

Case Study: Systematic, Evidence- and Data-based Interventions

Part 1: Getting to Know Liam

Liam and His Family

Liam is a bright and curious two-year-old enrolled in a toddler classroom at a community-based inclusive early childhood center. Diagnosed with global developmental delays, Liam experiences challenges across multiple domains, including communication, motor skills, and social interaction.

His family speaks English at home and is deeply involved in his development. They value cultural traditions and daily routines. Liam's family includes:

- **Mother:** Ana McDonald – a parent advocate who actively participates in team meetings.
- **Father:** Michael McDonald – a construction supervisor who shares insights about Liam's play and routines at home.
- **Sister:** Claire – age 5, who attends the same center and often models social behaviors for Liam.

Liam and His Team

The team supporting Liam is composed of dedicated professionals who work collaboratively to ensure his developmental needs are met in a nurturing and responsive learning environment. Ms. Jasmine Lee, the early intervention specialist, coordinates services and facilitates the planning of Liam's Individualized Family Service Plan (IFSP). Mr. Daniel Kim, Liam's classroom teacher, leads the inclusive toddler classroom and integrates embedded interventions into daily routines. Ms. Carla Nguyen, the speech-language pathologist, supports Liam's communication development using naturalistic strategies tailored to his needs. Ms. Rosa Martinez, the family support liaison, plays a vital role in bridging communication between Liam's home and school environments. Together, this team works in partnership with Liam's family to create a supportive and culturally responsive educational experience that honors his strengths and addresses his challenges.

Discussion Prompt:

- What strategies can professionals use to build trust and maintain effective communication with families like Liam's? How can each team member contribute to a truly collaborative IFSP process that honors family voice and priorities?
- How can early childhood professionals ensure that interventions and classroom practices are culturally responsive and respectful of family traditions? What are some examples of how cultural values might influence goal-setting or instructional strategies for Liam?

Part 2: IFSP Planning

The foundation of Liam's support began with the development of an Individualized Family Service Plan (IFSP), guided by a team-based, family-centered approach. During planning meetings, Liam's parents, Ana and Michael McDonald, shared their hopes for increased communication and social engagement, especially during daily routines like mealtimes and play. The professionals on the team, which include Ms. Jasmine Lee (Early Intervention Specialist), Mr. Daniel Kim (Classroom Teacher), and Ms. Carla Nguyen (Speech-Language Pathologist) used strategies to ensure that the planning process was inclusive, culturally responsive, and focused on family priorities.

Barriers such as scheduling conflicts were addressed by offering flexible meeting times. Together, the team identified developmental goals that aligned with both early learning standards and the family's vision for Liam's growth. These included:

- **Goal 1:** Liam will use gestures or single words to request preferred items or actions during daily routines (e.g., snack time, play) at least 3 times per day.
- **Goal 2:** Liam will engage in joint attention with an adult or peer during structured and unstructured play activities at least twice per session.
- **Goal 3:** Liam will participate in classroom routines (e.g., circle time, transitions) by following one-step directions with visual or verbal prompts in 4 out of 5 opportunities.

These goals were designed to be functional, measurable, and embedded within natural environments, ensuring that Liam's learning was meaningful and supported across settings.

Discussion Prompt:

- How can early childhood professionals ensure that IFSP planning remains truly family-centered and culturally responsive? What strategies can be used to elevate family voice and address barriers such as scheduling conflicts or language differences?
- What are the unique contributions of different team members (e.g., early interventionist, classroom teacher, SLP) in IFSP development and implementation? How can teams maintain effective communication and shared responsibility throughout the intervention process?

Part 3: Authentic Assessment

To understand Liam’s strengths and needs, the team conducted authentic assessments in natural environments, such as his classroom and home. Observations were made during snack time, circle time, and free play, capturing Liam’s interactions, communication attempts, and engagement with peers. The team emphasized the importance of gathering meaningful data that reflected Liam’s real-life experiences. Rather than relying on standardized tests, they used anecdotal notes, video recordings, and family interviews to build a holistic picture of Liam’s development. This approach ensured that instructional decisions were grounded in evidence and tailored to Liam’s unique context.

