### Chapter 5.10

# Interest and Performance when Learning Online:

Providing Utility Value Information can be Important for Both Novice and Experienced Students

Tamra B. Fraughton University of Utah, USA

Carol Sansone University of Utah, USA

**Jonathan Butner** University of Utah, USA

**Joseph Zachary** University of Utah, USA

#### **ABSTRACT**

As part of the Regulating Motivation and Performance Online Project (RMAPO), students completing an online HTML programming lesson demonstrated higher quiz scores and greater post-lesson interest when initially provided information about how the skills could be used (personal or organizational applications). These effects were mediated by higher levels of engagement with optional examples and exercises during the lesson. This paper examines whether the benefit from adding utility value information was limited to students with no prior experience creating web pages. Results show that, regardless of prior experience, the added information was associated with higher engagement levels, which were associated with higher lesson interest and quiz scores. Because prior experience was related to lower engagement levels overall, results suggest that experience had an indirect negative effect on motivation and performance outcomes that was offset by enhanced engagement when value was added. Implications for the Self-Regulation of Motivation Model (SRM) and online instructors are discussed.

DOI: 10.4018/978-1-61350-456-7.ch5.10

#### INTRODUCTION

Over the past several years, the number of online classes made available to college students has increased dramatically, and for the most part have been warmly received by students and instructors alike. For example, 58% of Chief Academic Officers surveyed viewed growth in the area of online learning as desirable for their institutions (Allen & Seaman, 2007). Online classes provide students the luxury of being able to "attend" classes whenever, and wherever they choose, also allowing them instant access to the course lectures, external links, and discussion boards with which to talk to other students in the class.

Though these reasons all seem like major advantages, there are substantial drawbacks associated with this tech-savvy classroom option. Sixty-three percent of the same Chief Academic Officers who saw online learning as desirable also thought that one of the biggest barriers to wider adoption of these courses comes from the need for stronger self-discipline in order to be successful, compared to traditional classrooms. The same luxury that affords students freedom to engage class material with the click of a button also affords them the luxury of not engaging that material. This is perhaps best exemplified in observations of an online HTML programming course where many students only completed the explicitly required material, rather than engaging the course material in ways that would help maintain and aid motivation to study, accessing and exploring optional examples and exercises (Zachary & Jensen, 2003; Zachary, 1994).

We use the Self-Regulation of Motivation (SRM) model to guide our examination of ways that brief motivation-based embellishments might influence whether and how students engage with different optional features during an online lesson, and whether different patterns of engagement predict learning and motivation at lesson conclusion. In the current study, we focus in particular on the role of an individual factor—previous experience

with the topic. We first briefly describe the SRM model and its implications for online learning. We then discuss initial findings, and why we hypothesize that differences in prior experience might be important in moderating these effects.

#### Self-Regulation of Motivation Model

The SRM Model (Sansone & Smith, 2000; Sansone & Thoman, 2005) begins by examining the role of goals when starting an activity (Elliot & Harackiewicz, 1996; Harackiewicz & Sansone, 1991; Vallerand, 1997). Before we begin a task, we normally have in-mind some sort of outcome goal we wish to achieve. The degree to which we are motivated to reach the goal (goals-defined motivation) depends on how much we value that outcome and how likely we think we are to achieve it (Eccles, 1983). The greater the goals-defined motivation, the more likely that we will choose to do that task over another for which we are less motivated. Once the task has started however, we must maintain our motivation to see the task through to the end.

The SRM differs from other models of self-regulation in that interest is seen as a key factor in maintaining this motivation once the task has begun (experience-defined motivation). For example, when engaged in an interesting task, individuals learn more quickly, choose that task more often over others, and persist in that task for longer periods of time (Alexander, Jetton & Kulikowich, 1995; Lepper & Henderlong, 2000). Furthermore, when the performance of a task is motivated by individual interest, individuals think about the task more if the task is interrupted or even after the task has been completed, and will practice task skills by choice (Krapp & Fink, 1992; Renninger, 2000).

When working on a task over time, as required in online learning, the SRM model suggests that both goals-defined motivation and experiencedefined motivation are important. It is therefore important to be mindful of each type of motivation

# 14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/interest-performance-when-learning-online/62508

#### Related Content

#### Architecture-Centered Integrated Verification

Yujian Fu, Zhijang Dongand Xudong He (2012). Computer Engineering: Concepts, Methodologies, Tools and Applications (pp. 201-222).

www.irma-international.org/chapter/architecture-centered-integrated-verification/62443

#### Formal Verification of a Subset of UML Diagrams: An Approach Using Maude

Allaoua Chaoui, Okba Tibermacineand Amer R. Zerek (2012). *Computer Engineering: Concepts, Methodologies, Tools and Applications (pp. 948-958).* 

www.irma-international.org/chapter/formal-verification-subset-uml-diagrams/62490

#### A Case Study of a Three-Part Entrepreneurial Strategy in a Japanese Accounting Cloud Service

Yutaka Mizunoand Nobutaka Odake (2018). *Multidisciplinary Approaches to Service-Oriented Engineering* (pp. 66-95).

www.irma-international.org/chapter/a-case-study-of-a-three-part-entrepreneurial-strategy-in-a-japanese-accounting-cloud-service/205294

#### The Human Role in Model Synthesis

Steven Gibson (2018). Computer Systems and Software Engineering: Concepts, Methodologies, Tools, and Applications (pp. 81-102).

www.irma-international.org/chapter/the-human-role-in-model-synthesis/192873

## Reputation Management Techniques and E-Collaboration: UAE Public Relations Communication Strategies During Crises Management

Badreya Al-Jenaibi (2019). Handbook of Research on Technology Integration in the Global World (pp. 64-86).

www.irma-international.org/chapter/reputation-management-techniques-and-e-collaboration/208793