group work, demonstrations, routines, station work, portfolios, and presentations. An example of a presentation assessment at the end of the universal AE unit would be a compilation of pictures or videos taken throughout the semester that the students put together to highlight what they learned, the fun they had, and the new relationships they have built.

There are many benefits of using UDL such as full access for all students to the curriculum and physical environment. There can also be an increase in active participation of all learners and reduced frustration for all involved (Lieberman & Houston-Wilson, 2009). By using the Three Block Model, PAL, and the instructional

methods suggested by Lieberman and Houston-Wilson (2009) universal AE units can be successful.

Description of Video

The instructional video that accompanies this project includes an overview of AE, as well as an explanation of the seven stages of AE. Along with each stage, there are examples of activities used in the stage of a universal AE unit. There are also examples of instructional methods used in universal AE such as inclusiveness, physical accessibility, and interactions. The video includes practical modifications and accommodations for students of all abilities within AE, as well as descriptions of resources that can assist in the process of designing and implementing a universal AE unit within physical education. Finally, there is an extensive case study of a successful universal AE program at Holmen High School in Holmen, Wisconsin. The video can be found at <http://www.uwlax.edu/Physical-Education-Teaching-MS/Adapted-Physical-Education-Graduate-Study/>.

Holmen High School Universal Adventure and Outdoor Pursuits

The Universal Adventure and Outdoor Pursuits (UAOP) class at Holmen High School has included many students with and without disabilities for several years. The class is offered twice a year during the third and fourth terms and is co-taught by a general and adapted physical education teacher. Beyond the physical education teachers' knowledge in universal AE, there is a strong relationship between UAOP and the local university, the University of Wisconsin-La Crosse. At the university there is an expert in adventure education, Dr. Jeffrey Steffen. By having this close relationship, UAOP and its

instructors are able to seek guidance and knowledge from Dr. Steffen and his colleagues. This relationship also serves as a way to develop creative ideas and activities for the high school students. Along with using university resources, school district Educational Assistants also contribute to UAOP. The instructors are able to utilize their talents and knowledge of each student to better create a successful environment for all students.

Students with and without disabilities are selected for the class. For the SWD, the adapted physical education teachers discuss if these students will be successful and have an engaging experience in the class. For the students without disabilities, there is an application process for selection to the class. The application (see Appendix A) is reviewed by a general physical education teacher to verify that the student is capable of protecting the physical and emotional safety of all students in the class, which is one of the main goals of UAOP. Students without disabilities are also required to write a short essay to explain why they are interested in the class and their prior experiences in AE and working with SWD.

After the selection process is complete students of all abilities begin the class. On the first day there is an orientation for all students about expectations and their roles in the class. This is an excellent way to communicate to the students without disabilities the important role they play in supporting the SWD and other students in the class. They are expected to provide leadership as positive role models for SWD.

Throughout the term there are many different activities in which all students participate. These activities include AE and outdoor pursuits. This combination of AE and outdoor pursuits is common in physical education programs. It is best to combine these because there is a large group of students and one goal of AE is to focus on group

cohesion. This can help facilitate an inclusive environment while participating in outdoor pursuits. All students are helping each other and all are focused on group success. To best meet group goals some students may have to sacrifice their own success to help another student reach theirs. Putting someone else's success before yours is one of the main goals in the Holmen High School Universal Adventure and Outdoor Pursuits class.

Resources for Universal Adventure Education

Books

1. Constable, N., Faulkingham-Hunt, L., Kohut, A., Rheingold, A., & Panicucci, P. (2003). *Adventure curriculum for physical education: High school*. Beverly, MA: Project Adventure.

The Project Adventure curriculum helps educators integrate and implement all or part of a K-12 AE unit into an existing physical education curriculum. The book covers curriculum structure and alignment with national physical education standards at the high school level. If educators do not want to follow the exact curriculum they can use activities provided in the book. The book also describes detailed lesson plans and assessment tools used in an AE unit within physical education.

2. Faulkingham-Hunt, L., Kohut, A., Rheingold, A., Stratton, N. & Panicucci, P. (2002). *Adventure curriculum for physical education: Middle school*. Beverly, MA: Project Adventure.

