"Can We Have Class Outside?" Implications of the Natural Environment for Marketing Pedagogy

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This paper argues that learning experiences in natural habitats can provide unique learning outcomes for marketing students, contributing to the development of marketing knowledge and the acquisition of skills and perspectives that can contribute to success in the marketing profession. Two direct applications are discussed: (1) a nature-based learning experience (class hike) in which students applied nature metaphors (specifically, evolutionary processes) and biomimicry; and (2) a similar hiking experience designed to help students develop observational and product/service development skills.

INTRODUCTION

Having any class outside can be a nice way to break things up during the course of a semester, and it can be a lot of fun. This paper argues that holding marketing classes not just outside, but in actual natural habitats, while certainly a fun diversion, can also provide unique learning experiences that are specific to the development of marketing knowledge and the acquisition of skills and perspectives that can contribute to success in the marketing profession. The learning experiences reported on herein seek to extend marketing pedagogy in creative directions in the same spirit of work by Das (2012) on the use of participatory photo novels, Rocco and Whalen's (2014) use of theatrical improvisation in teaching personal selling, and the use of cartoons to teach corporate social responsibility (Mills, Robson, and Pitt, 2013). In addition, incorporating this perspective affords opportunities to extend the contribution of the marketing curriculum to broader, liberal-arts oriented learning goals (Petkus, 2007).

NATURE METAPHORS IN MARKETING

As a starting foundational point for the justification of outdoor marketing class experiences, several "nature metaphors" can be examined for their potential to contribute to the understanding of marketing processes. Benyus (2002) offers the following list of nine basic "laws" that describe the implications for natural processes and structures for human practical endeavors:

- 1. Nature runs on sunlight
- 2. Nature uses only the energy it needs
- 3. Nature fits form to function
- 4. Nature recycles everything
- 5. Nature rewards cooperation

- 6. Nature banks on diversity
- 7. Nature demands local expertise
- 8. Nature curbs excesses from within
- 9. Nature taps the power of limits.

All of these precepts can form a basis for discussion of business principles in general and marketing principles in particular. Some of these notions raise the analogy with product/service design—form leading to function, the importance of local expertise, and the power of limits, for example. Others are more evocative of marketing processes—such as cooperation, resistance to excess, and the importance of diversity. Further, efficient energy use (driven ultimately by sunlight) and the recycling function inspire consideration of sustainability issues in marketing.

Vermeij (2004) outlines and delineates the fundamental parallels between natural ecosystems and human economies. He details the interrelationships between "producers" (the organisms, mainly plants, microbes, and phytoplankton, that convert inorganic matter into organic matter) and "consumers" (herbivores, predators, parasites, and decomposers—some of which themselves become secondary producers in the food chain). Vermeij extends the metaphor in his examination of the roles of competition (a primary driver of evolution and "continuous improvement") and cooperation (symbiosis), which manifests in brand alliances and co-branding relationships in the economic world. Finally, physical geography, climatic conditions, and seasonal fluctuations parallel the "external environment" in which marketing's producer-consumer relationships exist and operate.

Another example that has the potential to stimulate a productive class discussion is the consideration of advertising as a natural phenomenon. Indeed, posing the open question, "In what ways is advertising a natural, as opposed to a man-made/business, phenomenon?" inevitably yields responses that identify flowers attracting pollinators and male animals and birds mating displays as forms of "advertising." With the advent of digital communication, inbound marketing efforts represent even more direct analogies to the natural world.

BIOMIMICRY

Another justification for nature-based learning experiences in marketing lies in the realm of biophilic design, or "biomimicry." Biomimicry is the process by which materials, products, etc. are developed based on inspiration from the natural world. Examples include: Velcro (inspired by those little burrs that stick to your clothes and your pets); self-cleaning paints (inspired by the water-repellant surface structures of certain leaves), and the design of the Japanese 500-Series Shinkansen Bullet Train (inspired by two different birds—owl's feathers, for their reduced wind resistance, and the kingfisher's aerodynamic bill) (Benyus, 2002). In general, research shows that nature experiences can serve as inspiration for innovation and entrepreneurship (Louv, 2012). Louv (2012) discusses the importance of developing "hybrid thinking...that erases the false dichotomy of nature and technology" (p. 38).

