

classroom typically, but not always, in the outdoors” (Fellner, 2007, p. 3).

Studies on the effects on learners participating in outdoor education programs can be parsed in countless ways, but this paper will examine seven benefits participants receive: exposure to multiple intelligences, increased flow and motivation, psychosocial development, transference of improvements to everyday life, contextualization of material, improved physical health, and consciousness-raising. I believe these seven benefits can, to some degree, be utilized by second/foreign language educators. While no direct research has been done to support this claim, this paper investigates benefits of outdoor education and discusses ways these benefits could be transferable to language learning.

Multiple intelligences

Gardner (1999) delineates eight modes of acquiring knowledge: linguistic, interpersonal, intrapersonal, musical, logical-mathematical, spatial, kinesthetic, and naturalistic. Gardner suggests there is no one way that learners learn. Educators who increase the number of learning styles available increase the likelihood of successful outcomes. For learners with naturalistic intelligence, exposure to nature increases the ways they can acquire and integrate information and knowledge. For example, individuals with this intelligence have the ability to recognize and classify flora, fauna and other life organisms (Gardner, 1999).

Fellner (2007) suggests Gardner’s modes of learning can be implemented in an OLL setting; linguistic, kinesthetic,

and naturalistic styles are of particular relevance. Second/foreign language methodologies such as Total Physical Response (TPR) engage learners in different ways and seek to engage learners’ multiple intelligences. Outdoor education coupled with second/foreign language learning is a blend of TPR (Fellner, 2007). TPR is a participatory method of learning where learners respond to commands requiring physical action. An example of the natural link between outdoor language learning and TPR would be canoeing where learners make movements while the instructor verbalizes commands. Here learners would naturally be exposed to vocabulary words, such as “stroke” and “paddle” as well as grammatical structures inherent in expressions like, “Put your paddle on the left side of the canoe.” A significant benefit of learning vocabulary, phrases and sentence patterns in such a setting is that they are grounded in an authentic context. In the above example, learners would actually require the language they are learning if they are to successfully navigate. Learners would not only be utilizing their linguistic and kinesthetic intelligences, but also their naturalistic intelligence as they are moving on water.

Flow

Flow is a term Csikszentmihalyi (1997) coined. It is a psychological process describing how people balance skill, interest, and challenge. The metaphor of flow is one many athletes refer to as “being in the zone,” religious mystics call “ecstasy” and musicians and artists dub “artistic rapture.” Experiences causing flow are defined as “flow activities” and these activities have three essential qualities: clear goals

are defined, relevant feedback is provided, and challenges and skill are balanced, so attention is structured and focused (Csikszentmihalyi, 1997).

Flow follows when clearly defined objectives are set and appropriate responses necessary. In sports or games there are definite rules and goals. Clear goals allow participants to be fully engaged in the activity without being concerned about how to reach the goal. Thus, participants are in a universe where everything is clear-cut. In an OLL context, learners are provided clearly defined objectives requiring responses that would achieve flow. For example, in an activity like orienteering, learners are given instructions in their second language. They would then be fully engaged in finding checkpoints and reaching their target.

Another factor in flow activities is immediate feedback allowing participants to recognize how they are doing. After a move in a game, you recognize if you have progressed toward the goal. In an OLL orienteering activity, immediate feedback is given; language learners know if they have read instructions correctly if they have reached the target location.

Another characteristic of flow activities is whether an individual's skills are completely engaged in a challenge that is manageable (Csikszentmihalyi, 1997). Flow activities balance an individual's skill with challenge. If the task is too difficult, learners can become frustrated. In contrast, if the challenge is too simple, learners become bored. Another aspect of the challenge level of an activity is whether or not the activity connects with the participant's interests and can be connected to the rest of one's life. Csikszentmihalyi's (1997) research leads him to believe most flow experiences happen when new challenges match skills and interests.