This Project Adventure curriculum helps educators integrate and implement all or part of K-12 AE unit into an existing physical education curriculum. The resource book describes the curriculum structure, format, and alignment with national standards in physical education. The book also provides detailed lessons that an educator can use to teach AE to middle school students. Equipment needed, assessment tools, and safety precautions are provided.

3. Rohnke, K. (1974). *Adventure curriculum: Physical education*. Hamilton, MA: Project Adventure.

The Adventure Curriculum book is very useful for educators who want to begin teaching AE. The book is many years old but contains important rationale and justifications for teaching AE. The games and activities described in the book are still applicable. There is also a section on the importance of cardiovascular endurance and its role in AE. Chapter six in the book describes practical considerations such as weather concerns, time management, safety, and teaching in a co-educational environment.

4. Morris, D. & Stiehl, J. (1989). *Changing kids' games*. Champaign, IL: Human Kinetics.

This book describes how to play games with students. Games are very applicable to AE because educational games are played throughout the seven stages of adventure. The book describes the reasoning for playing games with students including specific purposes for games. What is most helpful in this book are Chapters 3 and 4. These chapters discuss how to design and present games. Chapters 3 and 4 are most useful for the educators who will be facilitating AE with their students. A teacher needs to know how to present a game to a group of students as well as how to evaluate and assess the game for future use. The final chapter in the book presents a very long list and directions of educational games. Some of these games are applicable to AE and fit within the seven stages of AE.

5. Butler, S. & Rohnke, K. (1995). *Quicksilver: Adventure games, initiative problems, trust activities and a guide to effective leadership*. Dubuque, IA: Kendall/Hunt.

This book is split into two sections that are extremely beneficial for adventure educators. The first section is about adventure leadership. It describes the leader's (teacher) role, how to recognize a good leader, how to properly debrief, and how to put

your own 'flare' in your AE teaching. The teacher or facilitator prior to starting an AE unit, should read the first section of the book. The second section is an extensive list of activities conveniently split into the stages of AE. Quicksilver is one of the most important resources to read before an educator begins their AE unit.

Book Chapters

1. Rogers, D. (2003). Teaching accessibility. In J. Steffen & S. Wurdinger (Eds.) *Developing challenge course programs for schools* (189-228). Dubuque, IA: Kendall/Hunt.

This chapter reviews the laws that mandate inclusion of people with disabilities in AE and other adventure programming. The chapter also describes a school challenge course program inclusion model that teachers can use to help facilitate an inclusive environment when implementing a unit that involves challenge courses. There are also activity modifications and adaptations to follow when accommodating persons with disabilities. A brief section describes a variety of disabilities and specifics on how to best include these students into adventure programming.

Journal Articles

1. Grenier, M, Iarrusso, K., & Rogers, R. (2013). Including students with Down syndrome in adventure programming. *Journal of Physical Education, Recreation & Dance*, 79(1), 30-35.

This article states that one out of every 1,000 children in the U.S. is born with Down Syndrome (DS). The article gives suggestions for best accommodating students with DS. One suggestion is to not rely heavily on adult support and use more peer support so the students with DS have more social interaction. Another facilitation strategy is to use proactive verbal cuing for students with DS during different stages of AE.

2. Hersman, B. & Hodge, S. (2015). Using adventure education to facilitate inclusion of students with disabilities in physical education. *PALAESTRA*, 29(2), 30-33.

This article states that there are many benefits of inclusive physical education for SWD and students without disabilities. Adventure education can have a positive impact on students' personal behavior and social interactions in general physical education. The article reviews proper facilitation and debriefing techniques used by educators to make all students feel like a member of the group. The article also discusses how to create a cooperative environment, rather than a competitive environment so all students can be successful.

Master's Project

1. Zimmerman, D. (2012). Development of a teacher's manual for adaptations for students with physical disabilities on challenge courses and climbing walls. Unpublished masters degree manuscript, Department of Exercise and Sport Science, University of Wisconsin-La Crosse, La Crosse, WI.

The manual is specifically about persons with physical disabilities and how to accommodate them on climbing walls and challenge courses. This resource is very useful for any educator that will be including SWD in AE. The seventh stage of AE is high elements, which are performed on a challenge course. The manual gives equipment modifications for students with physical disabilities to allow them to participate with their nondisabled peers.

