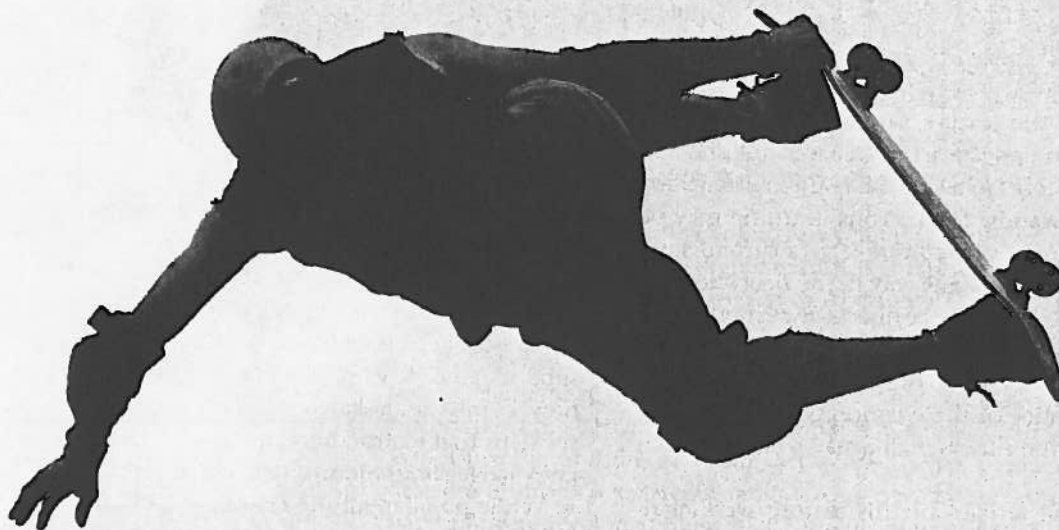


From Zumba to Yoga to Reality TV: Using Pop Culture to Teach the Sciences



Introduction

BONNIE T. BLANKENSHIP BRENT HEIDORN

FEATURE EDITORS

Photo © Ahmad Faizal Yahya

Increasing students' situational interest will motivate them to learn.

One of the biggest challenges for instructors of subdiscipline courses or of practitioners (e.g., coaches, physical education teachers, personal trainers) is how to get their students, athletes, or clients to understand and accurately use scientific concepts. For instance, it is one thing for an undergraduate student to be able to write a definition of center of gravity in a biomechanics course; it is quite another for that student to be able to teach a physical education lesson to first graders in which the concept is accurately applied. Often people are uninterested in learning scientific concepts because they fail to see the relevance to their future work or how the concepts will help them.

We should first define what is meant by "pop culture." Karen Collins, in the second article of this feature, uses Dictionary.com's definition (n.d.): "cultural activities or commercial products reflecting, suited to, or aimed at the tastes of the people." In other words, this includes things that are popular in current society: fashion, music, television, movies, sayings, technology, books, sports, food, and celebrities, to name a few. Ironically, what seems most consistent about pop culture is that it is constantly changing. This makes the task of using pop culture to teach the sciences quite challenging.

So why would the use of pop culture help students understand difficult concepts? One reason is that learners are interested in pop culture, and increasing a person's

situational interest in a new concept may increase their motivation to learn that concept (Hidi & Anderson, 1992; Subramanian, 2010). Since motivation is vital to the learning process (Bandura, 1986), pop culture may provide motivation to learners who might otherwise be lacking. Let's face it, many individuals would find discussing a reality television show or the latest fitness fashion more interesting than most scientific concepts.

Another reason pop culture may facilitate learning difficult scientific concepts is that many people learn better when they can connect new constructs to things already known or that are familiar to them. As Kathryn Ludwig points out in the fourth article of this feature, several learning theories might help explain the connection between learning and pop culture, but one of the most relevant is constructivism (Guba & Lincoln, 1994; Schwandt, 1994). Thus, learning may be enhanced if an element of pop culture (e.g., a current song or popular athlete) is tied in some way to the new scientific concept. For example, one might connect the current popular exercise dance of Zumba to biomechanical concepts, as Ludwig does in her article. Such connections may also help learners see the relevance of these concepts to their future career (e.g., a health and fitness major may someday teach Zumba classes).

