Designing for Children
- With focus on 'Play + Learn'

iSpeak++
Interactive Software Program that Empowers Anxious Kids To Talk

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Why iSpeak++, an Interactive Softward Program that Empowers Anxious Kids To Talk?

1. To Address Selective Mutism

Selective Mutism (SM) is best described as a phobia of being heard or seen speaking. People with SM are able to speak perfectly with their immediate family members while consistently unable to speak in social situations. The age of onset for SM is between 2.7 years and 4.1years. Children with SM typically display this nonverbal behaviour when they are involved in a structured setting such as preschool or kindergarten. The prevalence rate is estimated at 0.71 to nearly 2% with slightly more girls than boys affected (Kristensen, 2000). SM does not resolve over time. If left untreated, SM can have a negative impact on a child's life. Experts consider SM as an impairing condition that interferes with both educational and socialization achievement and self-esteem. Therefore, early intervention of SM is imperative to prevent the mutism behaviour from being entrenched (Schwartz & Shipon-Blum, 2005; Schwartz, Freedy, & Sheridan, 2006).

Although the prevalence rate of SM is higher that autism's, many health care professionals are unfamiliar with this condition, many children are misdiagnosed; the lag time for treatment or intervention can be as long as 4 year (Sharp, Sherman, & Gross, 2006).

Because children with SM predominately fail to speak inside structural settings such as schools, teachers are uncertain how to assist these children as there is no cohesive roadmap to follow. How is it possible that a child speaks freely at home but persistently failed to speak inside school? How can a teacher help this child interact comfortably, even without speech? How does a teacher evaluate a child with SM's reading ability (Bork, 2008)? Even though teachers and school personnel are ready to help intervene, engaging and maintaining an effective intervention for SM can be a daunting task, as there is no cohesive road map to follow (Sloan, 2007).

2. To Assist Educators

iSpeak++ is an interactive software program designed to assist educator to help provide SM intervention inside school. This psychoeducational software not only provides guidelines to further educator's understanding of SM, it also includes pertinent information such as how to set up a non-threatening learning environment that fosters speech, how to incorporate play activities, and how to follow the SM intervention treatment plan.

iSpeak++ also has a sophisticated intervention tracking system that extracts information from the child's "play" level within the software, and automatically identifies the appropriate type of intervention activities that needs to be carried out. Due to the fact that SM usually affects younger children inside school, iSpeak++ predominantly addresses children in primary grades (age 10 and under).

3. To Assist Students with Selective Mutism

Due to the fact that children with SM are unable to speak inside school, iSpeak++ has an array of customized built-in pictures such as bathroom, yes, and no, to provide young children with an alternative means of communication. It also has audio and video-recording options to allow the child the opportunity to progress once they're ready to speak to record their voice inside school. As well, a voice recognition system is built-in, to give the child the opportunity to practise sound and audible speech while engaging in the games to obtain rewards. A daily exercise program is also set up, so the child learns how to cope with anxiety provoking situations. As well, stories in the database are designed to be interactive, to allow customization so the stories can be personalized to make it more interesting for the child.

The principle of iSpeak++ is to make the intervention fun and effective, for both educator and the child with SM!

iSpeak++ Specifications

Main Page

A. Teacher Login

  A1. Selective Mutism Resources
      A1. Literature Review
         1. FAQs
         2. Sign of Selective Mutism
            1.   Selective Mutism check list
         3.   Accommodations
            1.   Classroom Seating Plan
            2.   Reading Assessment
            3.   Fun Activities

  A2. Intervention for _____
         1.   Management Team
         2.   Assessment
         3.   Treatment Goal
         4.   Log/Journal
         5.   Progress Chart