Companies and Organizations

1. ABEE Inc.: *Reach New Heights* – www.abeecinc.com

ABEE Inc. is a company that provides services in AE to educational institutions, camps, conference and outdoor education centers, resorts, health care providers, and

corporations. ABEE Inc. advocates for AE in the PK-12 school setting. ABEE Inc. can certify teachers and staff in AE. It is the “go-to” organization for equipment purchasing and care. ABEE Inc. can also help with sequencing activities to best fit the needs of a group of students.

2. Project Adventure: *Advancing Active Learning* - www.project-adventure.org

Project Adventure, started by Karl Rohnke, has been supporting AE in the physical education curriculum for over 40 years since its development in 1971. Project Adventure is an international, nonprofit organization that provides individuals with the tools necessary to challenge themselves by overcoming obstacles through AE. Project Adventure provides workshops, programs, challenge courses, and an extensive selection of books to help assist a teacher or facilitator to develop their own AE unit.

3. The Association of Challenge Course Technology (ACCT) – www.acctinfo.org

The ACCT is the world’s leading and largest American National Standards Institute Accredited Standards Developer. ACCT is focused solely on the challenge course industry. ACCT can help adventure educators build and design challenge courses that meet the unique needs of their students and also certify teachers and staff on challenge course operations that are internationally recognized. ACCT also has a committee on Universality. This committee would be extremely helpful in providing specific techniques when including students with a wide range of abilities within universal AE.

Recommendations for Future Research

Adventure education is an under researched topic within physical education. There are limited research based resources that are specific to AE. The following are research questions for future study in the area of adventure education:

1. What are the best instructional strategies to use when teaching universal AE?
2. What are the best activities to emphasize during elementary AE vs. secondary AE?
3. What are the best pieces of modified equipment to use with SWD when teaching AE?
4. Is there a different progression of stages that should be followed when teaching universal AE?
5. Are there more than seven stages of adventure that should be taught when teaching universal AE?
6. Is there a difference between the student outcomes between universal AE and segregated AE?
7. Do all persons with different types of disabilities benefit to the same degree from AE?
8. What are the socialization impacts of universal AE on SWD compared to students without disabilities?

Recommendations for Future Critical Analysis Projects

The following are future project recommendations in regards to universal AE:

1. A worthwhile project would be to design a complete universal AE curriculum that physical educators can use to include a wide range of abilities. Within the curriculum there would be modifications that can be made to each stage for a variety of learners, SWD, differing personalities, and others. Educators could continually expand on the project to include more and more disabilities or learning styles. They can also expand on the project with their creative ideas for different games, activities, and additions to what is already established.

2. A resource binder could be developed for each stage of adventure that holds all of the games and activities specific for each stage. These games and activities would include modifications for SWD and differing learning styles. This resource binder would give educators the freedom to pick and choose different activities or games that best suit the unique needs of their students.

3. A project could develop steps on how to include universal AE into a high school physical education curriculum. The project would include the necessary steps to get approval from administrators, funding, student application process, and specific curriculum.

4. A resource binder could be developed about equipment modifications or specialized equipment for use with certain disabilities. For example, one disability is autism and within the binder there would be a section on equipment modifications to use at each stage of AE for students on the autism spectrum.

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APPENDIX A

HOLMEN HIGH SCHOOL UNIVERSAL ADVENTURE AND OUTDOOR
PURSUITS STUDENT APPLICATION

Universal Adventure & Outdoor Pursuits

Physical Education Teacher Recommendation Form:

This course will utilize the inclusion of students of a variety of ability levels in a cooperative environment. The course will be team taught by a Physical Education Teacher and an Adapted Physical Education teacher. Activities may include seasonal outdoor pursuits (ice fishing, caving, snowshoeing, cross country skiing, orienteering, archery, and indoor rock climbing). To achieve the full benefits/experiences of outdoor pursuits, off campus field trips will be a part of this class. There will also be a course fee of \$25.00 - \$30.00 to cover field trip costs.

