



SCHOOL OF ARTS AND SCIENCES
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SuperDville: Addressing the Social and Emotional Needs of Students with Learning Disabilities

SuperDville Background. *SuperDville* is a multimedia resource that supports the social and emotional needs of children with dyslexia and/or attentional issues. *SuperDville* content integrates findings from decades of research on the unique needs of students with learning disabilities, with fun, developmentally-appropriate programming to build students' feelings of confidence and develop a positive mindset about learning. For example, *The SuperDville Show* features a cast of charismatic students managing the emotional sequelae of learning disabilities (LD), most notably the feeling of shame. Cast members cope with insensitive teachers, field questions from peers about the "resource room," and provide explanations for chronic challenges like tardiness or getting lost.

Content from the *SuperDville* show goes beyond simply identifying challenges. The programming supports the development of three traits considered essential for achievement and overall well-being of students with learning disabilities, these traits include, a learning orientation to goal setting, a sense of belonging and persistence. The program integrates strategy instruction in a humorous and creative manner that ensures issues are relevant to school-age students and enjoyable to watch. Furthermore, the *SuperDville* show serves as a platform for conversations among peers, teachers or families about the unique experience of having a learning disability.

Learning Goals

Background. Over the last twenty years, learning goals have emerged as an important and predictive characteristic of successful students. In a classroom setting, or any context in which their achievement is being evaluated, students usually demonstrate one of two types of goal orientations, a performance- or a learning-orientation. Students who are performance-oriented typically focus on proving competence and avoid challenging situations in which their weaknesses will be highlighted. Conversely, those students who subscribe to learning goals tend to pursue opportunities in which they can improve their abilities. [1] Learning goal students are more likely than their peers to initiate challenging tasks, persist through frustration, independently apply strategies during problem-solving, recover from failure, and enjoy learning [2]. Perhaps most importantly, students with learning goals also believe that their abilities are fluid and capable of being developed through strategy use, effort, and practice—this constellation of beliefs is referred to as possessing a "growth mindset". [3] Learning goal students believe they can "grow" their abilities, will put forth effort to do so, and can acknowledge the development of their skills ("I think I'm getting better"). Therefore, supporting the development of learning goals at home, and in the classroom, is a critical step in promoting academic achievement and overall well-being among all students. [4]

Learning Goals Among Students with LD. Students who are low achieving, including those diagnosed with learning disabilities, are more likely to report a performance goal orientation than their typically achieving peers. [5] A recent study conducted with over 1,500 participants found not only that students with a learning disability were more likely to believe that intelligence was fixed, but also tended to pursue performance over learning goals. These findings added to

existing studies that support the importance of interventions that focus not only on academic skill-building but also on developing a broader range of cognitive self-regulatory processes. [6]

Learning Goals in SuperDville. In order to help students develop a learning orientation toward goal setting, it is important to emphasize three key messages about the fluid nature of intelligence and skill development. The first and most essential message is that being smart is developed through experience, and is not simply a trait you acquire innately. Anyone can improve their skills through high-quality teaching, strategy-use and effort. Second, students need opportunities to reflect upon and celebrate their individual talents and skill growth. These reflections should be coupled with the clear assurance that skill development occurs at different rates for each student depending on their unique talents and needs. Finally, learning goals are supported when students understand that the process of learning is just as important if not more important than the products of knowledge.

A prominent theme in *The SuperDville Show* is celebrating unique strengths. Cast members of the show have numerous opportunities to showcase their talents and distinctive approaches to learning. They often close the show by meeting as a group and reflecting on the personal strategies that are most effective for each squad member.

In the episode titled “*Out of the Icebox Cooking Challenge*,” Jordan competes in a cooking challenge. Although she is budding chef, Jordan admits she always has trouble reading and following recipes, and uses her creativity to compensate, “I just mixed and mashed until I thought it was just right. There is more than one way to approach a dish, and I did it my way,” she proudly reports. At the end of the program, Jordan is applauded by the judges, for working at her own pace and thinking outside the “icebox”.

In the episode titled “*Think Differently with Susie Sings and Dinosaur Expert Jack Horner*”, Susie, a talk show host who loves to sing, and her guest Jack, a paleontologist with dyslexia, compare study strategies for remembering complicated dinosaur names. They both acknowledged that learning scientific terms is difficult and shared the study strategies that worked best for their individual learning styles. For example, Susie learns best by putting the names to music, her preferred mnemonic device, whereas Jack Horner prefers tactile techniques exploring bone structure and using visual aids.

Belonging

Background. The idea of belonging refers to students’ perceptions of acceptance by their peers. Feeling valued and accepted facilitates feelings of belonging, and are essential components of a supportive learning community. The presence of a supportive learning community is associated with numerous positive achievement behaviors among students. In particular, students who feel their thoughts and feelings are valued, are more likely to try out new strategies, attempt challenging tasks, and stretch themselves intellectually. [7]

Belonging among Students with LD. Students with learning disabilities can often feel isolated by their learning difference. Throughout their daily routine, students with LD typically participate in series of instructional activities that separate them from their peers such as: receiving instruction in a separate setting/resource room, utilizing different learning materials, or participating in differentiated support within the classroom. Furthermore, beginning at approximately eight years old, students frequently engage in comparative analysis, scrutinizing their own performance in terms of the accomplishments of their peers (e.g., “She’s a better reader than me”.) [8] The presence of a learning disability can exacerbate these comparisons, and many learning environments utilize competition and peer-to-peer comparison as a motivational tool. In short, students with LD are particularly vulnerable to feelings of isolation or disengagement compared to their non-LD peers. [9]

