There's an App for That: Using Apps to Support Transition for Students with Autism

Objectives

O Describe the challenges that students with autism face in college settings.

O Identify and describe a variety of apps that can be used to improve positive college outcomes for students with autism.

O Describe how to use a variety of apps to support college students with autism.

Current Statistics

O Approximately 44% of students with autism spectrum disorder (ASD) enroll in college after graduation from high school (Francis, Duke & Chiu, 2017).

O Only 39% of students with ASD graduate from college (Newman et al., 2011).

Academic Challenges

O Increased academic and social demands

O Difficulty with note taking

O Need for students to initiate and direct their own experiences across many domains and environments

O Students must disclose in order to access supports

O Faculty are unsure of how to best support students with ASD

(Dente & Coles, 2012; Grogan, 2015; Sayman, 2015)

Social Challenges

O Working collaboratively on group projects

O Participating appropriately in large lecture-based classes

O Navigating campus

O Building relationships with peers

O Interacting appropriately with professors

O Increased rates of loneliness and isolation

(Brown & DiGaldo, 2011; McKeon, Alpern, & Zager, 2013; Wenzel & Rowley, 2010)

Other Challenges

O Independent living:
   O Living outside family home
   O Hygiene and self-care practices
   O Sleep
   O Nutrition
O Executive functioning:
   O Time management (lack of structure; managing personal schedules)
   O Organization of long-term assignments
O Mental health:
   O Anxiety
   O Depression
   O Loneliness

(Geller & Greenberg, 2010; Cai & Richdale, 2016)

Mobile Apps

O Technology is being used widely in academic and non-academic settings, making it socially acceptable and motivating to use

O Technology is critical component in job industries

O Socially acceptable (widely used by college students without ASD)

O Young adults with ASD find apps highly motivating

O Portable, relatively inexpensive, reinforcing

O Built in elements of universal design and cognitive accessibility features including touch screen, media options such as photos, audio, video, voice recognition, and alarm features,

O Becoming increasingly customizable and more effective for supporting the independence of individuals with ID and ASD across many life domains.

(Arnett, 2012; Ayres, Mechling, & Sansosti, 2013; Fletcher-Watson, 2014; Mechling, 2011; VanLaarhoven, Van Laarhoven-Myers, Cancio, & Brady, 2011)

Mobile Apps

O Challenging to select most useful apps
   O Large number and variety of apps
   O Limited information on apps that are specifically helpful for students with ASD (Withey, 2016).

O This presentation will showcase mobile app technology which can be used in higher education settings to positively impact the academic, communication, and transition skills of individuals with autism, thereby increasing their positive outcomes.

O Mobile apps can be used to support students with autism in the higher education setting while still permitting them to maintain their independence.

Critical Domains

1. Academics
2. Social interactions
3. Independent living
4. Executive functioning
5. Mental health needs

(Cai & Richdale, 2016; Grogan, 2015; Newman et al., 2011; Taylor & Colvin, 2013)

Task Analysis App taskanalysislite on iTune store

O Capabilities:

  O Aids faculty in providing short video clip instructions that can aid

  O Students in the completion of everyday tasks for school, home, and work.

O "Student Feedback with ASD:

  O "Easy to navigate"

  O Gives me independence

O "Uses for students with ASD:

  O Get discreet in class and on job support for completing task

  O Helps students with planning class work and meals

Academic: My Homework
https://myhomeworkapp.com/

O <u>Capabilities:</u>
  - O Users can track classes, assignments, projects, and exams.
  - O Provides due date reminders
  - O Syncs between devices to increase organization
  - O Widget for upcoming homework, that users can use to track assignments that are due in the immediate future.

O <u>Student Feedback:</u>
  - O "Great for organization" and "user-friendly:"
  - O "The layout is helpful, everything is right there in the menu."

O <u>Uses for students with ASD:</u>
  - O Provides an organizational system for short and long-term assignments.
  - O Users could enter in the due dates of assignments, projects, tests and quizzes and then use the app to determine what they need to work on each day.

Social Interactions: Sit With Us:
https://itunes.apple.com/us/app/sit-with-us/id1133202101?mt=8

O <u>Capabilities:</u>
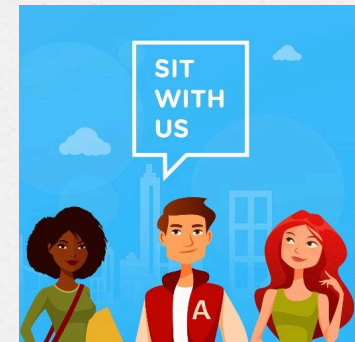 O Students connect at school to find peers to sit with at lunch
  O Users create profile including interests

O <u>Student Feedback:</u>
  O "Easy to navigate"
  O Would use it "just to find friends"

O "<u>Uses for students with ASD:</u>
  O Find peers to sit with and get to know
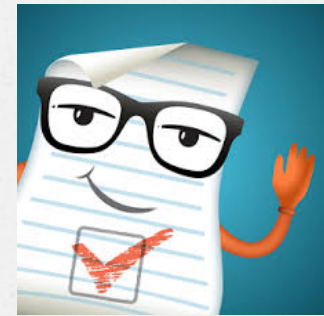 O Help students create profiles in class

Independent Living: Free Shopping List Ease:

https://itunes.apple.com/us/app/shopping-list-ease-grocery/id507605066?mt=8

O<u>Capabilities:</u>
- O Create shopping lists and to-do lists
- O Scan barcodes for future shopping trips
- O Share lists with family/friends

O<u>Student Feedback:</u>
- O "Like[d] the way it looks
- O Enjoyed how app helped them organize for future trips

O "<u>Uses for students with ASD:</u>
- O Used in high school to teach organization (work with cafeteria staff)
- O Use for meal planning in college

Executive Functioning: Habitica
https://habitica.com/

O <u>Capabilities:</u>
- O Interactive video game
- O Set goals and track progress towards them
- O Collect "gold" for meeting goals; cash in for rewards

O <u>Student Feedback:</u>
- O "Easy to handle"
- O "Really helpful with goals"
- O "Cool to explore"

O "<u>Uses for students with ASD:</u>
- O Manage goals in all areas of life

Mental Health: Mood Panda
http://moodpanda.com/

O <u>Capabilities:</u>
  O Mood diary
  O Social interactions with other users
  O Graph mood over time if they see negative trends seek counseling
O <u>Student Feedback:</u>
  O "Really easy to use"
  O "Love[d] the idea of training [their] mood
  O "Really fun to reply" to others' posts
O "<u>Uses for students with ASD:</u>
  O Track mood and examine trends (compare effectiveness of various stress management strategies)
  O Seek Support in community as needed

Other Considerations

O Introduce apps that meet students' strengths and needs

O Explicit instruction:

  O *How* and *when* to use app

  O Safety education

Questions & Discussion

O Have you used mobile apps in your work with individuals with ASD?

    O Which ones?

    O How effective were they?

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