

Nutrition Education: Toward a Framework of Cultural Awareness?

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Abstract

Adopting a framework of cultural awareness creates challenges for nutrition education that go well beyond introducing culturally diverse foodways or recruiting culturally diverse bodies into the fold of mainstream nutrition education, although both of these actions are needed. A framework of cultural awareness recognizes culture as foundational to human thought, including “scientific” thought. It locates the Eurocentric cultural grounding of nutrition sciences and nutrition education as formally taught in higher education. A framework of cultural awareness calls attention to background assumptions such as universality, materialism, control over nature, objectivity, reductionism, and value-neutrality as implicit Eurocentric cultural ground. Adopting a framework of cultural awareness asks nutrition educators to consciously locate themselves and their knowledge within a cultural context. The practice of cross-cultural engagement (CCE) is glimpsed through the Woodlands Wisdom model of nutrition education, developed with leadership from a confederation of tribal colleges. CCE offers a means for academic educators and learners to use a cultural awareness framework to culturally situate their own educational background and develop capacity to navigate the complex terrain of interfacing culturally different forms of knowledge. Are nutrition educators ready to confront the challenges and opportunities that come with adopting a framework of cultural awareness?

Introduction

Not long after I was hired as an assistant professor and extension nutritionist at the University of Minnesota, I became aware of what seemed to me as a paradox. The prevalence of diet-related obesity, diabetes, and heart disease among American Indian people was well-documented (13,14); through my extension travels I observed a keen interest in nutrition and health issues within tribal and urban American Indian communities of Minnesota. Yet within the nutrition and dietetics undergraduate programs at the University of Minnesota we had no American Indian students enrolled and had yet to produce a single American Indian registered dietitian. At that time there were only a dozen or so American Indian registered dietitians nationwide (4), so I learned the situation in Minnesota was by no means unique. Why the disparity between community interest and academic participation? This question held

my attention. Holding this question pointed me to the concept of culture. My interest in critical thinking oriented me to explore the power of implicit and unexamined assumptions.

Webster defines culture as “the totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought typical of a population or community at a given time” (24). The totality of all products of human work and thought would certainly have to include what we refer to as “science,” but many scientific disciplines infused with positivist–empiricist principles, including nutrition, continue to be taught as representing a process of either transcending or stepping apart from human subjectivity or culture. I began to recognize culture as a powerful force, in part because reflecting back, this concept was virtually absent from my own formal education in nutrition. As a biological and life science, education in nutrition prepared me to detach my subjective self from the events under study as a disinterested spectator or observer. Controlled experiments were constructed as ideal environments in which to test variables of interest, to maintain control of other variables, and to gather data through reliable, repeatable measures. These ideal environments were highly valued for meeting rigorous standards of internal validity, but limitations with respect to relevance in real world conditions (external validity) were less appreciated. That controlled experiment methods emerged from Eurocentric thought styles and cultural values went unmentioned. Food was considered in its physical, biochemical, and molecular terms. The underlying principles of materialism and reductionism that gave rise to this atomistic perspective were simply presupposed and undiscussed. Nutrition as a biological and biochemical science was largely concerned with delineating mechanisms of action of nutrients and other “bioactive” molecules, but the cultural particularity and limitations of the “man as machine” metaphor went unmentioned. Values, norms, and other human circumstances beyond the experimental domain were factored out in pursuit of objectivity and value-neutrality, but the cultural grounding of mechanistic views, materialistic orientations, and positivist presuppositions upon which science was practiced were not considered. I emerged from graduate education well-trained yet naïvely unaware of my own cultural situatedness as a newly-minted academic professional. Philosophy or history of science that might have helped me to culturally or historically locate the science I had learned was neither required nor recommended.

