Do and Understand: The Effectiveness of Experiential Education

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Abstract /Resumen

This paper shares the results of a study on the benefits which an experiential education program has on students in the K-12 range. The study was carried out at a bilingual North American-style college preparatory school located in Colombia, South America. Research was based on experiences obtained through the coordination and implementation of an experiential education program during the 2008-09 school year. The findings deal with experiential education as a pedagogical philosophy.

Este manuscrito comparte los resultados de un estudio sobre los beneficios que un programa de educación experiencial les otorga a estudiantes de grados pre-escolar a bachillerato. El estudio fue realizado en un colegio bilingüe, de estilo norteamericano, localizado en Colombia, Sur América. La investigación fue basada en las experiencias obtenidas a través de la coordinación e implementación de un programa de educación experiencial durante el período escolar 2008–2009. Los resultados se refieren a educación experiencial como una filosofía educativa.

Keywords/Palabras claves: experiential education, emotional well-being, social interaction, service learning, outdoor education companies, physical abilities; educación experiencial, bienestar emocional, interacción social, servicio social, compañías de educación al aire libre, habilidades físicas

Introduction

"I hear and I forget. I see and I remember. I do and I understand." This saying of Confucius (551-479 BC) sums up much of the effectiveness inherent in experiential education methodologies. However, experiential education as a systematic pedagogical philosophy was only first introduced in the early 20th century. Today it has come to have a respected position among educational philosophies. For nearly a century it has been implemented and utilized as a learning tool in many schools and organizations throughout Europe and the Americas. The main idea behind it is the integration of student experiences into the academic curriculum.

The experiential education program at the school which is the object of our research is called Classroom Without Walls (CWW). The program is offered to all students, from kindergarten to twelfth grade. Each grade level offers its students a CWW trip once a year. As seen in the following diagram (Figure 1), from kindergarten up to fourth grade, these are 1-day trips. Fifth-graders have their first overnight experience with a 3-night, 4-day trip. Starting at the middle-school level, the trips become week-long programs.

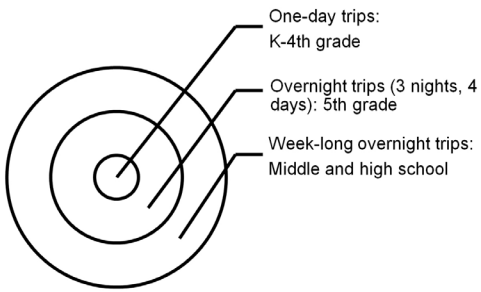

Figure 1. Duration of CWW trips with corresponding grade levels.

The main objective of the program in terms of destinations is to offer the students the possibility of getting to know the different regions of the country they live in. Therefore, all of the trips are national. Eleventh and twelfth grade students are offered the possibility of participating in one international trip within the Americas region. The coordination of the CWW program is handled by the school's Academic Support Services Office. This office coordinates and organizes the trips together with the trip leaders from the teaching staff. As part of the CWW policies, all trips must be led by an outdoor education company (OEC). Such a company provides the general logistics of the trip and ensures that all of the outdoor education activities fulfill safety requirements.

Apart from the outdoor education activities, all trips within the CWW program must include an explicit academic and social component. The purpose of each component is to ensure that the activities offered during the trip are educational and have objectives which are directly aligned with the school's curriculum.

In terms of the social component, one of the program's goals is to show students the social reality of Colombia. By exposing the youngsters to various regions, communities and ethnic groups, the program organizers elicit feelings of empathy, compassion and generosity for fellow countrymen. It is believed that the education of tomorrow's leaders should guarantee responsibility within the social reality of the society that surrounds students.

Area of Focus

The purpose of this action research project is to determine what if any are the benefits that an experiential education program has on the learning, emotional well-being, social interaction and physical skills of the students.

Research Questions

1. Do the trips have an important academic component that is directly aligned to the school curriculum in different subject areas such as science, social studies, English, math and *sociales* (social studies class taught in Spanish)?
2. Do students benefit from these trips in an emotional way, that is, by demonstrating that they have acquired different relational skills such as self-esteem, responsibility and friendship, as well as the values of independence and empathy?
3. Do the trips offer students the opportunity to interact with the social reality of their nation?
4. Do the activities offered during the trip provide students the possibility of strengthening their bodies through the development of various physical skills and abilities?

