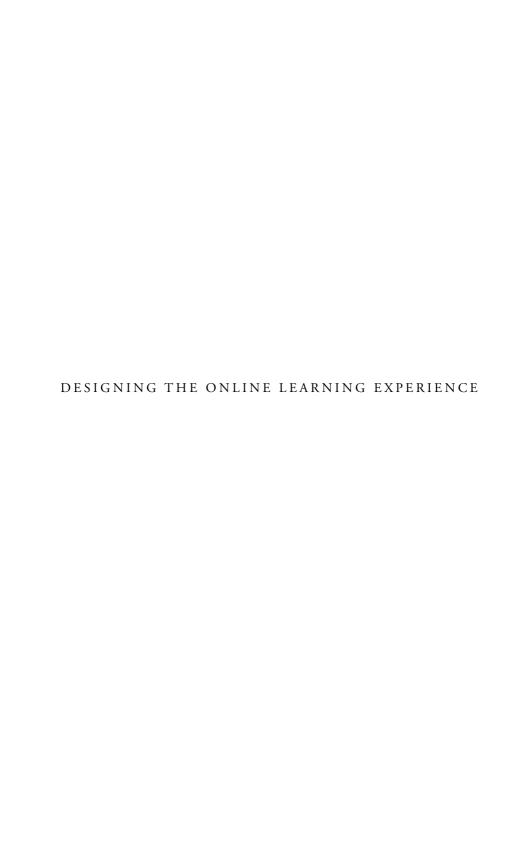
# Designing the Online Learning Experience

EVIDENCE-BASED PRINCIPLES AND STRATEGIES

Simone C. O. Conceição and Les L. Howles

FOREWORD BY B. JEAN MANDERNACH





# DESIGNING THE ONLINE LEARNING EXPERIENCE

Evidence-Based Principles and Strategies

Simone C. O. Conceição and Les L. Howles

Foreword by B. Jean Mandernach



First published 2021 by Stylus Publishing, LLC.

First Edition, 2021

Published 2023 by Routledge 605 Third Avenue, New York, NY 10017 4 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Routledge is an imprint of the Taylor & Francis Group, an informa business

Copyright © 2021 Taylor & Francis Group.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

### Notice:

Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

Library of Congress Cataloging-in-Publication Data Names: Conceição, Simone C. O., 1963- author. | Howles, Les L.,

author. | Mandernach, B. Jean, writer of foreword.

Title: Designing the online learning experience : evidence-based principles and strategies / Simone C.O. Conceição and Les L.

Howles; foreword by B. Jean Mandernach.

Description: First edition. | Sterling, Virginia : Stylus, 2021. | Includes bibliographical references and index. |

Identifiers: LCCN 2020058257 | ISBN 9781620368343 (hardback) | ISBN 9781620368350 (paperback) | ISBN

(hardback) | ISBN 9/81620368350 (paperback) | ISBN 9781620368367 (pdf)

Subjects: LCSH: Web-based instruction. | Instructional systems-Design. | College teaching-Aids and devices. | College teaching-Methodology. | Internet in higher education.

Classification: LCC LB1044.87 .C638 2021 | DDC 371.33/44678--dc23

LC record available at https://lccn.loc.gov/2020058257

ISBN 13: 978-1-62036-834-3 (hbk) ISBN 13: 978-1-62036-835-0 (pbk) ISBN 13: 978-1-00-344412-1 (ebk)

DOI: 10.4324/9781003444121

This book is dedicated to instructors and learning designers who had to rethink and retool existing courses for the online environment during the COVID-19 pandemic.



# **CONTENTS**

	FOREWORD  B. Jean Mandernach	ix
	PREFACE	xiii
1	DESIGNING FOR THE LEARNER EXPERIENCE	1
2	INTEGRATED FRAMEWORK FOR DESIGNING THE ONLINE LEARNING EXPERIENCE	15
3	DESIGNING THE COURSE STRUCTURE AND LEARNER INTERFACE	39
4	FACILITATING LEARNING THROUGH INSTRUCTIONAL CONTENT DESIGN	61
5	CREATING MEANINGFUL LEARNING ACTIVITIES THROUGH LEARNING EXPERIENCE DESIGN	85
6	ENHANCING MOTIVATION, ENGAGEMENT, AND LEARNING THROUGH SOCIAL INTERACTIONS	103
7	INCORPORATING ASSESSMENTS AND FEEDBACK THROUGHOUT THE LEARNING EXPERIENCE	121
8	PUTTING IT TOGETHER	137
	GLOSSARY	153
	REFERENCES	161
	ABOUT THE AUTHORS	175
	INDEX	177



### **FOREWORD**

In higher education, it is unusual for a book to be published at exactly the right time to make an immediate and profound impact. Although a handful of books are visionary and published in advance of predicted challenges, the vast majority are written in response to current needs and, despite being informative, arrive on the market well beyond the optimal time to have the greatest influence. Regardless of whether a book is published a bit too early or a bit too late, the practical impact is often diminished as a sheer byproduct of timing.