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Confronting Cultural Difference

“Culture shock” is an apt description of my first experiences as an extension specialist working in tribal communities. I was fortunate to be a part of Visions for Change, a Kellogg Foundation-funded project wherein I developed personal relationships with tribal members whom I came to respect as intelligent and knowledgeable. Surprisingly (to me) these individuals did not share my exclusive attachment or devotion to what I knew as “science.” They described their own theories, teachings, and concepts that were utterly foreign to my training and understandings of food and nutrition. For example, wild rice was considered healthful not only because of its nutrient composition, but because of its sacredness. I encountered Anishinaabe teachings that refer to the world as “alive” and to humans as “pathetic two-leggeds.” The teachings explain that sentience and conscious intelligence are not limited to the human brain, but exist throughout the body, environment, and cosmos. As the beings most recently created, humans were the most dependent upon on all other life forms for survival and the least in tune with the path and rhythms of the natural world. In these ways humans are therefore considered as the most pathetic or weakest beings in nature. While I could have easily and summarily dismissed such ideas, giving them over to serious consideration and critical reflection forced me to confront my own worldview assumptions; in this case convictions that humans are superior to other life forms, and ideas of the human mind as the exclusive source of consciousness and intelligence in an otherwise objective, materialistic, unconscious world. I began to understand Anishinaabe teachings as having their own coherence but grounded in very different assumptive frameworks of the natural world (3,5,7). For the Anishinaabe, nutrition was not just about food as nutrients, but food as relationship, as connection to place, as meaning, and as memory. The dissonance I experienced was at once highly unsettling and thought-provoking. I was learning that many communities continue to draw upon their “nonscientific” knowledge assets in solving contemporary health problems (3,10,20,21). Every human culture throughout history has developed its own knowledge of food and health relationships as a means of survival (9,16,17,22), yet only biomedical perspectives were acknowledged during the course of my training. I became more critically aware of how my formal training could lead me to dismiss any representations of reality originating outside the biomedical boundaries of my education. Using critical reflection as a mirror, I began to recognize more fully the extent to which my professional training had conditioned my thinking: that science did not begin with “reality” or describe it directly but was itself built upon a constellation of presuppositions about how the world works.

Take, for example, the idea that “effects have causes,” or its more elaborate cousin “physical effects have physical causes.” These ideas are absolute presuppositions, metaphysical ideas that are neither questioned nor verifiable, but are simply taken for granted by scientists (6). Collingwood defines metaphysics as the science of absolute presuppositions, claiming that science and metaphysics are inextricably united, standing or falling together (6). He warns us against confusing presuppositions with reality. Confronting cultural difference in a critically

reflective way helped me to gain awareness of these taken-for-granted dimensions of my scientific perspective. I began to use encounters with cultural difference as a critically reflective mirror to make explicit and examine the presuppositions and convictions implicit in my mindset. I started to see my scientific perspective not as something set apart from human culture or human subjectivity, but as grounded within and intimately tied to a much larger cultural and historical context. Perhaps most importantly, I recognized that there seemed little opportunity to address what is presupposed within the usual forums of scientific discourse. Fundamental tenets like scientific materialism, subject/object dualism, mechanistic explanation, abstraction from context, and universality cannot represent scientific knowledge *per se*, because they are not the result of scientific experiments (1,6,8,23). Rather, they are *a priori*, self-reinforcing presuppositions about the nature of the world. If we can put these ideas on the table and let go of their hold on our disciplinary mindset on universal truths, such presuppositions can be included as objects of discourse within the domain of formal nutrition education. The following example offers a more concrete illustration of the challenges and benefits of a cultural awareness framework for nutrition education.