A Physical Education teacher must sign this form in order for a student to register into this course. This is to ensure that each student will be able to protect the physical and emotional safety of everyone in the group. The student must have completed 1 credit of Physical Education which includes freshmen PE. During previous Physical Education classes, the student should have demonstrated exemplary personal and social behavior, a willingness to help others, and the ability to put the goals of the class above his or her personal goals. The student must also understand the purpose of the class, and that by signing up for this course he / she is making a commitment to the goals of the class, and to the other group members. If students violate the physical or emotional safety of the group at any time during the class they will be removed for the day and will be given a sit-out, and their grade will be reduced by 1 full letter grade. If this becomes a reoccurring issue the student will be dropped from the course. **(Return form to the guidance office prior to registration)**

Students Name: _____

Term: Circle term/terms interested in taking 3rd 4th 3rd & 4th

Physical Education Teachers Name: _____

Teachers Signature: _____

Briefly explain why you are interested in the course and what you can contribute to the class: _____

APPENDIX B

CRITICAL ANALYSIS PROJECT VIDEO SCRIPT

DESIGNING AND IMPLEMENTING A UNIVERSAL ADVENTURE EDUCATION
UNIT IN HIGH SCHOOL PHYSICAL EDUCATION

Designing and Implementing a Universal Adventure Education Unit in
High School Physical Education

Content and Script

Title Page

Assorted Clips of activity at Holmen High School and UW-L course using students with disabilities.

Me: Welcome adapted and general physical educators to this instructional video about designing and implementing a successful universal adventure education unit as part of a high school physical education curriculum. My name is Bridget Laszewski and I am in the adventure education and adapted physical education graduate programs at the University of Wisconsin-LaCrosse. The goal of this video is to assist general and adapted physical educators with topics such as what is adventure education, universal strategies for students of all abilities in adventure education, design and implementation of an adventure education unit, and universal equipment modifications and to highlight an established and very successful Universal Adventure and Outdoor Pursuits Program at Holmen High School in Wisconsin. Let's get started!

Me: Adventure education is a *way* of doing; it is not just one activity in and of itself. There is a process of learning to achieve group goals. More specifically, according to Swann; Adventure Education refers to the actual teaching of the adventure activities including cooperative games, trust building activities, problem solving initiatives and low and high elements. This instructional video is focused on Adventure education within a physical education curriculum, not a recreational setting that you might see at a local summer camp or community YMCA.

By including Adventure Education into your physical education curriculum you will be meeting many national physical education standards such as standard 4: exhibiting personal and social responsibility, standard 2: applying knowledge of strategies, and standard 1: competency in a variety of movement patterns.

Me: The most common delivery of adventure education is a seven stage process combining both Christian Bisson and Karl Ronke's works. These stages include acquaintance activities, dehumanizers, communications, problem solving, trustworthiness, low elements and high elements.

For each stage there will be a voice-over of footage for that specific stage

Me: Acquaintance Activities include name games, or 'get to know you' games. The purpose of this stage is for students to become well acquainted with peers or classmates. Simply by learning someone's name and using it immediately can help elicit a more respectful environment among students. ****Silent while showing student do activity****

One way to modify acquaintance activities for students with a cognitive disability would be to create a face and name chart like this. (Show example) There would be a picture of all of the students' faces and their name next to the photo so the student can see the names next to a picture instead of having to memorize names based on verbal interaction.

Stage two involves icebreaker activities. This stage allows students to play games that increase their physical activity and use the previous acquaintance activities to build a fun and respectful environment through social interactions. ****Silent while showing students do activity****

One way to increase the participation of students with disabilities that may not understand the rules is to provide extra verbal support by using simple and direct statements without extra jargon. You could also develop a rules sheet with picture icons and action words to remind the student of their task at hand such as this (on screen show an example)

Stage three of adventure education is communication. The games and activities in this stage teach the students how to good listeners, how to use different types of communication, proper body language and eye contact when communicating with others. ****Show activity****

Stage four is problem-solving. The purpose of the games and activities in this stage are to allow the students to work through a difficult problem or situation together. The focus of this stage is process oriented rather than product oriented meaning the way the students complete the task is far more important than completing the task itself. A teacher would rather see the students using communication skills and teamwork to complete an activity than not using those skills and focusing on the product or completion of the activity. ****Student activity****

To make this stage more successful for students with a cognitive disability eliminate any abstract concepts such as imagery of a particular situation and specifically describe the task as it is. For example, in nuclear waste the students cannot spill the "nuclear waste" in the bucket before they reach their destination. For a student with a cognitive disability just eliminate a scenario and give them specific directions to not step spill the water. The abstract thinking could be confusing and overwhelming for the student.

