



DIGITAL GAMES-BASED LEARNING FOR SPECIAL EDUCATIONAL NEEDED CHILDREN

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INTRODUCTION

The special education needed children such as dyslexia, autism spectrum disorder (ASD), asberger sendrom(AS) can be learn in different methods; such as watching, playing, listening, drawing, playing and repeating. Dyslexia is a learning difficulty. Autism spectrum disorders (ASD) are developmental disorders that affect individuals to different degrees. The core symptoms include impairments in communication and social interactions, with deficits in social emotion reciprocity, in non-verbal communication and in developing and maintaining relationships In both situation there is a failure in learning and improving social skills and social interactions. Social skills are verbal (e.g. speech intonation, clarity of speech) and also non-verbal behaviours (e.g. eye-contact, facial expression, gestures) that enable a person to achieve social competence. International Communication Technologies(ICT) supplies many functional e-learning strategies to these children. Because these children usually need virtual environments and enjoy playing video games. Many different strategies can be use on ICT like Digital games-based learning (DGBL) DGBL boosted the children's engagement with the learning activities and social interaction. Usually “**serious games**” are used for DGBL. **Serious games** can be described as digital games equipment with a agenda of educational design entertainment. They facilitate to start social interactions and realize emotions, normalize failure and strengthening children's self-esteem. They also served an intro-individual function of the children. For this reason they are used for cognitive therapies..The main characteristics of serious games are; -none were exhaustive (they are just target on training-never support the feeling of anger, aggressiveness and hostility) -by daily playing routine they start social interaction -all of them are playable on computer, notebooks, robots and mats.The special needed learning problem children are usually recognized by a school nurse or pediatric nurse due to routine health control. Rarely the families can't determine their children's problem until this time. Because of this they can't find the solution of the problem. At this point pediatric nurses can highlighted the parent's way by giving digital solutions.

OBJECTIVE

In this study it's aimed to review the digital games- serious games that facilitate learning and social interaction of special educational needed children.



METHOD

The search was done by reviewing literature screening at Medline, Science Direct, Pub Med and ACM Digital Library.

RESULTS

The serious games are usually targeting on emotion recognition and production. These games consist of incremental learning, linearity, attention span, scaffolding, transfer of learned skills, interaction, learner control, practice and drill, intermittent feedback, reward, situated and authentic learning, accommodating the learner. The practitioner is aimed to improve empathy, problem solving, enhance collaborative skills, joint attention, symbol use, enhance collaborative skills, improve collaborative skills, improve social skills, train social skills through a multiplayer, social and emotional skills of language art, language development, adaptive skills, cognitive skills, mathematics, teach social understanding, teach imitation and joint attention during a cooperative task. The mechanisms of games are; game narratives, video games, virtual moving characters in 3D, games in 3D with real scenarios, games in 3D with real scenarios and avatars, cartoon with avatar in 3D, photos, drawings. The most popular serious games names are found as below. Emotions, Copy Me, The Junior Detective Training Program, Emotion Trainers, Face Say 2, Let's Face It, Mind Reading, Smile Maze, Virtual Reality In Second Life, Join In Suite, Kid Talk, Raketeeer, SIDES, Story Table, Teachtown, Junk Yard, Music Hall, Mail Room, Bike Shed, Bridge.

CONCLUSION

Digital games-based learning (DGBL) involving “**serious games**” can be useful for digital based learning and improving social interaction for special educational needed children.

KEY WORDS

Dislexia, Autism spectrum disorder, Digital based learning, Serious games.