Theoretical Framework and Review of Related Literature

> There is more in us than we know. If we can be made to see it, we will be unwilling to settle for less. (Hahn in OBI, ¶1)

Experiential education has existed as an educational philosophy since the early 1920s. The difference between experiential education and *experiential learning* (these two terms are sometimes used interchangeably) is their contexts. Experiential learning refers to *primary*

learning, in other words, the experience which an individual receives without the intervention of a third party. On the other hand, *experiential education* refers to an academic experience in which the individual is aided though a facilitator, teacher or guide (Builes, 2003).

There are two main theorists who described experiential education as a philosophy of education: Kurt Hahn and John Dewey (Builes, 2003). Even though research shows that many more educators have studied the topic, these two are undoubtedly the original sources of experiential education theory.

Kurt Hahn

The first person to formally organize experiential education into a system was Kurt Hahn. He was inspired by the idea of the creation of a society based on commitment, responsibility, honesty, justice, service to others and compassion found in the writings of philosophers such as Plato (Builes, 2003). Hahn was born in 1886 into a cultured Jewish family in Berlin, Germany. During his early educational years, he became fascinated with the field of education. Hahn believed that every child is born with the ability to make correct decisions while facing moral issues. However, as one grows and enters adolescence, one loses this ability due to the pressures of society. In order to be able to manage these pressures, a child's physical aptitudes must be strengthened (Neill, 2008).

At the age of 34, after much study and analysis, Hahn founded a new type of school. This school would have the purpose of helping others; it would be a school where intellectual and physical activities would be harmonized. He taught his students a variety of abilities such as how to prepare backpacks and camp, through which he saw them develop self-esteem, learn conflict resolution techniques and learn how to build community (Builes, 2003).

> I regard it as the foremost task of education to ensure the survival of these qualities: an enterprising curiosity, an undefeatable spirit, tenacity in pursuit, readiness for sensible self denial, and above all, compassion. (Kurt Hahn cited in Neill, 2008, ¶3)

Hahn combined his years of applying experiential education principles to establish the first Outward Bound School in Aberdovey, England in 1941. This school built an extension in Marble, Colorado (US) in 1962. As a result, Outward Bound Schools soon became the main experiential education centers in the world, with 28 schools throughout Europe, Africa, Asia, North America, Australia and Puerto Rico (Builes, 2003).

John Dewey

The second theorist, John Dewey, has been called the father of experiential education. In the 1920s and 1930s, John Dewey became famous for introducing the premise that the "authoritarian, strict, pre-ordained knowledge approach of modern traditional education was too concerned with delivering knowledge, and not enough with understanding students' actual experiences" (Neill, 2005a, ¶2). At the same time, Dewey also found problems in progressive education. He found it to be characterized by a too liberal and student-driven style. By arguing that both forms of education have their strengths and weaknesses, Dewey proposed a theory to guide educational experience and conduct. This theory is based on two main principles: continuity and interaction.

The *continuity principle* acknowledges that past experiences influence present experiences. As human beings, from the time one is born, people learn from every experience, whether they be positive or negative. The *interaction principle* states that present experiences arise from an interaction among all situations. In other words, any situation can be experienced in a profoundly different way by each individual, and the only way of linking this situation to an educational experience is by living it (Neill, 2005b). Thus, Dewey proposes, that every educator must take into account each student's past experiences and the unique differences between each of the students. Being that each person is different both genetically and in experiences; Dewey argued that teaching styles and curriculum design must be structured in ways that allow for such differences (Neill, 2005b).

According to the Association for Experiential Education (AEE), "experiential education is a philosophy and methodology in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills and clarify values" (2009, ¶3). As per this definition, an experiential education program must have a defined purpose and goal. The program must be part of the school's curriculum in order to make sure its objectives are *academic* in nature. In addition, the program must have a *social component* which allows for the student to interact with his/her social surroundings. These two components must be complemented by the skills and values which have to be included in every experiential education program.

The Four Variables of the CWW Program

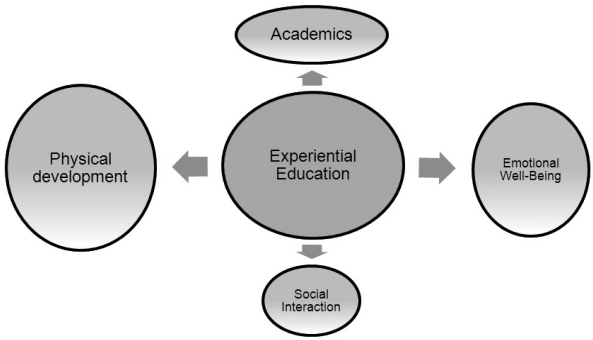

Figure 2. Experiential education components.