Designing the Online Learning Experience is the rare exception. With over 50 combined years as distance education scholars, practitioners, and thought-leaders, Simone C.O. Conceição and Les L. Howles fully understand the ever-evolving nature of online education and anticipated the growing need for learning experience online design. Our conversations as colleagues on the eLearn Magazine editorial board centered around a growing unrest . . . a dissatisfaction with traditional approaches to instructional design. At the heart of our discussions was an awareness that our knowledge of online education and our experiences as online instructors were not enough. To do something meaningful—something actionable—we needed to shift our perspective to focus on those who matter most. The missing element in the available literature was a comprehensive approach to online course design that aligns research and experience with the needs, perceptions, and realities of those at the center of it all: students.

While I and most of my colleagues were content to stand around the virtual watercooler complaining about this disconnect, Conceição and Howles set out to fix it. Hence, the philosophy and ideas underlying *Designing the Online Learning Experience* were born.

Then the COVID-19 pandemic hit. Higher education—all higher education—was thrusted suddenly and unexpectedly into virtual teaching and learning. While the need for more holistic online course design was already an emerging issue, the COVID-19 pandemic catapulted concerns to the forefront. Online teaching and learning were no longer reserved exclusively for those who chose it. It impacted everyone. Questions skyrocketed. Concerns skyrocketed. Dissatisfaction with the status quo of online education skyrocketed.

Simply put, thanks to the pervasive, global immersion into online education, time for contemplation has run out. It is time for action. It is time for a fundamental shift in our philosophy of online teaching and our approach to online course design. Fortunately, *Designing the Online Learning Experience* arrives just in time to make this happen. With research-driven, practitioner-proven strategies, it is poised to make an immediate and profound impact on not only those new to online education but also experienced instructors seeking to create a more engaging online learning experience for their students.

There is a host of available literature addressing virtually every aspect of distance education. From assessment to technology (and everything in between), there are books, journals, websites, and podcasts dedicated exclusively to promoting best practices in online teaching. Admittedly, I am a frequent contributor—as a researcher, author, and journal editor—of these disparate best-practice findings. But despite this plethora of information, what was missing—until now—was an holistic approach to online course design that comprehensively addresses the cognitive, social, emotional, and behavioral aspects of the learning experience. It is not a matter of needing more information. Rather, the greatest need is for an actionable philosophy and framework that fosters effective design decisions using relevant research in concert with the learners' experiences.

Key to this endeavor is a focus on the learners' experiences. This is more than instructional design. Instructional design applies research principles to design, develop, and deliver online courses; it is necessary but not sufficient. Instructional design centers around the expertise and decisions of the content expert but fails to fully embrace learner empathy as a driving factor in course design. Recognizing the limitations of traditional approaches, theorists have offered a wide range of alternatives: learner-centered design, human-centered design, user-experience design, participatory design, emotional design, empathic design . . . the list goes on and on. Like traditional instructional design, these approaches are relevant and valuable. Like traditional instructional design, they are necessary but not sufficient. Or, perhaps more accurately, when viewed in combination, sufficient but disconnected. Learning experience design connects these philosophies to offer a holistic approach to online course design that transcends individual, independent design strategies. As explained by Conceição and Howles, "Learning experience design . . . require[s] a different mindset, process, and toolkit for instructors and course designers" (p. 13, this volume).

Designing the Online Learning Experience delivers the inspiration and guidance that online instructors and course designers need *right now*. While the COVID-19 pandemic will undoubtedly end, the widespread repercussions of higher education's immersion in online education will not.

Experienced online instructors were forced to dig deeper and think differently to meet student demands that had not previously existed. Instructors new to online teaching were pressed to reconsider the fundamental meaning of effective teaching and explore the potential available via online education. The questions, concerns, and challenges raised during the pandemic-induced shift to online teaching and learning are not likely to fade as we return to "normal." Higher education is ripe for a new approach to meaningful, engaging, learner-centered online education. And *Designing the Online Learning Experience* provides it.