DIRECT APPLICATION TO STUDENT LEARNING PART ONE: BIOMIMICRY AND EVOLUTIONARY PROCESSES

Evolutionary processes provide a particularly strong pedagogical metaphor for producing effective learning experiences in marketing. Clear analogies between marketing processes and evolutionary dynamics can be made. These include treating brands or products as "species" that undergo "mutations" (e.g., those cappuccino-flavored Lays potato chips) and "adapt" to their environment to varying extents; competitive advantage as a form of "survival of the fittest" or natural selection; and international marketing efforts operating in a similar fashion to invasive species (is Starbucks the "stinkbug" of coffee chains?).

Sirkin (2010) discusses examples related to other biological/ecological phenomena. Artificial selection has helped reintroduce nearly-extinct wolves into select habitats in North America—just as

musicians such as Jack White have reintroduced nearly-extinct vinyl records into certain niche markets. Similarly, "conservation" efforts have preserved the existence of threatened brands such as Polaroid film and Twinkies. Sirkin also discusses the interplay between "endemic and invasive species" in the marketplace—in the sense that certain endemics (i.e., established brands) face threats from "invasive" brands or, in some cases, entire brand categories (e.g., mass-market breweries vs. smaller craft breweries).

While students can certainly come to understand the details of evolutionary theory without going outside, experiences in nature can enhance their understanding by offering concrete illustrations close to home, as opposed to in the Galapagos. To examine this process, we produced a two-part learning experience with students in a senior-level Special Topics elective course at a mid-sized AACSBaccredited business school in the northeast United States. The first part of the learning experience was a ninety-minute class hike, in September, in a mountainous county park. The tasks involved included identifying invasive plant species, birds in migration, and other aspects of the ecosystems. A post-hike group discussion sought to apply the biomimicry concept. Students were asked to develop three new product or service ideas inspired by things they had observed during the outdoor experience. Most of the ideas generated were food-based, inspired by students' (completely voluntary) tasting of wineberries, sassafras leaves, and black birch twigs.

In the second part of this nature-based learning experience, the students wrote an analytical essay drawing analogies between marketing process and evolutionary processes, using the invasive plant, bird species, and other observations and experiences from the hike as metaphorical analogues to products, brands, media, and marketing techniques. Students were given a "refresher course on four basic evolutionary precepts: (1) genetic variation through mutation; (2) the passing on of genes to successive generations; (3) relative adaptation (natural selection) of characteristics associated with genetic variation; and (4) adequate time periods facilitating changes over time. These twenty papers were then contentanalyzed to assess the degree to which these themes were applied to marketing processes, the specific ways in which the students applied the concepts, and any other insights that students developed with respect to the connections among marketing and evolutionary processes.

RESULTS

The content analysis of the students' papers clearly demonstrated connections to the four evolutionary precepts. The most prevalent connection was to basic natural selection (95% of papers); 75% of papers made direct connections to mutation/variation, and to adaptation specifically. All of the papers directly addressed at least two of the main themes; 85% of papers addressed at least three of the themes; 25% addressed all four themes. Thirty percent of students made the meta-connection to the process of mutually-beneficial exchange, discussing ways in which organisms evolve to benefit each other similarly to marketing processes such as co-branding, and to relationships between advertisers and media and ad agencies.