As illustrated in Figure 2, four components were chosen as study variables: academics, emotional well-being, social interaction and physical abilities. Correspondingly, the CWW program must explicitly address each of these in order to be consistent with the school's experiential education commitment.

Academics

Drummond (2003) discusses the distinction between two types of learning: cognitive and experiential, and how such a distinction may be applied to geosciences. The first type of learning (cognitive) refers to traditional academic knowledge such as vocabulary or multiplication tables. The second type of learning refers to applied knowledge. The importance of this distinction is that experience addresses the needs and wants of the learner. According to Carl Rogers (in Drummond, 2003), experiential learning can occur when several conditions are met: there is student participation, students control and direct the learning process; activities are based upon direct interaction with nature; and self-evaluation is used to assess student learning.

One of the biggest challenges faced by an experiential education program is to clearly define the roles of teachers and students. Within this type of program, educators must move away from the notion that the teacher is the sole purveyor of knowledge and the student the passive recipient of it. Experiential education requires interaction between teachers and students; they must both become active learners. The adaptation of roles takes time, and administrator's support becomes critical if the process is to take place. In order to better understand the philosophy, David Kolb's experiential learning cycles shed light on the

subject. These cycles are commonly used to help structure experience-based programs. Smith (1996) presents the experiential learning cycles model and examines its applications. According to David Kolb (as cited in Smith, 1996) the learning process must be broken down into 4 distinct stages:

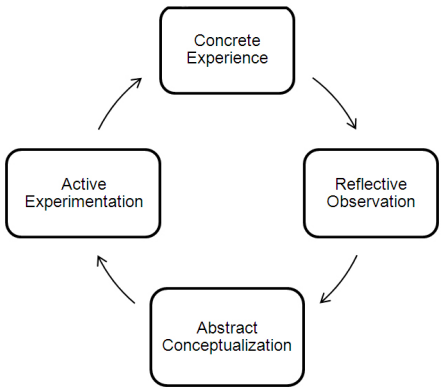

Figure 3. David Kolb's learning cycles.

Emotional Well-Being

Emotional health has many aspects. It is based on self-esteem and behavior that is appropriate and healthy. While we most often think about experiential learning and outdoor education as a way to develop physical skill, leadership abilities, environmental knowledge, and other useful knowledge and skills, it must also be used to develop emotional strength and well-being.

In order to understand the importance of addressing the psychological factors of the program and ensuring that they are present, it helps to understand Howard Gardner's work on multiple intelligences:

> I want my children to understand the world, but not just because the world is fascinating and the human mind is curious. I want them to understand it so that they will be positioned to make it a better place. Knowledge is not the same as morality, but we need to understand if we are to avoid past mistakes and move in productive directions. An important part of that understanding is knowing who we are and what we can do... Ultimately, we must synthesize our understandings for ourselves. (Gardner in Smith, 2008, ¶1)

Howard Gardner's theory of seven multiple intelligences has been well received among educators internationally. Consequently, many schools around the world have tried to address these intelligences through their curricula. The seven learning styles Gardner presents are:

Intelligence Type	Capability and Perception
linguistic	words and language
logical-mathematical	logic and numbers
musical	music, sound, rhythm
bodily-kinesthetic	body movement control
spatial-visual	images and space
interpersonal	other people's feelings
intrapersonal	self-awareness

Table 1. Howard Gardner's multiple intelligences (Chapman, 2008,¶7).

Subsequent research and reflection by Gardner and his colleagues has looked at three additional intelligences:

Intelligence Type	Capability and Perception
naturalist	natural environment
spiritual/existential	religion and "ultimate issues"
moral	ethics, humanity, value of home

Table 2. Three additional areas of Gardner's multiple intelligences (Chapman, 2008, ¶10).

In order for an experiential program to be successful, it must acknowledge most if not all of the 10 areas of intelligence. Howard Gardner's notion of multiple intelligences forced educators to look beyond the traditional scheme, which is the much the same objective of experiential education, and to offer young people the opportunity to excel according to their natural inclinations. Kinesthetic, visual and naturalistic learners are examples of students who would thrive in environments that take them beyond conventional teaching methods. Such opportunities to break tradition are available in outdoor education experiences.