Woodlands Wisdom

The Woodlands Wisdom Nutrition Project was initiated by tribal colleges in the upper Midwestern United States as a proactive approach to address chronic health issues experienced by American Indian communities (7,9,12). Tribal colleges have a mission to rebuild and explore traditional tribal cultures as a means to strengthen their communities while supporting the creation of more American Indian health professionals (2). The Woodlands Wisdom Nutrition Project offered an opportunity for reservation communities to express their desire for a nutrition program grounded within indigenous knowledge traditions, while offering biomedical perspectives needed to articulate with professional nutrition programs (7,9). Indigenous understandings of nutrition, food, and health receive only brief, passing mention within the mainstream accredited nutrition science programs, yet these understandings are recognized by Woodlands tribes as an essential dimension of higher education in tribal colleges, both for their students and for their communities (9,12). For example, it is often forgotten that, prior to western influences, heart disease, diabetes, and cancers were unknown to the indigenous peoples of the Americas (22). American Indian tribes developed sophisticated systems of agriculture that have given us beans, corn, potatoes, pumpkins, squash, tomatoes, and over twenty other foods, as well as more than 200 medicines that have been recorded in the Pharmacopoeia of the United States of America since 1820 (16,17,22). Daniel Moerman reports that of the 31,566 kinds of vascular plants found in North America, American Indians used 2,874 of these species as medicines, 1,886 as foods, 230 as dyes, and 492 as fibers for weaving, baskets, building materials, etc. (18). All told, they found a useful purpose for 3,923 kinds of plants. How did indigenous peoples come to this knowledge? Why shouldn't it be possible to develop academic models that explore the depth and complexity of indigenous worldviews and epistemologies?

The Cross-cultural Model

The Cross-cultural Model that was developed in response to these concerns positions personal experience and indigenous science as frames of reference through which to study nutrition (Fig 1, reprinted with permission). These frames of reference are placed alongside those of biomedical science that have dominated (some would say monopolized) accredited nutrition science curricula over the past century. The model reflects perspectives held by tribal communities that biomedical scientific understandings of nutrition, diet and health in and of themselves are not sufficient for full restoration of the health of Woodlands peoples (7,9). By considering the practical realities and cultural needs of the Woodlands peoples from the cultural perspectives of those communities, the Woodlands Wisdom model takes a bold and explicit step: it broadens nutrition education by diversifying the cultural contexts within and through which knowledge is generated about food and health relationships (1). In other words, the model expands and diversifies not only knowledge (what is known), but also broadens the domain of epistemology (how we know). Thus, the perspectives identified in Figure 1 represent not different areas of knowledge to be subjugated to western/scientific forms of inquiry, but different epistemologies that in themselves lie beyond access to western/scientific forms of inquiry. In this way, the cross-cultural approach taken by Woodlands Wisdom extends cultural diversity in nutrition education beyond observable foods and foodways to deeper and more powerful levels of culture, into the realm of diverse epistemology, ontology, and worldview (1,3,5). Within a community context, it opens nutrition education to the realms of indigenous knowledge and experiential knowledge as resources people can access and use to improve health. The model recognizes the self-sufficient agency and capacity within communities. The relationship with professional experts becomes less about dependence upon “outsider” knowledge that originates beyond the specific cul-

tural context and more about mutual navigation and negotiation between different forms of knowledge. The work of nutrition education becomes less about “imposing” research-based programs developed outside the culture and more about opening possibilities for nutrition educators to learn that their own knowledge is also culturally situated and not necessarily universal. Skills in engaging across cultural difference (cross-cultural engagement, or CCE) require cultural self-awareness. Cultural awareness allows educators to situate their knowledge within a cultural context. A framework of cultural awareness allows nutrition educators to become more sensitive to how unilateral efforts to impose or intervene can do damage by subjugating or stigmatizing knowledge resources that exist within a community or cultural context (11).

Pedagogical Implications

The Woodlands Wisdom model is innovative in that it asks learners to develop a capacity to actively shift their own frame of reference to accommodate different forms of knowledge. Quite literally, a shift is made from informational learning to transformational learning (15). Drawing from Kegan, most nutrition education is “in-form-ative” in that it brings valuable new knowledge (what we know) into the existing form of making meaning, our way of knowing about nutrition (15). In other words, informational learning occurs by increasing the amount of knowledge within the boundaries of an established epistemology of nutrition. This kind of learning certainly can be useful; it is quite common but within a cross-cultural context it can feel rather like a kind of “museum tour” approach to learning about “other” cultural practices from a pre-existing, detached, or fixed learning perspective that remains unchallenged.