He argues that while not all activities are the same, there is a major distinction between active and passive activities. Passive activities, like watching TV, have nothing to focus attention and so lead to the opposite of flow, which is apathy or anxiety. Csikszentmihalyi and his colleagues measured the percentage of time an activity provided "Flow [meaning]: high challenges, high skills; Relaxation: low challenges, high skills; Apathy: low challenges, low skills; and Anxiety: high challenges, low skills," by surveying 824 U.S. teenagers as illustrated in Table 1 (Csikszentmihalyi, 1997, p. 67).

Table 1. Percentage of time activities produced given emotions

Activities	Flow	Relaxation	Apathy	Anxiety
Games and sports	44	16	16	24
Hobbies	34	30	18	19
Socializing	20	39	30	12
Thinking	19	31	35	15
Listening to music	15	43	35	7
Watching TV	13	43	38	6

From the table, we notice the three active and/or social activities provide more flow than the three more solitary and less structured activities. Moreover, activities with more flow also have higher levels of challenge and anxiety. With increased challenge comes the risk of failure; doing an activity like canoeing comes with the risk of falling into the water.

In an OLL activity like orienteering, where learners' receive instructions and maps in their second language, a high level of flow would probably result as this activity corresponds to the category of "games and sports" (Csikszentmihalyi, 1997). However, in this activity instructors must be careful to maintain appropriate levels of linguistic and physical challenge. The vocabulary and grammatical structures in the instructions must be level-appropriate to insure anxiety or apathy do not occur. Likewise, suitable physical challenges must be given. By insuring linguistic and physical challenges are maximal without leading to negative responses, language instructors could be confident learners were experiencing flow.

Motivation

When flow occurs, intrinsic motivation often results. Flow activities are done for their own sake because the experience is primary. However, if learners do not see the application of information, there is likely to be no reason to learn and education becomes nothing more than external associations (Csikszentmihalyi, 1997). Csikszentmihalyi and Knauth found indications that a strong negative correlation exists between the classroom and intrinsically motivating activities (as cited in Fellner, 2007). Given the nature of outdoor education, where challenge and proficiency are necessary, motivation and flow are more apt to follow (Berman & Davis-Berman, 2005). Szczepanski, Malmer, Nelson, and Dahlgren (2006) argue, "in the authentic encounter with the outdoor environment there exists an important source of motivation for meaningful and creative learning processes" (p. 2). Olsen provides reports from outdoor education

participants who stated: the learning experience was more interesting, the mind more active and thinking was clearer and more critical (as cited in Taniguchi, 2006).

Student motivation is a concern for second/foreign language instructors. Using language in a real context is one way to promote intrinsic motivation. Fellner (2007) believes when students are engaged in activities where English is used "for real purposes to achieve real outcomes they concentrate on achieving a real objective (say portaging a canoe) and are not necessarily focusing on using English" (p. 5). Szczepanski, et al. (2006) suggest "direct physical contact with nature...increases the authenticity in learning [regardless of the subject] by providing a link to an approach that should reasonably be innate in human beings" (p. 2).

Psychosocial development

Outdoor education programs promote intra- and interpersonal development. Stolz et al. discovered outdoor education courses improve participants' self-concept, self esteem and personality (as cited in Sheard & Golby, 2006). Sheard and Golby (2006) found outdoor education "foster[s] qualities such as initiative, perseverance, determination, self-restraint, cooperation and resourcefulness" (p. 189). In 1994 a study was performed on the effects of an outdoor adventure experience on mood and self-concept in troubled youth. Researchers revealed no significant difference in participants' self-concept, but they found a "reduction in the participants' anxiety, depression, and hostility" (Larson, 2007, p. 315). In 2001, Haluza-Delay examined experiences of eight teenagers who participated in a 12-day outdoor education trip (as cited in Taniguchi, 2006). Post-trip

interviews showed participants found the experience to be more beneficial than a traditional classroom setting because there was “no sense of limitations or inhibitions to their levels of self-discovery” (Taniguchi, 2006, p. 214).

Hattie, Marsh, Neill, and Richards (1997) argue that not only have personal psychological development gains been made through outdoor education, but also benefits in character and social development have surfaced. Evidence from numerous studies suggest conflict resolution, problem-solving skills and group cohesion improvements were made following outdoor education experiences (Sheard & Golby, 2006). These studies suggest psychosocial skills learned outdoors may correlate to learning a second/foreign language. Language often occurs as a social event. That is, it is not usually done in isolation, but rather with another human. Thus, if activities outdoors improve conflict resolution, problem-solving skills and group cohesion, OLL activities may be useful for language learning.