B. Child Login

  B1. Help
      Hi, I need _____
  B2. Fun Time
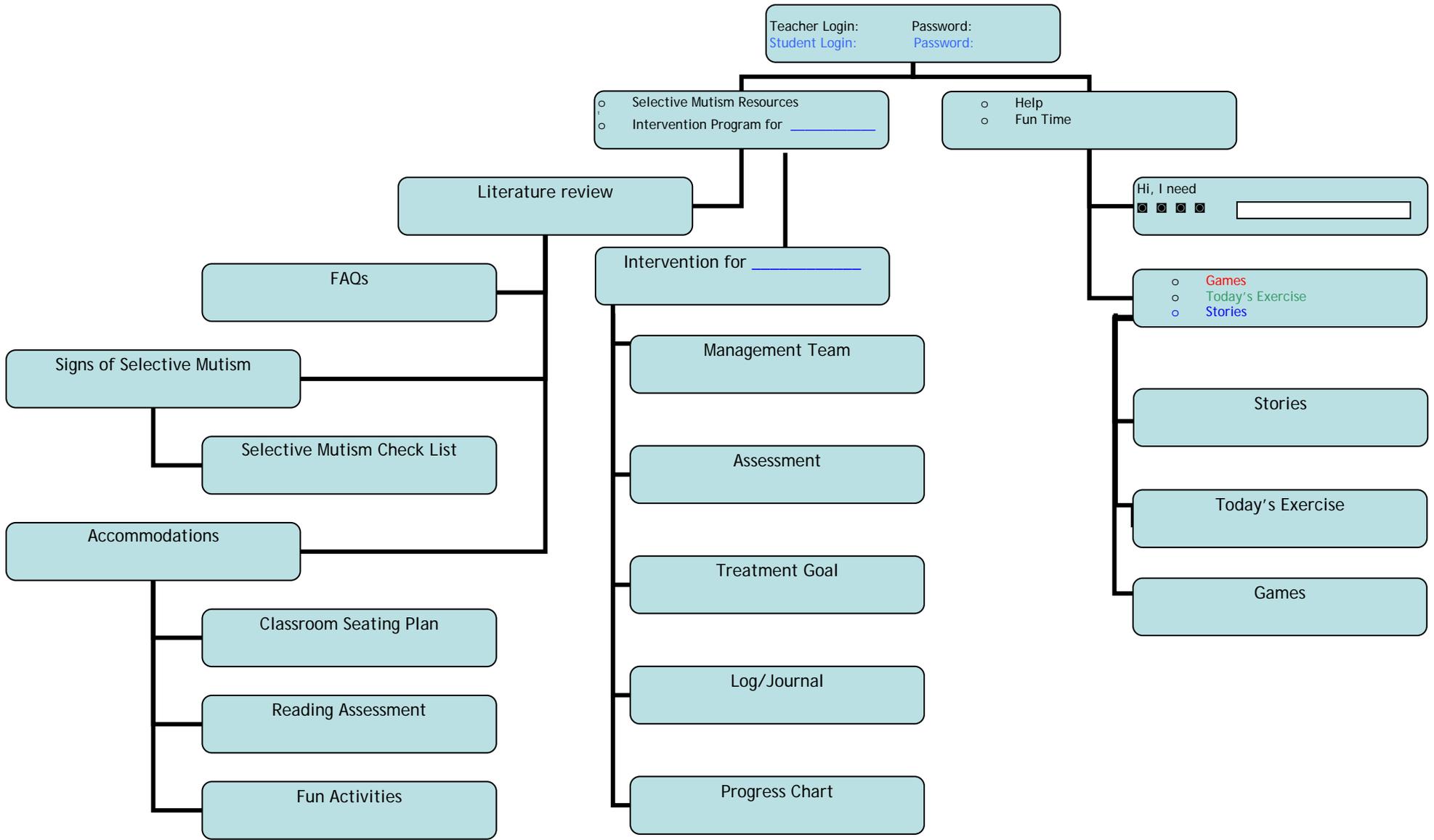   1.   Games
         2.   Today's Exercise
         3.   Stories

Teacher Login: Password:
Student Login: Password:

- o   Selective Mutism Resources
- o   Intervention Program for _____

- o   Help
- o   Fun Time

Literature review

Hi, I need
◉ ◉ ◉ ◉   [   ]

FAQs

Intervention for _____

- o   Games
- o   Today's Exercise
- o   Stories

Signs of Selective Mutism

Management Team

Stories

Selective Mutism Check List

Assessment

Today's Exercise

Accommodations

Treatment Goal

Games

Classroom Seating Plan

Log/Journal

Reading Assessment

Fun Activities

Progress Chart

Figure 1. Flow model of **iSpeak**++

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