Stage five is trustworthiness. The purpose of the activities in this stage is to teach students how to trust others and to become trustworthy individuals themselves. The students need to know *how* to trust their classmates so they can have a healthy relationship and also *how* to be a trustworthy person not just in the physical education setting but in everyday life with peers, teachers, other adults, etc. ****Student activity****

Low elements, which represent stage 6, are apparatuses that do not require a belay system but are group activities or scenarios that rely on the use of previous stages to complete. ****Student activity****

For accommodating a student with a disability the facilitator/teacher can modify the rules for each element to increase the success. The rules should be for all students and not specific to the student with a disability. For example, on the spider web element pictured here the students could use close pins to make bigger holes and areas to crawl through or walk through.

Finally, high elements are activities that take place on challenge courses or climbing walls either on indoor facilities or outdoor facilities. The high elements are individual challenges that are completed utilizing group support. These elements are usually the students' favorite activity and the

basis for many of their personal challenges they wish to overcome such as making it all the way up the climbing wall or going down the zip-line.

****Student activity****

The main modifications for students with disabilities at this stage are equipment adaptations. We will look at two pieces of equipment commonly used for students with disabilities. They are the 3:1 pulley system and booty bag.

****Explain each piece using a grad student. ****

After each stage of the adventure education process it is recommended to debrief so the students have a chance to reflect on their experiences they just had and express their likes, dislikes. Debriefing usually takes place as a group but can be done in different ways. To best meet the needs of the group of students the facilitator/teacher will ask questions to elicit a discussion among the students. Some questions might be "what style of communication did you use to complete the activity?" or "were there any obstacles your group encountered in completing the spider web and how did you fix them?"

If this style does not fit your group or best accommodate students with cognitive disabilities there are other options. These could include journal writing, solo reflection then come back together as a group, drawing their experiences or duoling which is when students are paired together and share their experiences with a partner instead of the whole group.

Now that we have discussed the adventure education process, lets shift our focus on how to best include students with disabilities in adventure education. According to Lieberman and Houston-Wilson more than 93% of children with disabilities are included in public schools. This inclusion often takes place in physical education including adventure education. Inclusion is the process of educating children with and without disabilities together. One way to facilitate inclusion is through Universal Design for Learning. Universal Design for Learning in education means that the physical, social, and learning environments are designed so that diverse learners are supported through powerful possibilities for teaching and learning. According to Lieberman there are many instructional methods that utilize the principles of universal design and can be adapted to an adventure education program.

One instructional method is building inclusiveness. This can be achieved by creating an environment that respects and values students with different educational needs. At the beginning of the adventure education unit, to foster the inclusive environment, the teacher can plan a lesson on diversity and include discussions about different disabilities. If appropriate those students with disabilities can discuss their disability to the class. Make the presentation very broad so no student is singled out. The teacher could also set behavior guidelines that avoid the possible segregation of students.

Another instructional method that facilitates inclusion is physical accessibility. This ensures that the gymnasium, classroom, fields, climbing facilities, and other areas are accessible to all ranges of abilities. Before you begin each session in your adventure education unit go to the location and make sure all students will be able to physically access the location. If the location is inaccessible then make sure you have a secondary location or modifications in place.

Delivery models are another way to employ universal design for learning. By alternating your methods of delivering instruction you are increasing the learning of curricular content, or in this case adventure education content. Some ways to make modifications in delivery is through picture icons, simplified rules, demonstrations prior to activity, and videos.

Finally interaction among peers is an effective way to meet the principles of universal design. As the facilitator or teacher create situations where students are in groups, partners, class discussions, and individual or group demonstrations. Interaction among peers is seen in each stage throughout the adventure education process. One specific way to facilitate interactions is to establish pairs that include one student with a disability and one student without a disability during the dehumanizer, communication, problem-solving and trustworthiness stages.