Discussion Prompt:

- Why is it important to conduct assessments in natural environments rather than clinical or isolated settings? How does observing children during real-life routines enhance the accuracy and relevance of the data collected?
- How can educators ensure that data from authentic assessments directly inform instructional planning? What strategies can be used to translate observational data into actionable goals and interventions?

Part 4: Curriculum Modifications

To support Liam’s full participation in classroom activities, the team implemented a range of curriculum modifications. They introduced environmental supports such as visual schedules, sensory cushions, and quiet spaces to help Liam navigate transitions and stay regulated. Materials were adapted to include tactile elements and bilingual labels, making them more accessible and engaging. Instructional strategies were also adjusted, with teachers using simplified language, visual prompts, and peer modeling to scaffold Liam’s learning. These modifications allowed Liam to access the curriculum meaningfully while promoting independence and inclusion.

Discussion Prompt:

- What are the benefits of adapting materials and instructional strategies to meet individual needs? How can educators ensure these modifications maintain high expectations while promoting access and engagement?
- In what ways can curriculum modifications support both inclusion and independence for children with developmental delays? How can teams balance individualized supports with opportunities for peer interaction and shared learning?

Part 5: Embedded Intervention

One of the most impactful strategies used to support Liam was embedded intervention during snack time which is a routine that offered rich opportunities for communication and social interaction. The team selected this routine because it was predictable, motivating, and naturally occurring. The intervention focused on helping Liam request preferred food items using gestures or simple words. Teachers modeled requests, used picture cards and sign language, and reinforced Liam's attempts with praise and access to desired items. Peers were encouraged to offer choices and wait for Liam's response, fostering a sense of community and shared learning. This approach, grounded in the principles of Naturalistic Developmental Behavioral Interventions, allowed Liam to practice new skills in a meaningful and supportive context.

Discussion Prompts:

- What are some effective strategies for embedding communication and social skills into daily routines? How can educators balance intentional teaching with maintaining the natural flow of classroom activities?
- What criteria should educators use when selecting routines for embedded intervention? How can choosing meaningful and motivating routines enhance learning outcomes for young children with developmental delays?

Part 6: Pro-Social Skills

Recognizing the importance of social-emotional development, the team also focused on helping Liam build pro-social skills such as turn-taking, greeting peers, and initiating play. Using a tiered support model, the classroom incorporated whole-group activities like social stories and songs to promote these behaviors. Liam participated in small group activities with adult facilitation and received individualized support through visual cues and peer buddies. Data from observations helped the team identify moments of success and areas needing additional support, ensuring that interventions were responsive and intentional.

Discussion Prompt:

- How can tiered supports be effectively implemented in inclusive early childhood classrooms to address varying levels of social-emotional needs? What are some examples of universal, targeted, and individualized strategies that promote pro-social development?
- What types of data are most useful for monitoring progress in pro-social skill development? How can educators use this data to make timely and responsive adjustments to interventions?

Part 7: Progress Monitoring

To track Liam's progress and guide instructional decisions, the team developed a comprehensive progress monitoring plan. They identified specific goals, such as using gestures or words during snack time and initiating joint attention during play. Measurement tools included frequency counts and checklists, with data collected weekly by the classroom teacher and reviewed monthly with the family. Decision rules were established to determine when instructional strategies needed to be adjusted. Importantly, Liam's parents were actively involved in the monitoring process, contributing observations from home and participating in regular check-ins. This collaborative approach ensured that progress monitoring was both systematic and family-centered.

Discussion Prompt:

- Why are decision rules important in progress monitoring? How can teams collaboratively develop criteria that are both data-informed and responsive to individual child needs?
- What are the advantages and limitations of using tools like frequency counts and checklists in early childhood progress monitoring? How can educators use these tools to make timely and effective instructional adjustments?