

# Chapter 2

## Challenges and Solutions when Designing and Teaching Online Courses

**Jennifer Bachner**  
*Johns Hopkins University, USA*

### **EXECUTIVE SUMMARY**

*This case identifies the common challenges associated with teaching and developing online courses in higher education and proposes solutions to address these challenges. The solutions employ emerging technologies that facilitate (1) intellectual engagement through progressive inquiry, (2) collaboration among students, (3) continuous feedback, and (4) learning that takes place both within and outside of “class time.” The technologies discussed in the case advance these four learning principles and include online labor markets, collaborative annotation programs, interactive textbooks, and assessments that provide immediate grading and feedback. The examples used throughout the case are largely drawn from courses that were taught as part of a Master of Arts in Government Program. Although the courses focus primarily on the study of governance, politics and research methods, the technologies described would be useful in a wide range of academic courses, including those in the humanities, social sciences, natural sciences, and information sciences.*

### **ORGANIZATION BACKGROUND**

The courses referenced in this case were administered as part of an M.A. in Government program, which is housed within the School of Arts and Sciences at a major research university. The majority of students are working professionals who are

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completing their degrees on a part-time basis. A majority of the students live in the Washington, D.C. area and work for federal agencies, nonprofit organizations, political consulting firms, government contractors and on Capitol Hill.

Many of the examples used in this case are drawn from three online courses:

1. **Behind the Numbers: Polling and American Elections:** Discusses survey methodology in the context of the American electoral process. Topics include survey design, sampling, survey administration, daily tracking polls, exit polls and election forecasting.
2. **Research and Thesis:** Introduces students to the master's thesis process. Covers topics related to qualitative and quantitative research designs, including case studies, focus groups, interviews, survey methods, content analysis, policy evaluation and historical analysis.
3. **Political Analysis and Statistics:** Provides an introduction to the quantitative analysis of social science data. Introduces students to descriptive statistics and regression analysis.

Each of these courses is divided into 14 modules, with one module administered each week of the term. The courses use the Blackboard platform as the main course Website. Instructors are provided with formal training in using Blackboard and other relevant programs, such as Adobe Connect and VoiceThread. The university also provides office hours during which instructors can query trainers about technology related to online learning.

## **SETTING THE STAGE**

There is a wealth of existing literature on pedagogical best practices. Owing to decades of rigorous experimental and observational studies, scholars have a strong handle on which approaches to teaching and learning are most effective. Several of the principles established in the existing literature are particularly relevant to online learning. This section describes four principles that should inform the selection and implementation of online learning tools: (1) progressive inquiry facilitates knowledge building and retention, (2) collaboration motivates learning, (3) continuous feedback promotes progress and accuracy and (4) "outside-class" learning enhances "inside-class" learning.

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