While the students' ability to see these broad connections between marketing processes and evolutionary processes was encouraging with respect to the effectiveness of this learning experience, the details of the ways in which they expressed the connections were even more interesting and enlightening. For example, the students interpreted the changes over time due to adaptation in two different ways: some described changes in particular products and brands (through brand extension or modification) as "speciation"; others expressed evolution in marketing in terms of changes in marketing processes overall, such as the changing application of technology over time. The "speciation" theme was also applied to the development of new products for international markets as "invasive species" by several students. Several students interpreted the creative processes (product development, advertising, other marketing tactics) in marketing as analogous to "genetic mutation" and drew the parallel to the continuous process of seeking competitive advantage. The theme of "extinction" also emerged—students saw the parallel between products/brand failure and the failure of species to effectively adapt to changes in the environment, or to competitive threat. Specific insights that individual students offered included analogies with the product life cycle, changes in the promotional mix over time, and the scientific species classification system (as analogous to the way products are officially classified).

In sum, the combination of the outdoor experience (class hike) and reflective experience (analytical essay) provided students with a unique learning experience in marketing. While the particular focus of this learning experience was the analogy with evolutionary processes (with a sub-goal of the application of biomimicry), the structure of the learning experience could be applied to any of the nature metaphors, or with a different contextual emphasis (e.g., the reflective essay could focus on biomimicry, etc.).

DIRECT APPLICATION TO STUDENT LEARNING PART TWO: OBSERVATIONAL SKILLS AND CONSULTING EXERCISE

In another effort to produce learning marketing-related learning experiences in the outdoors, summer sections of Marketing Research (same college as above), in three consecutive summers, were taken on a class hike in the same park described above. The first learning objective for these experiences was the development of observational skills, as an application of the discussion of "participant-observation" as a qualitative methodology. This represents an expansion of ethnographic methodologies in the marketing research curriculum as called for by Freeman and Spanjaard (2012).

Prior to the hike, students were given a primer on observational skills in marketing research (Belk, Fischer, and Kozinets, 2013). These included: understanding the context (time and place), multi-sensory awareness, and the recognition of patterns, aberrations, contrasts, and transitions. The general "environmental scanning" metaphor (as part of understanding the external environment of marketing processes) comes into play in this context as well.

The second learning objective for this experience involved a more practical learning outcome. After the hike, the students were asked to form small groups and act as "park experience" consultants, brainstorming ideas for how the user experience of the park could be improved. This assignment allowed the students to become attuned to the "consumer experience" in natural spaces thereby expanding their perspective beyond products and services to pure experiences. Recommendations included: digital information and enhancements (unsurprisingly, every group recommended an "app"); increased trash/recycling infrastructure; increased signage; and increased interpretive content (for nature and history).

While no specific empirical results were generated with this second application of the outdoor learning experience, future research could more formally explore the learning outcomes discussed.

OTHER RELEVANT APPLICATIONS

Through outdoor learning experiences, students can come to understand the role of nature in various market contexts (urban agriculture, "maker" culture, farm-to-table, etc.). Students can also better understand the potential for nature-based services, such as Green Gyms (nature-based exercise for kids); Casting for Recovery (fly-fishing experience for cancer survivors), and nature-contact therapy for the elderly.

All these nature-experience implementations can be topic-specific (e.g., biomimicry lesson as an enhancement to a new product development topics) or intended to develop broader skills and perspectives that are applicable across marketing topics (e.g., creativity, observational skills, the evolution metaphor, dimensions of consumer experience). Further, online resources such as Asknature.org (a comprehensive, searchable catalog of nature-inspired product/process design) and Biomimicry 3.8 (a biomimicry consulting service clearinghouse) are available as supplements to these "live" nature learning experiences.

Finally, spending time outdoors has the potential to contribute to the development of the "whole student." These benefits--general positive effects of what Louv (2012) calls "vitamin N"--include overall health and well-being of students, less days missed due to illness, and lower levels of stress. While this last outcome of outdoor learning experiences is certainly neither particular to nor exclusive to marketing education, it is relevant to the holistic collegiate experience within which a marketing education exists.

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