Chapter IX

Curriculum and Instructional Design

Introduction

Who should design the curriculum that technology educators teach? Should curriculum be developed by governments and ministries of education? Should curriculum design be privatized and limited to commercial vendors? Should teachers design their own curriculum? Who should design the instructional materials? Should all materials be professionally designed by a vendor? As we noted in the previous chapter, technology teachers have had a century of freedom in designing and customizing their curriculum and instruction to suit themselves, their community, or the students. This had its advantages in diversity. The disadvantages, as we noted, related to the inconsistencies from school to school, even in the same district. When the teacher departed from a school, he or she typically departed with the curriculum and instructional materials. New teachers often began their first school year with little more than what they carried with them from their teacher preparation programs and student teaching experiences. One major problem was that when it came time for governments to identify priorities in the schools, technology studies was overlooked because of its incoherent curriculum. As indicated in Chapter VIII, the international trend is quickly shifting toward standards and unified curriculum in design and technology—the trend is toward a consistent scope and sequence of content for the study of technology. Common curriculum and goals along with

content and performance standards are the trends. From a perspective of professional vitality and political finesse, these trends are healthy. These trends offer the potential for long-term sustainability of technology studies in the schools. Nevertheless, given that all curricula are fallible and have shortcomings, teachers will always have a need for dispositions toward, or skills and knowledge in, curriculum and instructional design.

The questions "what should be learned?" and "how should it be organized for teaching?" are eventually resolved, whether by consensus, fiat or might, through processes of *curriculum and instructional design*. One is basically a question of content, the other a question of form. Neither can be resolved without changing the other—the questions are dialectically related. We can say that curriculum and instructional design involve the forming of educational content and the contents of educational forms. Curriculum theorists take it for granted that curriculum flows from the "*what*" of "what should be learned?" Instructional designers take it for granted that instruction flows from the "*how*" of "how should it be organized?" Theorists neglect design. Designers neglect theory. Teachers, however, cannot afford to neglect either theory or design; they have to be theorists and designers. In this chapter, curriculum and instructional design are explained along with a focus on the design of projects, units, and modules. This chapter combines background knowledge with techniques of curriculum and instructional design. The chapter concludes with sections on course design, copyright, and academic freedom. In some of the previous chapters, the emphasis was on "what should be learned?" This chapter focuses on "how should it be organized for teaching?"

Curriculum Design and Theory

The practice of organizing curriculum—activities, environments, goals, knowledge, student and teacher interests, social conditions, technologies, values and the like—into a containable pedagogical form involves a series of judgments. Judgments are necessarily made on what and whose knowledge is of most worth, the scope and sequence of this knowledge, how student desires will be focused, what technologies to deploy or purchase and so on. Curriculum designs lend form to, and chart provisions for, the processes of learning and teaching and become concrete and operational at various stages of educational practice. The very nature of student experiences are shaped by the way we choose to design, or not design, curriculum. In other words, different curriculum designs provide varied qualities and powers of experience and knowledge. Curriculum design might at first glance appear to be about the economics and pragmatics of teaching, about arranging content and assignments, apportioning time on timetables, and allocating resources. Curriculum is, and is much more than, scope and sequence. Mundane *and* profound judgments

Related Content

Framework for the Structuring of Distance Education in Higher Education Institutions in the COVID-19 Pandemic Process
Ali Kürat Erümitand smail Çetin (2022). *Handbook of Research on Managing and Designing Online Courses in Synchronous and Asynchronous Environments (pp. 315-329).*
www.irma-international.org/chapter/framework-for-the-structuring-of-distance-education-in-higher-education-institutions-in-the-covid-19-pandemic-process/292371

Changes in Organizational Learning and Leadership Influenced by Technology
Judith Parker (2012). *Technology and Its Impact on Educational Leadership: Innovation and Change (pp. 78-89).*
www.irma-international.org/chapter/changes-organizational-learning-leadership-influenced/62912

When Internships Go Virtual: Unpacking Experiences of Black Supervisors
Shanetia P. Clarkand Lynne G. Long (2021). *The Black Experience and Navigating Higher Education Through a Virtual World (pp. 22-38).*
www.irma-international.org/chapter/when-internships-go-virtual/281468

Understanding Faculty and Student Attitudes about Distance Education: The Importance of Excitement and Fear
Rui Li, Jennifer Bunkand Esther Smidt (2017). *Handbook of Research on Humanizing the Distance Learning Experience (pp. 410-434).*
www.irma-international.org/chapter/understanding-faculty-and-student-attitudes-about-distance-education/171332

Interactivity in Web-Based Learning
Adams Bodomo (2006). *International Journal of Web-Based Learning and Teaching Technologies (pp. 18-30).*
www.irma-international.org/article/interactivity-web-based-learning/2964