Pacific Northwest American Therapeutic Recreation Association

Using Therapeutic Recreation and Role-Playing Games as IEP for ADHD in Schools

Presentation Slide Notes

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AREAS OF DIFFICULTY TARGETED

Problem solving, organization, time management, working with peers (cooperative problem solving), mathematics and/or physics.

IDEA AND IEP

The 2004 IDEA, a federal education law, “provides for a free appropriate public education to children with disabilities who have an educational need and meet eligibility criteria.” Approximately 50% of children with ADD/ADHD may need services under the IDEA. If the student meets the eligibility requirements under “Other Health Impairment (OHI)”, then they may receive such services. (Dendy 184)

“Students may receive any 'related services' recommended in the IEP – e.g., counseling groups, occupational therapy, instructions regarding study skills, organizational strategies, time management, problem solving, and/or anger management.” (Dendy 188)

While Recreation Therapy is not explicitly listed (as all to frequently happens with so many programs), a “gamification” TR-based Education program plan utilizing RPGs could be developed and proposed targeting the “organizational strategies, time management, problem solving” and other relevant skills, for those students qualifying under this program.

People with ADD/ADHD need a higher level of stimulation or “novelty” to overcome the Executive Function (EF) and Dopamine receptor deficiencies to aid in attention focus, and long-term memory encoding (Dendy 39), an RPG approach to covering these topics would likely be much more effective for a young student struggling to learn these critical skills.

FACILITATION TECHNIQUE

As we have seen throughout this presentation, a program plan utilizing RPGs would be an ideal modality to achieve the above goals.

A potential “adventure setting” could be something along the lines of a “Cyber” or Detective adventure, having to unravel technical clues (solve math problems, organizational riddles/puzzles, time-based sessions, and of course the easily understood development of problem solving skills inherent to role-playing gaming.

Tabletop RPG, in a science fiction / cyber setting, using a heavier math-based RPG system such as Space Master (more intensive math than D&D style systems), using basic mat skills including averaging, means, dice rolling modifications. While this can be a challenge unto itself, most players (even those with math deficits) are generally work through the numbers as part of the “fun” of the game to find out the results of their actions “in game”. Eventually they stop reacting to the “dreaded math” instead become excited about figuring the results. Required to work cooperatively in problem solving challenges. Provided with specific “mission(s)” with riddles/clues to solve, working together socially, and interdependent on each others skills, which in the long run are all of equal value while being stronger and weaker in different areas.

The instructor separates student into groups of 4 to 6 “players” called investigation squads, which are not competitive, they are cooperatively working toward common goals, solving a larger complex problem/puzzle, with different data sets for each squad as part of their clues to unravel.

The teacher is the Game Master (GM). As needed the GM can provide guidance & clues, help to individuals, squads, or the class as a whole. Each squad investigates a location by interacting with Non-Player Characters (NPCs) played by the GM.

Remembering this is a tabletop game so it is all handled verbally and on paper, no actions are actually taken in real life. The characters will have a series of physical, social, and cognitive challenges

to overcome. These challenges include specific math problems, posed as algorithmic for more advanced classes, or as riddles/story problems for other levels. Solving these problems as “access codes” to open doors or computer systems access, or calculating a specific physics formula to overcome physical challenges, such as how much force is necessary with a pneumatic “jaws of life” device to pry open sealed doors of a specific weight. Participants would also have to “social engineer” their way past bodyguards, bureaucrats, security guards, etc. Collaborating with law enforcement to gather evidence to stop “the bad guys” from some diabolical plans, for example spreading a virus on the public transit system that will turn everyone into zombies.

Each player character (PC) has distinct roles. One PC might specialize in systems analysis, another specializes in physical forensics, another an expert in legal issues relevant to the mission, another specialized in using forceful technologies or military equipment, another ideal as a scout, the list of permutations is considerable. All represented with specific skills on the player character sheet, and modified by dice rolls.

Missions with specific deadlines, countdown clocks involved at various stages, clear means of tracking time to help those with such EF challenges. All can take place in a single session, or spread out over multiple sessions spanning days, weeks, or even months, with various differential time lines. As each squad overcomes their portions of the overall puzzle being unraveled, they share their information with the other squads (writing the information on the chalk/white/bulletin board) which may also provide extra clues to the other squads to help them in unraveling their portion of the clues.

All of this helps with ADD/ADHD participants interest level by providing higher stimulus of specific learning topics through a novel approach, overcoming EF & Dopamine receptor deficiencies to aid in attention focus, & long-term memory encoding (Dendy 39), and as per Caine Learning Institute recommendation for 3 teaching strategies for interactive learning:

- Orchestrated Immersion: Create a learning environment that surrounds the student with interesting, related, hands-on activities
- Relaxed alertness: Eliminate fear while creating a challenging learning environment.
- Active processing: Connect information to prior learning and allow the student actively process the information. (Dendy 51)

REFERENCES

Zeigler, Chris (2011). *Teaching Teens with ADD, ADHD, & Executive Function Deficits. 2nd Edition.* Woodbine House.