Belonging in SuperDville. Luckily, there are a number of ways to support students’ sense of belonging, including emphasizing peer support and positive social feedback, promoting collaborative problem solving, and facilitating team-building activities. For example, when students are encouraged to cooperate on group projects, explain the relevance of classroom assignments to each other, and share their ideas, they create an environment that promotes high-quality teacher-student and peer relationships. These relationships, and the sense of belonging and warmth associated with

them, are crucial for improving students' academic self-perceptions, school engagement, motivation, learning, and performance. [10]

The primary way in which the *SuperDville Show* illustrates the importance of belonging is through the cast members' collective adventures and supportive conversations in their clubhouse. In each *SuperDville* episode, cast members collaborate to solve problems, provide emotional support, and offer unique learning strategies to manage school assignments.

In the episode titled "*The Obnoxious Teacher*," an instructor who is insensitive to the needs of his dyslexic student, Kaya, demands that she reads aloud, and openly criticizes her errors. As a result, the teacher becomes the subject of an investigation by "Detective ComeUppance" from the "Federal Department of Humiliation". Her teacher is found to fit the "obnoxious" profile, and forced to apologize for his insensitive behaviors. Later in the episode, Kaya has the opportunity to teach her friends some new strategies for algebra, and utilizes all the approaches she feels are critical to good teaching including, patience, empathy, and an appreciation of different learning styles.

In the episode titled "*Jedi Mind Tricks*," Ayanna talks to her friends about her discomfort every time her classmates question her about the resource room. Their questions are aggressive and put her in a defensive position. Ayanna's friends Charlie and Kaya recommend using "Jedi mind tricks" to tell the truth but with a little flare. They reassure Ayanna that it doesn't matter what her classmates think, what matters is that the resource room instruction is helpful for her. The squad uses humor and friendship to help Ayanna cope with feelings of isolation and shame, and reiterate her role as a valuable member of their community.

Persistence

Background. Traditionally, academic achievement was thought to be the product of intelligence and opportunity. Yet, in the last several years, a handful of non-cognitive characteristics have emerged as more predictive than traditional cognitive traits like intelligence. Persistence and passion for long-term goals is a featured characteristic among non-cognitive traits. [11] An individual who possess persistence tends to view achievement as a marathon and despite challenges and setbacks utilizes stamina and persistence to achieve their goals. The degree to which an individual possesses persistence and can demonstrate passion and fortitude, is often more predictive than innate talent or aptitude in a particular domain. [12]

Persistence among Students with LD. The development of persistence is particularly important for students with learning differences, who have been found to differ significantly in their motivational and behavioral profiles compared with their non-LD peers. [13] In particular, LD students exhibit more task avoidance compared to non-LD students, which negatively impacts their skill development, motivation, and future success. [14] Breaking the cycle of task avoidance and stagnated skill growth is essential, as persistence has been identified as a characteristic of adults with dyslexia who have been able to leverage their strengths and manage their weaknesses in order to achieve success. Common themes of success dyslexic adults revolve around working extra hard or attempting challenges multiple times despite repeated setbacks. [15]

Persistence in SuperDville. There are several ways in which persistence can be fostered among students, but first and foremost it is essential to make meaning out of tasks. The degree to which a student values a given task is considered the fundamental determinant of extrinsic versus intrinsic motivation. [16] Tasks are considered meaningful when they are interesting and/or relevant to students' objectives. Secondly, students will persist with tasks when they are just the right amount of challenge. Tasks that are too hard feel demoralizing, and if they are too easy than they do not offer the opportunity to challenge oneself. Research has found that individuals are most likely to persist when they can accomplish between 80-85% of a task independently. [17]

The notion of persistence is frequently featured in the *SuperDville Show*. Cast members are often featured persisting through challenges and overcoming adversity. Members cope with frustration and mistakes by employing learning strategies they learn from other squad members. In addition, episodes highlight their unique passions outside of school.

In the episode titled “*Left, Right and Lost in the Park,*” Ari has weaknesses with working memory and spatial orientation that leave him prone to challenges with time management and directions. When traditional strategies like maps and oral directions don’t work, an encounter with a mystical troll leaves Ari with a unique approach to manage his frustration differentiating left from right. He uses nail polish as a visual representation to differentiate his right (ruby red) and left (lime green) hands. Other cast members are impressed by his technique, and remind Ari that if he can’t achieve something a typical way to seek the alternative route.

In the episode titled “*The Confidence Hat,*” a young student is comforted after a bullying event by the classic tale of a special hat that protects the wearer from feelings of sadness and shame. When Jace is bullied at school, he purchases the confidence hat from a magical fairy (in his locker no less) and while wearing it is able to confront his bullies. It is only afterwards that he realizes the confidence hat is merely an accessory and his true fortitude lies within.

About the Author

This white paper was developed by Melissa Orkin, Ph.D., Program Director at the Center for Reading and Language Research at Tufts University. The center helps organizations like SuperDville integrate empirical evidence from the fields of education, psychology and neuroscience into practical applications that can support the educational, emotional and social needs of students with learning disabilities.

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