Chapter XVI
Comparing Visual Instructional Design Languages: A Case Study

Luca Botturi
University of Lugano, Switzerland

Daniel Burgos
The Open University of the Netherlands, The Netherlands

Manuel Caeiro-Rodríguez
University of Vigo, Spain

Michael Derntl
University of Vienna, Austria

Rob Koper
The Open University of the Netherlands, The Netherlands

Patrick Parrish
The COMET® Program/University Corporation for Atmospheric Research, USA

Tim Sodhi
The Open University of the Netherlands, The Netherlands

Colin Tattersall
The Open University of the Netherlands, The Netherlands

ABSTRACT

This handbook testifies that research on VIDL is lively, and has produced a number of interesting design languages and tools. This chapter wants to support readers in understanding the similarities and differences of some of the VIDL presented in the previous chapters, not in theory, but applying them to a specific instructional design case.
INTRODUCTION

The sequence of Chapters in Section II of this handbook is the evidence that research in the field of VIDL is lively, and that interested readers have only to choose a language among many in order to apply some of the ideas presented in her/his own professional context. However, how to choose a language is not self-evident. Chapter XVIII will provide a structured framework for this—but with this chapter we already want to provide a first space for comparing some of the proposed VIDL.

The chapter is built around an instructional design case study, which is presented in the next section. The case study was submitted to all authors of chapters in part II of this handbook. Some of them took time to model it with their VIDL, and we collected here the results, which are presented in the following sections. In particular, the focus is on how each single design language contributes to the design, in what stages it intervenes, and what benefits it brings.

The languages represented here are narrative-based design (Patrick Parrish, Chapter VI in this handbook), E2ML (Luca Botturi, Chapter VII), coUML (Michael Derntl, Chapter IX), POEML (Manuel Caeiro-Rodriguez, Chapter X), and IMS Learning Design (Daniel Burgos, Tim Sodhi, Colin Tattersall and Rob Koper, Chapter XV). The differences in style among the sections of the chapter are a natural consequence; as such, this is also a good example of international collaboration.

Throughout the chapter, comments are kept to a minimum, as the main purpose is illustrative: to let the readers see the languages at work, in order to foster reflection and to provide elements for selection and discussion.

THE CASE STUDY

Setting

The case study describes a 16-hour course in a blended learning environment. The topic of the course is Introduction to Instructional Design, and it follows a case-based and project-based teaching strategy.

The client, who asked for the course, is the director of a non-profit organization. The target is a group of 15 people, employed in a network of non-profit organizations that organize vocational training programs for dropout students at the age of 14-19. They are all social workers, and want to improve their skills in the design of instructional activities in order to better cope with their daily job.

The course is held by a single instructor, who can count on the help of a tutor for uploading materials online and for monitoring online discussions.

Learning Goals

After the instruction, the course participants will be able to:

1. Plan and manage an instructional design process in their professional environment
2. Define the main roles and task involved in instructional design
3. Foresee the critical points in instructional design projects
4. Given a design task, effectively apply specific design techniques, namely
   a. Conducting a complete instructional analysis
   b. Properly define learning goals
   c. Define an instructional strategy
   d. Design a sound evaluation plan
27 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/comparing-visual-instructional-design-languages/22100

Related Content

NOD Makerspace
(2019). *European Perspectives on Learning Communities and Opportunities in the Maker Movement* (pp. 159-176).
www.irma-international.org/chapter/nod-makerspace/220820

Online Education Programs for Adult Learners in Higher Education
www.irma-international.org/chapter/online-education-programs-for-adult-learners-in-higher-education/106312

Deepening Engagement: The Intimate Flow of Online Interactions
www.irma-international.org/article/deepening-engagement/228971

Collaborative Game-Based Learning with Motion-Sensing Technology: Analyzing Students' Motivation, Attention, and Relaxation Levels
www.irma-international.org/article/collaborative-game-based-learning-with-motion-sensing-technology/187237

E-Assessment System for Open and Short Answer (Applied to a Course of Arabic Grammar in 7th Year in Tunisia)