Tech for Understanding: An Introduction to Assistive and Instructional Technology in the Classroom

Taylor Caldwell, Dr. Randall Dunn, Dr. Lucinda Spaulding

Abstract

This project examines the different types of assistive and instructional technology available to students who are classified with one or more of the thirteen disabilities outlined in IDEA (Individuals with Disabilities Education Act) or (IDEA). While the roles of assistive and instructional technology are different, there are many instances where their uses may overlap. Thus, while these two categories will be discussed separately, it should be noted that some information may be applied to each category and more than one piece of technology. The purpose of this paper is to provide an introduction to the world of assistive and instructional technology for those who may be new to its concepts, particularly parents who have recently learned that their child may benefit from extra assistance and future educators who are interested in learning more about the devices they will be using to reach their highest of peaks with a little help from their teacher it be taken for granted. Each and every student has the ability to their students. Now, this impact can be either positive or negative, and it should be the goal of each teacher to make sure their students. However, it is also important to remember that while technology serves a significant part of the educational process, it does not educate children. Just as Bill Gates said, “Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important” (The Telegraph, 2017). There is no way possible to replace or replicate the impact teachers have on their students. Now, this impact can be either positive or negative, and it should be the goal of each teacher to make sure it is positive. This influence cannot be undermined, nor should it be taken for granted. Each and every student has the ability to reach the highest peaks of a little help from their teacher and maybe some technology.

Disability/Technology Matrix

<table>
<thead>
<tr>
<th>Disability/Technology Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistive Technology (AT)</td>
</tr>
<tr>
<td>Targets Student Learning</td>
</tr>
<tr>
<td>Access</td>
</tr>
<tr>
<td>Impossible to Plan a Perfect Definition</td>
</tr>
<tr>
<td>Instructional Technology (IT)</td>
</tr>
<tr>
<td>Acquisition Permanent</td>
</tr>
<tr>
<td>AT &amp; IT</td>
</tr>
<tr>
<td>Jayden</td>
</tr>
</tbody>
</table>

Case Study

Jayden is a fourth grade student with attention deficit hyperactivity disorder (ADHD) who has recently received a diagnosis of high functioning autism spectrum disorder (ASD). During instructional time, Jayden struggles to maintain attention in his tasks. He often glancing around the room and taping his pencil on his leg. When his teacher asks him a question, he often does not remember the question that was asked. When this happens, he becomes extremely frustrated and with himself and he taps his pencil on his leg in a more intense manner. In rare situations, he becomes extremely embarrassed and will become irritable and may verbally lash out towards his teachers and peers. When asked about his school experiences, Jayden replied that “the teacher moves too fast and doesn’t talk about everything that she gives me for homework.” His grades in third grade had begun to drop before the school year, and he said the reason was because “I’ve never seen this before.” What resources are available to you, Jayden’s teacher, as you help Jayden combat these challenges and guide him to achieve his educational goals?

References

IDEA. (n.d.). Sec. 300.8(c)(10). Retrieved from: https://sites.ed.gov/idea/reg/44b/300.8c10