B. Jean Mandernach, PhD Research Professor and Executive Director Center for Innovation in Research and Teaching Grand Canyon University September 2020



### **PREFACE**

he number of students taking at least one distance education course from fall 2015 to fall 2016 accounted for 6,359,121 individuals (representing 31.6% of all students), whereas students taking exclusively distance education courses accounted for 3,003,080 people (14.9%) (Seaman et al., 2018). This shows that online education is no longer a trend; it is a reality. Institutions of higher education now consider online education a critical element of their long-term strategic planning; however, leadership still sees faculty acceptance showing only small signs of improvement.

Many instructors, older and with higher ranking, still tend to be reluctant to embrace online education. Some of the reasons for their resistance include the perception that online instruction gives few visual cues when interacting with learners, provides little interaction with and among learners, and is not as effective as in face-to-face classrooms when it comes to quality of content, among other reasons (Ubell, 2016). This lack of interaction and control over the teaching and learning experience fosters a feeling of impersonal instruction. Instructor resistance is mostly justified by unfamiliarity with online education, inexperience with online instruction, and lack of knowledge of online learning design (Conceição & Lehman, 2011).

In most online courses, instructors and learners are separated in time and space and depend on technology to facilitate interactions that often lack a strong personal dimension. As distance education programs continue to proliferate and mature, the emphasis on simply making content available to students online, emulating heavily text-based correspondence courses, is no longer acceptable. Yet, antiquated learning design practices persist in higher education and become amplified in online learning environments where technology-mediated communication combined with an emphasis on content delivery often ignores the personal dimension of learning. Creating online courses now requires a new way of thinking that incorporates new design ideas and approaches from a variety of fields; it also requires a new set of learning design skills for instructors and course designers.

### The Focus of This Book

The focus of this book is on the learners and the design of their online learning experiences. We refer to learning design instead of instructional design—which focuses on instruction and places the instructor at the center stage of the process. Therefore, the focus is on approaching a learner's online course experience as a journey consisting of a combination of learning interactions with content, instructor, and other learners.

### Who Can Benefit From This Book

This book provides instructors new to online course design with a holistic way of thinking about learners, learning, and online course design and distinctive strategies derived from an integrated framework for designing the online learning experience. This framework helps experienced instructors to intentionally use strategies for creating a holistic learning experience that is more personalized, engaging, and meaningful for online learners. These strategies are based on evidence-based learning design principles and strategies and allow readers of the book to adopt an empathic mindset focused on the experience of the learner.

For experienced online instructors and course designers, this book provides strategies for approaching the learning experience from an integrative perspective. The integrated framework for designing the online learning experience is not an instructional design model, nor is it intended to be a replacement for well-established learning design practices. Our approach to learning experience design attempts to supplement conventional learning design models and provides a set of principles and strategies intended to enhance and invigorate learning design practices for online courses. We encourage practitioners to continue using the learning design models they are most comfortable with that work in their context.

# How the Book Is Organized

The book is organized into eight chapters. The opening chapter of the book, "Designing for the Learner Experience," addresses the changes in the dynamic learning ecosystem of higher education and the need for a unique mindset for designing learning for online environments. We explain why higher education is at a tipping point and the need to focus on learner-centered values and approaches in the online learning environment. We introduce concepts and research from a variety of fields, provide a definition of *learning experience design*, and offer core concepts that provide the basis for this book.

In chapter 2, "Integrated Framework for Designing the Online Learning Experience," we present several learner characteristics that can influence the design of online courses. Then we introduce the integrated framework for designing the online learning experience. The chapter concludes with a set of learning experience principles and strategies as a preparation for implementing the integrated framework in practice in subsequent chapters.

In chapter 3, "Designing the Course Structure and Learner Interface," we present common challenges and scenarios involved in designing a course structure and the impact of designing the learner interface on the learning experience. We conclude the chapter by presenting strategies for designing the online learning environment, applying design thinking and learner-centered design principles.

In chapter 4, "Facilitating Learning Through Instructional Content Design," we focus on the design of learner—content interactions and apply concepts and principles from the integrated framework for designing the online learning experience. The intent is to help instructors and course designers to adopt a learner-centered perspective for custom designing, curating external resources as well as repurposing and integrating content into the course structure and flow. We approach this design aspect by first defining what we mean by instructional content interactions and common starting points for designing online course content. We identify common challenges and design factors influencing instructional content design and present fundamental shifts in designing online content material. We conclude the chapter by offering practical strategies to enhance learner—content interactions and foster higher levels of engagement and deeper learning outcomes.