Interpsychosocial and intrapsychosocial improvements made during outdoor education programs have shown transference. That is, what participants learned and benefited from during their outdoor experience was transferred to everyday life. Holman and McAvoy (2005) conducted telephone interviews with 29 participants following an outdoor wilderness program; 41% of participants stated they were able to transfer outcomes from their experience to their work and 24% stated they could transfer skills learned to their family lives. Moreover, more than half of the participants found they had higher levels of motivation and increased self-confidence. The researchers attributed these findings to the outdoor education program.

Sheard and Golby (2006) reveal that outdoor experiences appear to improve self-esteem and self-concept; these are useful assets when learning a second/foreign language. As Oxford reports, “successful [language] learning necessitates overcoming inhibitions and learning to take reasonable risks” (as cited in Fellner, 2007, p. 6). Skills and lessons learned in an outdoor activity program are transferable to other facets of learners’ lives and this suggests second/foreign language learning could benefit from encounters in the outdoors.

Contextualization of material

Education, from the Latin *educere* meaning to bring out or to lead out, implies learners are to be led out or helped made aware of new concepts and ideas. Teaching and learning dynamics do not occur in a vacuum; they are contextualized. In the case of outdoor education, the setting of education is, “contextually rich” (Fellner, 2007, p. 5). Dewey argued learning is a continuous process, which, at times, produces unpredictable outcomes in an unstructured context (as cited in Feller, 2007). Outdoor education provides a natural setting where learning occurs in a less formulaic environment than the traditional classroom. According to Priest, learning opportunities outdoors provide problem-solving situations where decisions impinge upon learners directly, and often immediately (as cited in Taniguchi, 2006). Passingham found a correlation between higher IQ scores, cognitive development and “contextually rich” settings (as cited in Fellner & Halvorsen, 2007). Also, Szczepanski et al. (2006) point out direct physical interaction with nature increases the genuineness of learnt material because humans learn with all the senses, not only hearing and seeing as in the case of most classroom learning.

For language educators these findings are important. If “contextually rich” settings provide such benefits, then they can be implemented in second/foreign language instruction. For example, if students set up a tent using written or oral instructions in a second language, the natural environment will impact learners’ senses (smell of the surroundings, feel of the tent, sound of wind blowing and the sight of flora and fauna) and may authenticate the material being learned. Writing haiku is another activity instructors can implement that puts language in context (Fellner & Halvorsen, 2007). As a poem form that evokes images of the natural world, having students write haiku while in nature would certainly be “contextually rich.”

The five senses play unique roles in humans’ interaction with the world, but the sense of smell as it relates to learning and memory, has an interesting correlation. Smell is not particularly at play in traditional classrooms. Numerous studies reveal memory and odour interact uniquely. Miles and Jenkins (2000) found memories associated with odour were retained longer than other sensory memories. Chu and Downes (2000) termed the phrase “Proust effect.” It suggests odour connected with an experience aids in memory recall, and the olfactory sense is a better memory cue than other senses. This is because humans respond to olfactory sensations involuntarily as the olfactory nerves go directly to the brain’s limbic system. The limbic system is associated with emotions which in turn, are closely connected to memory. The sense of smell is unique because it reaches subconscious levels.

Acquisition of a second language “may make great demands on working memory resources” (Kroll, 2007, p.

110). Kroll postulates that individuals with more memory capability may have an advantage learning a language. To some degree, learning a second/foreign language necessitates memorization. Could the distinct smells of the outdoors assist learners recall aspects of language? If smell can, would it not be prudent for educators to use the power of smell to assist language learners?