The framework of cultural awareness represents transformational learning in that it resituates the fixed, pre-existing learner perspective by challenging learners to first articulate the cultural situatedness of their own learning perspective. Once learners begin to “see” their own cultural grounding, it becomes easier for them to develop the ability to shift their perspective to begin to more empathetically accommodate forms of knowledge based upon very different assumptive terrain. The practice of CCE becomes transformational in that it asks learners to develop their capacity to temporarily but actively shift their own frame of reference to accommodate a culturally different form of knowledge, so that they begin, to the extent possible, to empathetically experience the meaning and value of a knowledge system as it might be experienced within the cultural community (11). The Cultural Wellness Center in South Minneapolis refers to this practice as “cultural interfacing” and has worked with faculty from a variety of health science disciplines in developing these skills (19).

Conclusion

The framework of cultural awareness recognizes that formal nutrition sciences and mainstream nutrition education curricula are both expressions of and products of Eurocentric culture. It is an approach that recognizes that all human knowledge is culturally constructed and sees cultural difference as an opportunity for learning about ourselves as well as others. Applying the framework of cultural awareness to nutrition education dislocates the presentation of nutrition from an exclusive, privileged, and dominant orientation often presumed as universal or culturally transcendent to an explicit

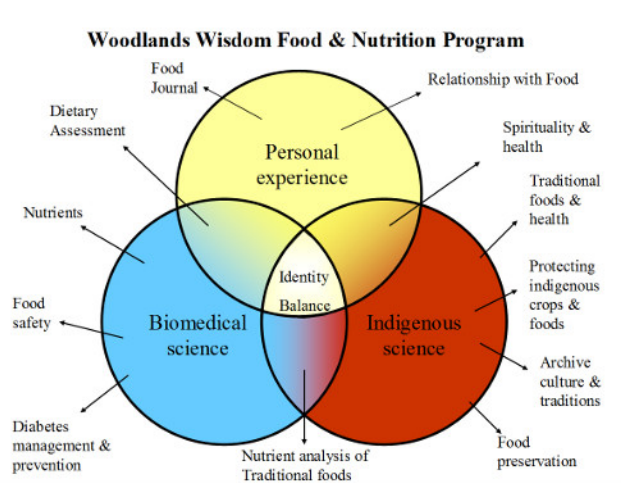


Fig. 1. The Woodlands Wisdom Food & Nutrition Program (reproduced with permission). Three frames of reference are depicted; personal experience, indigenous science, and biomedical science. Personal experience represents the lived experience of food choices as a daily process. Indigenous science represents ancestral systems of understanding the interrelationships of earth, water, plants, and animals, and balance as the key to health. Biomedical perspectives offer western/scientific understandings that view food in terms of chemical composition and nutrition as physically measurable interactions of food and physiology.

cultural context that invites exploration of cultural roots as well as exploration of other forms of knowledge grounded in different cultural terrain.

CCE includes a practice of respectfully navigating culturally different forms of knowledge with knowledge holders, whether in a community or institutional context. Interfacing includes navigating worldview orientations that may initially seem absurd or incomprehensible when viewed exclusively from within the intellectual infrastructure of western scientific orientations. Such practice can be challenging for university professionals who may implicitly assume that academic disciplines grounded in a Eurocentric worldview represent the exclusive means for producing valid and just claims about how the world works. CCE does not challenge the value of scientific inquiry as a set of tools that can help us to better understand the world of food and health. But it does challenge the social, political, and epistemic boundaries of credibility established by professional interests to demarcate that which constitutes “legitimate knowledge” to be included in sound, accredited nutrition education programs. It also offers a practical means for professionals to step out of their scientific skin and experience cultural difference for themselves through human interaction. This experience can powerfully influence professionals to reconsider the rationale of how we have set epistemic boundaries and what forms of knowledge we have excluded and why.

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