# 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<sup>®</sup> 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.

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# 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 narrativebased design (Patrick Parrish, Chapter VI in this handbook), E<sup>2</sup>ML (Luca Botturi, Chapter VII), coUML (Michael Derntl, Chapter IX), POEML (Manuel Caeiro-Rodríguez, 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

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