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Information technology for learning, education and training — Catalogue model for virtual, augmented and mixed reality content

*Technologies de l'information pour l'apprentissage, l'éducation et
la formation — Modèle de catalogue pour les contenus en réalité
virtuelle, augmentée et mixte*



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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier; Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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Introduction

Effective use of the characteristics of virtual, augmented and mixed reality (VR, AR and MR, respectively) content in education has growing importance. There are increasing numbers of VR/AR/MR educational resources and there are also VR/AR/MR resources that have been aligned with curriculum documents. One of the main challenges is to search for and find content that is appropriate for the curriculum. However, lack of adequate description of such characteristics in a standard way makes it difficult for users to find suitable content.

This document describes a catalogue model for virtual, augmented and mixed reality content that can be linked to curriculum and achievement standards information. The curriculum catalogue metadata is designed to support search and retrieval of VR/AR/MR content in activities in education.

For teachers and learners, it supports:

- searching and selecting VR/AR/MR content related to curriculum;
- exploring specific features of the content (type, price, etc.) at a glance;
- finding technical information for the effective use of the VR/AR/MR content.

For the institution, it supports:

- managing the VR/AR/MR content related to the curriculum;
- adopting the VR/AR/MR content with priority based on the catalogue model.

For curriculum developers, it supports:

- comparing and identifying VR/AR/MR content for review to determine relevance to the curriculum.

For content providers, it supports:

- exploring and reviewing content to determine relevance and potential usefulness of content development initiatives;
- providing tools to gather reviews and feedback regarding content developed.

For device vendors, it supports:

- providing support for feedback regarding performance, technical configuration (e.g. platform, infrastructure), accessibility/usability information, and other improvements needed.

This document provides related catalogue models and specific elements of the catalogue model to use VR/AR/MR content for activities in education. However, specification of the catalogue model using the ISO/IEC 19788 series is not in the scope of this document.