In chapter 5, "Creating Meaningful Learning Activities Through Learning Experience Design," we focus on the third design aspect. In this chapter, we describe key attributes and types of online learning activities. The emphasis throughout this chapter is on applying design thinking as a foundational strategy for creating innovative learning solutions. We provide an example scenario for creating online learning activities using the design thinking process. We conclude the chapter with strategies for designing online learning activities.

In chapter 6, "Enhancing Motivation, Engagement, and Learning Through Social Interactions," we build on learner–content interactions and focus on the fourth design aspect: social interactions that derive from technology-mediated interpersonal communication between learner and instructor and learners with other learners. In this chapter, we explain why social interactions matter, highlight types of social interactions, identify five factors influencing the design of social interactions, provide a process for

designing social interactions, and suggest strategies for integrating social interactions into learning experience design.

In chapter 7, "Incorporating Assessments and Feedback Throughout the Learning Experience," we focus on the last design aspect: assessments and feedback. In this chapter, we differentiate between assessments and feedback, provide ways for rethinking assessments and feedback as learning experiences, and provide strategies for incorporating assessments and feedback into learning experience design. We highlight the importance of incorporating assessments and feedback into the learning experience to sustain learners' attention and motivation.

Chapters 3 through 7 begin with guiding design questions. These questions are answered in the chapters by providing strategies as design solutions. These chapters focus on enhancing online learning experiences for each of the major aspects of an online course, providing evidence-based principles and strategies to promote learner engagement and deep learning.

In chapter 8, "Putting It Together," we provide an example illustrating a real-world application of the principles and strategies covered in the book using design thinking to create learning experiences. We also provide a summary of the guiding design questions and design strategies for each design aspect in the integrated framework for designing the online learning experience. We conclude with approaches for moving forward for designing the online learning experience.

# Our Design Thinking Process for Writing This Book

With similar experiences but different backgrounds in learning design, we brought diverse perspectives into the writing of this book. Conceição is a scholar-practitioner whereas Howles is a practitioner-scholar. Writing this book involved an iterative process. We did not use a linear approach for writing one chapter after the other; instead, we brainstormed ideas, sketched concepts, developed outlines, created graphics, and then put those ideas into a written format. We used design thinking and a free-flow style that required an open mind for accepting new ideas and perspectives. Often we needed to process these ideas on our own or through ongoing exploration of the literature for a couple of days before settling in with a concept to build a chapter.

The first chapter begins with examining concepts and research from a variety of fields—user experience design, human factors design, human-centered design, and design thinking. These concepts served as the foundation for the entire book. Our intention was to bring together concepts to create innovative ideas to solve design challenges. Other design concepts

emerged as we moved forward with the subsequent chapters; however, we often returned to the first two chapters to add or remove concepts as our thinking became more refined upon sharing our sketches with stakeholders (learners, instructors, and course designers) and discussing between ourselves. The iterative process was essential for our writing.

The integrated framework for designing the online learning experience emerged and evolved through the iterative process and design thinking. Once we established the framework in chapter 2, chapters 3 to 7, on the design aspects of the framework, were created by building on each other's concepts, principles, and strategies, always focusing on the learner experience in an online course. These five chapters could not have been created as stand-alone sections since the online learning experience is holistic and requires flow.

One important element of our writing process was to apply our new design ideas in practice. The integrated framework for designing the online learning experience was employed in a course taught by Conceição in spring 2019. This allowed for rapid prototyping of our new ideas, receiving feedback on areas that were unclear, and reality checking. Rapid prototyping of our work proved to be valuable for putting it together. The final chapter shows how the ideas in this book can be brought together using the concepts, principles, and strategies provided in this book.

For us, empathic design, always keeping the learner perspective in mind when designing aspects of an online course, is paramount. The learner perspective is in the forefront of making design decisions. Using design thinking and an iterative process was like putting into practice what we are advocating in this book. We hope this book inspires instructors and course designers to reinvigorate their current practices and ways of thinking about online learning design in their own contexts and build on the ideas from this book.

Simone C.O. Conceição, PhD Milwaukee, Wisconsin Les L. Howles, MS Waunakee, Wisconsin