Social Interaction

By providing a social interaction aspect on the trips, teachers offer their students the possibility of actively engaging in an experience that will have real consequences. The work that students do during the

service-learning component is designed to have a long-term effect on local communities. Service learning is a pedagogical method through which students apply their academic skills and knowledge to address the real-life needs of communities. Service learning teaches and develops the ethical values of service and civic responsibility. By solving real-life problems and addressing real needs, students learn to apply classroom learning to a real-world context. It should be noted that service learning is different from *community service*. While the latter may be defined as volunteerism, service learning always integrates knowledge acquisition into the service (McPherson, 1996). ELS schools see service as an important connection between academic content and the problems students face in their everyday life.

Andrew Furco (1996) proposes a deeper understanding of service learning. Furco quotes Robert Sigmon who defined it as an experiential education approach premised on "reciprocal" learning. Furco suggests that both those who provide the service and those who receive it benefit from the experience (Furco, 1996). It is imperative that service-learning programs have an academic component and be designed in such a way that ensures service will enhance learning and vice versa (Furco, 1996).

Physical Skills

The fourth variable of an experiential education program is the development of physical skills. In a recent research review, Rickinson (LOTC, 2009) and other researchers conducted a study on outdoor education programs available throughout the UK. Some of the conclusions drawn by the study mention that those outdoor adventure activities which involve physical fitness show positive effects not only for short, but also for long-term development. Outdoor education activities have integrated learning opportunities which include risk awareness, personal and social development, citizenship, and connectivity with the environment. Physical activities are also learning opportunities in which students are constantly obtaining different skills and values. It is the objective of an experiential education program to use adventure activities to aid in the understanding of subjects such as science, math and history.

Research Report

Context

As we look carefully at the results of the 2008-2009 CWW program, we first notice that the program took place throughout the entire school year. The first trips take place in October and the last trips in March of the following year. The majority of the trips (middle and high school

level) take place during the first 2 weeks of February. During these weeks, approximately 600 students participate in the CWW program. Being that the elementary level trips took place during the first semester of the 2009 school year, their outings were not included in the study.

Area of Focus

The responsibility of the administrators and leaders of the program was to analyze the results of the program and to conclude whether or not the results justify the continuation of the program offer to students. The purpose of the action research project was to determine the benefits that an experiential education program has on the learning, emotional well-being, social interaction and the physical skills of the students. The following were the research questions:

1. Do the trips have an important academic component that is directly aligned to the school's curriculum in different subject areas such as science, social studies, English, math and *sociales* (social studies class taught in Spanish)?
2. Do students benefit from these trips in an emotional way by learning different skills and values such as self-esteem, responsibility, friendship, independence and empathy?
3. Do the trips offer students the opportunity to interact with Colombia's social reality?
4. Do the activities offered during the trip provide students the possibility of strengthening their bodies by developing various physical skills and abilities?

Data Collection

Quantitative data collection techniques were used as the primary research method for this study. Three different types of surveys were designed which were distributed among students, parents and staff members.

The research questions were placed in a triangulation matrix as follows (Note: DS = data source). By practicing triangulation, a variety of sources and methods are compared with one another to cross-check data (Mills, 2007). In the case of this research project, it was necessary to have feedback from the school community as a whole, including students, parents and staff.

Questions	DS1	DS2
Learning/academic component	Student/Parent/Staff surveys	Student testimonials
Emotional well-being	Student/Parent/Staff surveys	Student testimonials
Social interaction	Student/Parent/Staff surveys	Student testimonials (CWW Exhibit)
Physical abilities/skills	Student/Parent/Staff surveys	Student testimonials

Table 3. Triangulation matrix.

Data Sources

Surveys. Once the design of the parent surveys were finished, these were also placed on the school's intranet service. After a couple of weeks, the number of parents who had filled out the survey was minimal, therefore, a decision was made to distribute the parent and student surveys in homerooms. The staff surveys were distributed directly to teachers. With the student and parent surveys, data was collected to measure the following areas: the academic component of the trips, the social component of trips, the role of the outdoor education company, safety standards, communication during trips, the logistics, the area of student personal growth during the trips, participation in the local program and destination options for future trips.

Testimonials. During the course of the trips, the school received testimonials from students reporting aspects of their experience. These reports were sent to parents. Additionally, as trip closure, the different sections of the school organize the CWW Exhibit which has the purpose of showing parents and the school community what students learned during the trip. This year, the middle school focused the exhibit on the social aspect of the trips. Students spoke about their experiences during the trip and diplayed to parents some of the projects they worked on.

