MULTIPLE INTELLIGENCES AND VIDEO GAMES: ASSESSMENT AND INTERVENTION WITH TOI SOFTWARE

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https://doi.org/10.3916/C58-2019-09

INTRODUCTION

Multiple Intelligence (MI) Howard Gardner's term that revolutionized education. It defines intelligence as skills that are independent of each other and present in all people.

Videogames, powerful tool of evaluation that can be incorporated through specific methodologies such as gammatization to improve the learning process.

'Tree of Intelligences' (TOI), digital tool to evaluate and intervene the MI through video games and to achieve a more personalized and inclusive education.

OBJECTIVE

Present the design, development, and piloting of TOI (Tree of Intelligences) software, a digital tool to evaluate multiple ntelligences and perform interventions through video games.

METHODOLOGY

1. Description of the TOI software
2. From instructional design to intelligence assessment
3. The games, the TOI software engine
4. Profile of Intelligences, TOI's main mission

372 students, (5 and 9 years)
1st, 2nd and 3rd Primary Education
3 centres in Asturias and Madrid

Figure 1. Graphic description of the TOI Method.

Variables successes, total time and accuracy. Criteria laid down by Finney and Di-Stefano (2006)
The Mann-Whitney U was applied for the analysis of gender differences
The Kruskal Wallis tests for the analysis of differences according to the school year.

RESULTS

9 out of 10 games had a normal distribution without differences according to gender in most games (valid instrument for both boys and girls), but there were differences in relation to the school year and age.
The content in terms of difficulty is appropriate

CONCLUSIONS

1. The TOI software has the potential be a suitable instrument for the evaluation and intervention of multiple intelligences by its operation and design, and their inclusion in the classroom could avoid classification of students.

2. Video games, a positive resource for learning that young people consider them attractive, and improve skills and abilities. Are a powerful strategy for facilitating learning .

3. We hope that the methodology for the design of games to cover different age groups and to verify the validity and reliability of TOI with the students with specific educational needs (ADHD...).

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