We have reviewed adventure education and strategies for inclusion through the use of universal design for learning. Now it's time to design your inclusive adventure education unit in your district. When designing inclusive adventure education you must first and foremost determine your student learning objectives. What are goals and objectives you wish your students to gain by the end of the program? For example; by the end

of the program the student will be able to demonstrate an understanding of and respect for differences for both students with and without disabilities. You might also want to include learning objectives that include physical, personal, and social responsibility. Some of the learning objectives you choose could achieve IEP goals for students with disabilities. For example if the IEP goal was to demonstrate more social interaction among peers the inclusive adventure education program can help in the process of achieving that goal.

As the physical educator it is your responsibility to advocate for and collaborate with your administration to get the resources and approval to begin an inclusive adventure education unit. By creating open lines of communication with your administration; they can in turn help with funding to receive resources and materials needed. They can also help with facility maintenance and improvements when needed. It is always a great idea to involve the administration at any point you can during the unit to show them the positive impact the program has on your students.

Holmen High School Universal Adventure and Outdoor Pursuits Class

The Universal and Outdoor Pursuits (UAOP) class at Holmen High School has included many students with and without disabilities for several years. The class is offered twice a year during the third and fourth terms and is co-taught by a general and adapted physical education teacher. Beyond the physical education teachers' knowledge in universal adventure education, there is a strong relationship with the University of Wisconsin-La Crosse where there is an expert in adventure education, Dr. Jeff Steffen. UAOP and its instructors are able to seek guidance and knowledgeable information from Dr. Steffen and his colleagues. For the students without disabilities, there is an application process for selection to the class. The application must be filled out by a general physical education teacher to verify that the students in the class, which is one of the main goals of UAOP.

Interview with Steve Eggerichs

Question 1: Why did you first start this universal adventure class as part of your physical education curriculum?

Question 2: The course has an application process for the students without disabilities. Could you explain this in detail and why do you feel this is necessary?

Question 3: What were your biggest challenges in designing and

implementing the class?

Question 4: What specific inclusive strategies or universal design methods do you implement during your class?

Question 5: How do you assess student learning or progress in the class for students with and without disabilities?

Question 6: What has contributed to student success in the class

****Assorted clips of adventure at Holmen****

Infused within the assorted clips- Interview with 2 nondisabled students

How long have you been involved with the Universal Adventure class?

Why did you want to join the Universal Adventure class?

What was your favorite moment in the class?

ACCT: Association of Challenge Course Technology

ACCT is the world's leading and largest American National Standards Institute Accredited Standards Developer. ACCT is focused on the challenge course industry. ACCT can help adventure educators build and design challenge courses that meet the unique needs of their students and also certify teachers and staff on challenge course operations that are internationally recognized. ACCT also has a committee on Universality. This committee would be extremely helpful in providing specific techniques when including students with a wide range of abilities within universal AE.

ABEE Inc. is another organization that advocates for adventure education in the school setting. ABEE Inc. certifies teachers and staff in adventure education. They are also a "go-to" organization when it comes to equipment purchasing and care. ABEE Inc. can also be helpful if you need help sequencing activities to fit the needs of your students.

Interview with owner of ABEE Inc. Ryan Olson

Question 1: Could you briefly describe your experiences with universal adventure?

Question 2: Why do you believe universal adventure education is beneficial for students with and without disabilities?

Question 3: What are two tips you have for physical education teachers who are interested in starting their own universal adventure education program?

Question 4: What services and or support can ABEE Inc Offer to schools who are interested in starting their own universal adventure programs or units?

As you can see, adventure education can meet the needs of all students. We have reviewed the seven stages of adventure and inclusion methods best used in adventure education through the use of universal design for learning. Also highlighted were ways to design your universal adventure education unit with modifications to games and activities to make students of all abilities successful. This could include rule modifications or specialty equipment such as the 3:1 pulley system and booty bag. If at anytime you are seeking more information visit the ACCT, ABEE Inc. , and the Holmen High School Universal and Outdoor pursuits Program websites. This instructional video is to help you design and implement a universal adventure education unit within physical education that meets the unique needs of your students. Thank you for watching.

End credits: List all who helped and end on a slide of the websites for all three (ACCT, ABEE Inc., and Holmen UAOP)