Informal feedback. Even though this study does not consider informal feedback to be an official data source, the authors took feedback into account when analyzing the results and the action plan.

Data Analysis and Interpretation

After analyzing the data collected from the student and parent surveys and testimonials, the following themes emerged:

The academic value of the trips. During the planning stages, the administrators encouraged teachers to include the academic component within the trip. It was requested that this component both be addressed during the trip and assessed afterwards. It had to refer to one or more of the subject matters studied. The researchers observed that the majority of the students believed that the trip had an academic component and that

they were able to make connections between what they learned at school and what they learned during the trip. It must be mentioned however, that this percentages decreases as the students get older.

The student's area of emotional well-being. It is evident from both the student and parent surveys that students acquire various skills and abilities that contribute to personal growth and emotional well-being. The question that addressed this area in both the student and parent surveys was open-ended, thus allowing for various comments answers.

Social interaction. The findings regarding the social interaction students have during the trips shows us that this is one of the most important aspects of the program. The surveys illustrate that the social activities carried out during the trip led students to have a better understanding of the communities visited. The service learning-approach of experiential education, based on reciprocal learning, has the objective of not only students giving their time, but giving their hearts to other local communities. Although both benefit and learn, for organizers, students should always be the main beneficiaries. Apart from the survey findings, this variable was also measured by the students' presentations at the CWW Exhibit (organized by the middle school *sociales* teachers). The students not only manifested to the school community how much they learned, but also what they felt about their contribution to the well-being of their country.

Development of physical skills and abilities. During all of the trips, students are faced with different physical challenges that the outdoor education companies organize depending on the region to be visited. These activities include rappel, caving, canoeing, rafting and hiking (among others). These activities develop a variety of skills which, in all likelihood, the students did not previously have. As part of the answers to the personal growth question, many of the students and parents gave important recognition to the physical aspect.

Conclusions

Regarding the academic aspect, most of the students felt satisfied; however, the researchers believe that the objectives of each trip must be more explicitly aligned to the curriculum. In order to do this, a closer involvement of the teaching staff will be necessary. It is recommended that there be an explicit *preparation stage* in which teachers make sure the trip has clear and measurable objectives aligned to the school's curriculum.

With reference to the emotional well-being of the students, all of the trips offered students the possibility of maturing and growing emotionally. Such emotive skills and values are difficult to measure; nonetheless, the open-ended answers to the surveys showed that students

and parents recognize that participants in the outings a) acquire greater independence, b) learn how to make friends in different setting, c) get to know themselves in other areas of life, as well as c) develop teamwork, empathy, compassion and responsibility.

Finally, we also saw that both students and parents are more motivated with the program during the early school years. As students enter higher grade levels, this motivation significantly decreases.

Action Plan

Based on the themes that have emerged from this study, and according to what has been learned, the researchers propose the following action plan:

- Continue implementing CWW in grades K-12 as an experiential education program.
- Work closely with the teaching staff in the preparation stage of the program to ensure that each trip have a measureable academic component that directly addresses the standards and benchmarks of the subject areas. Each teacher must be delegated an explicit role, responsibility and involvement in both the academic and social aspects of the program. These roles and responsibilities must be clearly defined in advance.
- Ensure that all of the trips are carefully planned by both the school and the outdoor education company so that all aspects are analyzed prior to the trip. There must be a design and implementation of a *risk management plan* which includes a protocol for emergency situations.
- Improve the planning and the implementation of the local program. Organizers will have to make sure that 100% of the students benefit from the learning, emotional, social and physical aspects of the trip, whether they go or simply opt for participation in the local program. The teachers who do not go on the trip will be given greater responsibility within the local program.
- It will be very important to ensure, with the assistance of the *sociales* team, that all grade levels have a strong service-learning component on their respective outings.
- Organizers will seek long-term partnerships with outdoor education companies in order to ensure that these design programs which fully address school objectives and mission.
- Organizers will make certain that all trips are planned well in advance which will help teachers to work with a suitable timeframe allotted to the organization of the exhibit.

- The high school principal and teachers should be more involved in to the design of a high school trip which is motivational and relevant to this age level.
- The administrators will continue to strive to offer an experiential education opportunity to all students. In this effort, risk management, cost and destinations of the program will be carefully analyzed.

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