
# DEVELOPMENT OF AN EDUCATIONAL GAME TO TEACH SQL PROGRAMMING

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# Development of an Educational Game to Teach SQL Programming

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# Abstract

To be written.

# Acknowldgements

To be written.

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# Outline of Project

To be written.

# Chapter 1

# Literature Review

## 1.1 Video Games

The video games industry is growing very rapidly. The value of the video games market was predicted at $108 billion USD in 2017, and is expected to reach $180 billion by 2022 [1, 2].

### 1.1.1 History

The interest in video games

### 1.1.2 Genres

To be written.

### 1.1.3 Platforms

To be written.

## 1.2 Educational Games

Video games for entertainment purposes have dominated the market, but serious games are expected to grow. Serious games have proved to be successful, however further research is required to determine the effectiveness of serious games for educational purposes [3].

Susi et al., noted that there are many definitions for the term 'Serious Games', but most agree on a core meaning that serious games are (digital) games used for purposes other than mere entertainment [3]. Zyda, defined serious games as "a mental contest, played with a computer

in accordance with specific rules, that uses entertainment to further government or corporate training, education, health, public policy, and strategic communication objectives" [4]. So for the purpose of this dissertation, we will focus on the subset of serious games that are concerned with educational purposes.

### 1.2.1 History

To be written.

### 1.2.2 Motivation

To be written.

### 1.2.3 Engagement

The design and production of video games involves aspects of cognitive psychology, computer science, environmental design, and storytelling, to name a few [7].

### 1.2.4 Learning

To be written.

### 1.2.5 Examples

To be written.

## 1.3 Developing an Educational Game

To be written.

### 1.3.1 Genre

To be written.

### 1.3.2 Platform

To be written.

### 1.3.3 Game Design Approaches

Of the 67 studies considered over a period of 28 years, 38 show no difference between games and conventional instruction; 22 favor games; 5 favor games, but their controls are questionable; and 3 favor conventional instruction.

The authors conclude that subject matter areas where very specific content can be targeted are more likely to show beneficial effects for gaming.

# Bibliography


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[5] The first video game? `https://www.bnl.gov/about/history/firstvideo.php`. Accessed: 2018-12-06.

[6] *9th Symposium, April 17-19, 1970.* National Gaming Council. Envirometrics and Scientific Resources Corp.

[7] Raph Koster and Will Wright. *A Theory of Fun for Game Design.* Paraglyph Press, 2004. ISBN 1932111972.

# Appendices

# Appendix A

# Uncertainty Analysis