Health benefits

Outdoor education studies purport physical benefits. Kaplan and Kaplan found activities in natural settings provide satisfaction, alleviate stress, improve concentration, and increase observation proficiency and alertness (as cited in Szczepanski et al., 2006). Hartig et al. reveal that blood pressure levels decreased in individuals who walked forty minutes in a nature reservation but did not decrease when the exact same activity was done in the center of a city (as cited in Szczepanski et al., 2006). The researchers attributed the discrepancy to context. Such findings relate not only to matters pertaining specifically to one’s physical body, but, as Szczepanski et al. (2006) report, also relate to one’s mental faculties, e.g. increased concentration, alertness and observation proficiency—factors which bode well for second/foreign language learners. These traits, which benefit from encounters in nature, are helpful when learning a second/foreign language.

Consciousness-raising benefits

Being outdoors in nature takes learners from the familiar setting of classrooms. This can provide a different way of

looking at one's existence. It could even present learners with situations that are physically unsettling. Existential philosophers suggest such conditions serve as a driving force for individuals to confront mortality. Taniguchi (2006) states when individuals realize the relationship between mortality and Nature, they are thrust into situations where they must consciously recognize their finiteness and respond to this consciousness. Kaplan and Talbot attribute this awareness to the fact that an individual is unable to control or manipulate nature (as cited in Taniguchi, 2006). Therefore, individuals participating in outdoor education programs can have existential consciousness-raising experiences.

Martin (2004) conducted interviews with students in a two-year outdoor education program in Australia and examined their journals. Martin divided students' responses to the research question, "What is your relationship with Nature?" into three categories: "traveling through, caring for and [being] integrated with Nature" (p. 5). While Martin acknowledges no field investigations were done and this limited the findings of his study, he concluded that "within this particular group the different relationship caricatures were sequential...[and] developmental" (p. 6). One finding was that students linked direct experience with nature to increased comfort levels. A participant's journal entry highlights this:

It was probably after the Grampians 6 day hike I started to appreciate nature more. After those 6 days I felt a hell of a lot more comfortable going out into the bush. Before that I'd just felt insecure and not at home. And then after those 6 days, that made me appreciate nature a lot more (p. 8).

Students engaged in outdoor activities experience consciousness-raising and this benefit is advantageous to the second/foreign language learning context. If individuals confront their mortality directly, perspective comes; the relative importance and unimportance of matters become crystallized. Martin (2004) states one of the crucial findings in his research was "the outdoor education program course provided students with a language and conceptual framework to talk about their relationship with nature" (p. 3). This idea could be a point for investigation in the second/foreign language learning context. Students' awareness of their relationship to nature could foster curiosity in explaining this new consciousness in another language, which would then, in turn, naturally influence and encourage language growth. In an OLL setting, students could write their impressions and feelings about what they experienced outdoors in their second/foreign language. This would not only be an exercise in language, but also could be a method to foster ways of thinking and being which had heretofore not been touched.

Conclusion

While research studies have been done in the domains of outdoor education and second/foreign language education, this writer is not aware of any studies investigating the two methodologies employed together. Obviously, to say conclusively that conducting second/foreign language education in an outdoor setting would be beneficial is speculative and not supported by research. Yet, it leads the writer to believe such research would be advantageous to second/foreign language educators, given the benefits found in employing outdoor education in other educational

contexts. Having said that, some considerations would need to be addressed if such research or educational methodology were to be undertaken. First, practitioners must have a rationale for teaching English as a second/foreign language in an outdoor setting. Moreover, knowledge of how to teach in the outdoors would be necessary. Because “the outdoors is not specifically designed for comfort and, therefore, more unforgiving than the traditional classroom setting, it is critical...educators have a well-grounded understanding of what they are doing and why” (Taniguchi, 2006, p. 210). Second, the concept of flow and the risk/apathy balance must be considered. Physical activities have to be set so optimal learning can occur and so too must linguistic activities. Physical and linguistic challenges must not be so difficult that they induce anxiety, nor must they be too basic as to induce apathy. Finding an appropriate balance is a concern, and with two challenges occurring simultaneously, due caution and vigilant awareness are necessary to promote a nurturing, yet challenging OLL situation.

Kevin Mueller is a Visiting Assistant Professor at Tokyo International University. He is interested in educational matters related to the outdoors, environmental studies, and religion. <kejmueller@yahoo.ca>

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