The authors of the articles in this feature were challenged to describe how pop culture could be used to help make scientific concepts in their subdiscipline relevant and understandable to learners. The authors chose to attack this topic in various ways. One (Plymire) chose a specific aspect of pop culture (a reality television show) to teach a singular scientific concept in depth, while another explained how several aspects of pop culture could be used to teach several different scientific concepts (Collins). Still another author described a general process that instructors could follow in trying to use aspects of pop culture to help learners understand scientific concepts (Ludwig). While some authors wrote to help teachers and coaches in P-12 schools use pop culture to teach scientific concepts to students and athletes, others geared their advice more toward instructors of subdiscipline courses at the undergraduate level.

Derrick Mears, from the Curriculum and Instruction Academy, begins this feature with an overview of how technology, a dominant part of pop culture, has influenced today's learners. While we are probably all aware of how integral technology is in our culture, readers may be amazed at the speed at which technology changes for learners in today's society. Mears discusses the challenges that schools face in our technology-driven society, such as the inability of schools to keep up with current technology and how to teach students who have various levels of access to technology. Several means of using current technology in physical education classes are described.

Karen Collins, from the Sport and Exercise Psychology Academy, focuses on three aspects of pop culture—technology, television and movies, and athletic fashion trends—to illustrate how pop culture can be used to teach sport psychol-

ogy concepts. She offers these examples to instructors of a sport psychology course or practitioners (i.e., coaches or sport psychology consultants) who are trying to help students; future coaches, teachers, and personal trainers; and athletes to understand and use psychological concepts to enhance their own or their clients' performance and enjoyment.

Darcy Plymire represents the Sport History, Philosophy and Sociology Academy and explains how a reality show, *The Biggest Loser*, can be used to help students learn the concept of sociological imagination. The reality show is used to illustrate how society is conditioned to view obesity as a personal problem and how such a view can restrict our ability to solve that problem. Learners are encouraged to develop an alternative view of obesity as a social problem, a perspective that should prove valuable for a wide variety of professionals, including physical education teachers, personal trainers, health educators, and coaches.

Our last contributor, Kathryn Ludwig from the Biomechanics Academy, describes a general process by which pop culture could be used to teach a scientific concept from any subdiscipline. As examples of the process, Ludwig describes how Zumba and skateboarding can be used to illustrate six steps that instructors can use to help learners construct knowledge about biomechanical concepts.

While popular culture changes regularly, it is not going away. Using pop culture to teach subdisciplinary concepts to learners can be a powerful instructional tool. We hope the following articles will help college professors, coaches, physical education teachers, and other practitioners to harness this powerful tool for the benefit of their learners.

References

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Dictionary.com. (n.d.). *Pop culture*. Retrieved August 6, 2012, from <http://dictionary.reference.com/browse/pop+culture?s=t>.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.
- Hidi, S., & Anderson, V. (1992). Situational interest and its impact on reading and expository writing. In K. A. Renninger, S. Hidi, & A. Krapp (Eds.), *The role of interest in learning and development* (pp. 215-238). Hillsdale, NJ: Erlbaum.
- Schwandt, T. A. (1994). Constructivist, interpretivist approaches to human inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 118-137). Thousand Oaks, CA: Sage.
- Subramanian, P. R. (2010). Unlocking the power of situational interest in physical education. *Journal of Physical Education, Recreation & Dance*, 81(7), 38-41, 49.

.....

Bonnie T. Blankenship (bblanke@purdue.edu) is a professor in the Department of Health and Kinesiology at Purdue University, in West Lafayette, IN 47907. Brent Heidorn is an associate professor in the Department of Leadership and Applied Instruction at the University of West Georgia, in Carrollton, GA 30118.