CHARACTERISTICS OVERVIEW CHART

<table>
<thead>
<tr>
<th>Verbal Skills</th>
<th>Grade Levels</th>
<th>Cognitive Level</th>
<th>Areas Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ Nonverbal</td>
<td>✗ PK</td>
<td>✗ Classic</td>
<td>☐ (Pre) Academic/Cognitive/Academic</td>
</tr>
<tr>
<td>✗ Mixed</td>
<td>✗ Elementary</td>
<td>✗ High Functioning</td>
<td>☐ Adaptive Behavior/ Daily Living</td>
</tr>
<tr>
<td>✗ Verbal</td>
<td>✗ Middle/High</td>
<td></td>
<td>☒ Behavior</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>☒ Communication/Speech</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>☒ Social/Emotional</td>
</tr>
</tbody>
</table>

BRIEF INTRODUCTION

Many individuals with autism (AU) have strong special interests, and these have been identified as one of the most powerful ways to motivate an individual. As a result, teachers are well advised to incorporate them in their work students with autism.

DESCRIPTION

Special interests have been broadly used to teach students with autism. Even though these students have deficits in various areas (e.g., social, communication, fine- and gross-motor), research suggests that they also demonstrate great and sometimes even surprising strengths in certain areas. Indeed, restricted repetitive and stereotyped patterns of behavior and restricted interests are included as characteristics of autism.

Winter-Messiers and her colleagues (2007) suggested a strength-based model focused on the special interest areas of individuals with Asperger Syndrome (AS). As a result of this model, students showed strength in areas generally described as deficit in the AS profile: social (e.g., highly motivated attitude to share own interests and fascinations with other people), communication (e.g., talking fluently about own interests), emotion (e.g., using own interests and enthusiasm for animals to cope with difficulties), sensory-motor (e.g., enthusiasm for
computer games that require fine-motor skills to use a mouse), and executive function (e.g., using special interests in Disney movies to teach organizational skills).

Examples of using special interests include:

- Using a student’s interest as a vehicle for teaching counting (e.g., counting pictures of cars, trucks, or other motor vehicles)
- Using a student’s enthusiasm for water to teach self-help skills (e.g., taking a shower, cleaning a bathtub, or washing hands)
- Using a student’s interest in cartoon characters to teach social skills (e.g., making a Power Card [Gagnon, 2001] with Bugs Bunny as a model for a desired behavior)

**STEPS**

The following steps can be helpful in using special interests to teach students with AU:

1. **Identify the student’s special interests.** Instructors need to develop a list of the student’s special interests. Observation and information from parents, paraprofessionals, or other related people can be helpful in identifying special interests.
2. **Apply the identified interests of the student into various forms across teaching areas.** Special interests can be applied to teach self-help skills and social, communication, or academic behavior. For example, the child who likes lady bugs can improve her reading by reading books on this topic.
3. **Update the list of special interests and use several of the student’s interests.** Special interests can change over time. Therefore, instructors need to monitor the student’s performance along with using special interests. Also, overreliance on using one special interest can decrease its effectiveness. Varying the use of special interests may keep less preferred interests still functioning as motivators.

**BRIEF EXAMPLE**

1. Minho is a third-grade student with classic AU who loves to play with water and becomes extremely excited whenever he sees bathrooms or water. When Minho is out in the community,
he always tries to find and then goes into the bathroom, including the women’s bathroom. In addition, he tries to flush every toilet and plays with water until someone stops him.

2. Ms. Taylor, his special education teacher, decided to use Minho’s enthusiasm for water to teach various skills, including self-help, reading, and math. For example, Minho learned to recognize words and icons using stories about water, weather, oceans, and fire engines (water was used to put out fires). Ms. Taylor also wrote a Social Story™ about hygiene for Minho emphasizing all the hygiene activities that involved water.

3. Jonathan, a seventh-grade student with AU, had a special interest in sports statistics. His P.E. teacher made him the football team’s statistician. This enhanced his social interactions because football players wanted to know their personal statistics – information that Jonathan was eager to share. Jonathan’s literature teacher used his special interest to motivate him to read. She carefully selected stories about sports stars.

**TIPS FOR MODIFICATION**

Special interests can be applied to most teaching areas using a variety of strategies. For example, the Power Card strategy uses special interests to enhance learning desired behaviors or skills.

**SUMMARY**

Teachers and parents can use the child’s special interests as powerful motivators to teach various skills and behavior. With a positive perspective on the student’s strengths, instructors can identify and apply special interests to teach across areas, including self-help skills, social, communication, or academic behavior. It is important to develop various forms of applications and to update the child’s special interests to ensure the approach remains effective.

**RESEARCH TABLE**

<table>
<thead>
<tr>
<th>Number of Studies</th>
<th>Ages (year)</th>
<th>Sample Size</th>
<th>Area(s) Addressed</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2-19</td>
<td>23</td>
<td>Communication, joint attention, social interaction</td>
<td>+</td>
</tr>
</tbody>
</table>
STUDIES CITED IN RESEARCH TABLE

   This study compared the effects of circumscribed interests (CI) to less preferred (LP) tangible stimuli on the social behaviors of three 5-year-old children with autism. The children engaged in social interactions at a higher rate when they involved their circumscribed interests.

   This study of a 3-year-old girl with autism found that interactions with the author of the study, the parent, and the study participant increased when familiar and motivating activities were available.

   This study assessed the social sharing behavior of three 2- to 3-year-old students with autism when they had access to their perseverative interests. When provided access to their interests, the participants showed increased joint attention and higher quality social interactions. Joint attention generalized to less preferred objects.

   Three teens with autism ranging in age from 17 to 19 participated in a study to increase their verbal responses when preferred and nonpreferred stimuli were available. The responses of two of the three boys increased when preferred stimuli were present.

   Three students, ages 5 through 7, participated in the study, which was designed to measure social interactions when special interests were incorporated into play scenarios. Results showed that social interactions increased when the interests were integrated into the setting.

This study found that for three 5- to 8-year-olds with autism access to a perseverative interest could be used to create intrinsically reinforcing and socially appropriate play activities with typically developing peers and siblings.


Three children, ages 7 to 9, participated in a study to measure behavior when typical tokens or tokens representing a special interest were used as reinforcers. Results indicated that percentage of correct on-task performance was higher when objects of obsession were used as tokens than when typical tokens were used.


Four children ranging in age from 5 to 7 participated in a study where obsessions were used as reinforcers. When compared to a verbal redirection and food, obsessions were found to be more effective.

**REFERENCES**


**RESOURCES AND MATERIALS**

- **Interactive Autism Network:**
  Part of the Interactive Autism Network, this page gives the user an overview and provides links to multiple resources.

- **How to Use the Special Interests of Students with Autism in the Classroom:**
  Article on easy steps to increase students’ academic skills and motivation to learn by incorporating their interests into the curriculum.

  This article describes a model of incorporating student special interests in daily lessons.