

Advances in Game-Based Learning

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Describing and Studying Domain-Specific Serious Games

 Springer

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Preface

In 2014, a new International Research Network entitled “Developing competencies in learners: From ascertaining to intervening” was established. This network, which is coordinated by the Center for Instructional Psychology and Technology (CIP&T) of the KU Leuven, Belgium, and funded for a 5-year period by the Research Foundation—Flanders (FWO), involves 14—mainly European—research teams. As the network’s title indicates, it addresses a theoretically and methodologically major theme of instructional sciences, namely how to make the difficult step from results of ascertaining studies to intervention studies, or, stated differently, from models or theories of (stimulating) cognition, development, and learning to models or theories of instruction, with a particular attention to the role of instructional technology. Arguably, addressing this complex and fundamental issue requires the confrontation and integration of insights and approaches from various subdomains of instructional sciences, including instructional psychology, instructional technology, instructional design, subject-matter didactics, and teacher education.

For its first meeting, which took place in the Autumn of 2014 in the Irish College, Leuven, a theme was chosen that is in the heart of the network’s research agenda, namely domain-specific serious (computer) games.

The present volume is based on that meeting, during which the theme of domain-specific serious games was addressed in different domains, at different educational levels, and from the distinct above-mentioned subdisciplinary perspectives reflected in the network.

The volume is quite unique in its conception and structure. Compared to most other scientific volumes on serious games, this publication does not only comprise scientific reports of the effects of these games on the development of various aspects of learners’ competencies, or on how these games are effectively implemented and used in learners’ educational settings. This book also pays ample attention at and provides a revealing insight into the conception, design, and construction of these games under investigation, their underlying theoretical assumptions, their developers’ struggles with trying to balance and integrate the (domain-specific) learning and gaming elements, the contextual and pragmatic affordances and constraints that co-determined their architecture and outlook, etc. Moreover, the volume contains

unusually detailed descriptions of the domain-specific serious games being used in implementation and intervention studies being reported. By providing such an unusually rich and vivid view on (the making of) these serious games, this volume constitutes a nice complement to the available research literature on (domain-specific) serious games.

I would like to congratulate and thank the organizers and sponsor of the meeting and the editors of the volume that resulted from it. I am sure that this book will be informative and inspiring to researchers and other professionals active in the design, implementation, and evaluation of domain-specific serious gaming.

Leuven, Belgium
March 2015

Lieven Verschaffel

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