Sustainable Learning for Students with Intellectual Disability: A Cross-Curricular Approach to Adaptive Skill Development

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The effective development of adaptive skills is critical for students with intellectual disability (ID), as it serves as a foundation for their future independence and long-term success (Tassé, 2020). Nevertheless, students with ID often face significantly lower success rates in employment, independent living, and community involvement, emphasizing the need for more intentional instructional practices. One potential solution is the incorporation of targeted instruction in adaptive skills through thoughtfully designed Individual Education Plan (IEP) goals and academic instruction. By establishing a clear framework for obtaining sustainable learning, practitioners can better navigate the complexities of developing curriculum and IEP goals that prioritize adaptive skill development in preparation for students' postsecondary transitions.

As the field of special education continues to evolve, there is growing recognition of the importance of unifying adaptive skills within academic curriculum. When planning effective instruction, it is essential to incorporate cross-curricular activities that not only engage students in their academic subjects but also promote the development of critical adaptive skills (Cannella-Malone et al., 2019). Lessons designed to blend adaptive skills with core academic content support educators in creating a comprehensive learning environment that prepares students for real-world experiences. Through this integrative approach, one that enhances student engagement and empowers learners with practical tools, educators can foster both independence and meaningful success. The purpose of this paper is to increase understanding of the value of adaptive skills, offer implementation strategies for instruction, and support educators in lesson planning and IEP goal creation to assist students in achieving long-term independence.

Understanding Adaptive Skills

Defining Adaptive Skills. Adaptive skills encompass the practical, social, and functional skills that students use across their lifespan to live independently and efficiently (Tassé, 2020). These skills are vital for actively engaging in daily life and encircle areas of development such as self-care, social interactions, emotional regulation, community awareness, and academic achievement. Limitations in adaptive skills impact an individual's social responsibility and independence (Patel et al., 2020). These difficulties are especially prevalent in students with an intellectual disability, as the diagnosis is characterized by significant limitations in both intellectual functioning and adaptive skill behavior (Schalock et al., 2021). Between 1% and 3% of the population have been reported to have ID, and characteristics of a diagnosis of ID include below-average cognitive ability, difficulties in independent living, and developmental delays in functioning and skill acquisition (Patel et al., 2020). Further, the American Psychiatric Association reports that a student with ID generally meets the following criteria: (a) an intelligence quotient (IQ) score of approximately 70 or below, (b) deficits in adaptive skills that affect everyday life and interfere with an individual's ability to function in society, (c) condition symptoms manifest during developmental period of individual's life (Luna, 2024). Special

education teachers have reported a belief that functional academics structured around adaptive skills is relevant to the future of students with significant cognitive disabilities (Ballard & Dymond, 2017). For a student with ID, these skills could include writing their name, reading food labels and street signs, and counting money. Abilities such as decision making, and problem solving are equally important when defining the skills necessary for successful independent living. Therefore, functional academics are indispensable to students as they prepare to transition into postsecondary environments, as they lay the foundation for independent living and being active members of the community.

Legislative Foundation. The Individuals with Disabilities Education Act or IDEA (2004) is the federal law that requires all public schools to create an IEP for each eligible student with special education services. In accordance with IDEA, an IEP consists of the following: (a) statements referencing the child's present levels of academic and functional performance, (b) measurable annual goals including academic and functional goals, and (c) a description of alternate tests and benchmarks or short-term objectives (34 CFR 300.320(a)). The team responsible for the formation of an IEP includes the student, a parent or legal guardian, a school administrator, a general education, and special education teacher, and any other personnel who may be involved in the student's life or education. IEPs serve as a plan for the successful skill acquisition of students with disabilities. Specifically, students with ID benefit from IEPs because they outline goals that lead to success beyond the secondary classroom setting.

Writing IEP Goals for Adaptive Skills. Special education teachers have long aimed to create equitable and accessible learning experiences for students with ID. In a study by Ishartiwi et al. (2023), teachers were surveyed to understand their experiences with implementing individualized adaptive skill development for students with ID. The results showed a high percentage of educators emphasized individualized education methods. Many teachers faced challenges in applying IEPs in large classroom settings, as it is often difficult to balance the needs and requirements for each student. This is a critical area of need as students and their supporters prepare for the transition from secondary education to life beyond the classroom. Best practice recommends that teachers utilize the method of integrating both adaptive and academic skills to promote positive postsecondary outcomes for students with intellectual disability (Canella-Malone et al., 2019). With the appropriate support from school, individuals with ID have increased capability of fulfilling successful roles in society (Luna, 2024). Therefore, positive transition into independent living relies on the deliberate planning and implementation of adaptive skill development strategies in the classroom and the support of the IEP. Incorporating hands-on experiences into the curriculum is essential for fostering both academic skills and student independence, making adaptive skill development a crucial aspect of effective IEP planning.

Cross-Curricular Activities

A cross-curricular approach to teaching is characterized by intertwining a combination of knowledge, skill, and understanding from various subject areas (Savage, 2011). These inform an enriched pedagogy to learning and explore a wider sensitivity through various instructional methods (Savage, 2011). Cross-curricular activities foster greater student outcomes, including knowledge and skill, but also prioritizing understanding and real-world usage of skills (Savage,

2011). Several arguments have been made for the inclusion of such activities when teaching students across secondary education (Timmerman, 2017). A notable challenge is aiding in the preparedness of students for life after school and understanding its complexities. Cross-curricular activities bring together knowledge and skills from different areas of learning, showing how they connect and offer new perspectives on the same ideas (Timmerman, 2017). Figure 1 provides various examples that can be used to integrate multiple areas of learning and enhance adaptive skill development. For students with ID, this approach combines classroom learning with adaptive skills, to help students prepare for postsecondary independence through IEP goal development.

Figure 1
Cross-Curricular Activities Toolbox

Objective	Procedures	Target Academic Skills	Target Behavioral Skills
Activity 1: *Grocery store visits (math & independent living skills)*			
Practice math, decision-making & budgeting	Students prepare a shopping list for a meal or week of groceries, calculate the expected total cost, and complete shopping trips.	Math skills, budgeting	Organization, independence
Activity 2: *Weather reporting (science & communication skills)*			
Teach students about the weather & seasons	Students create a weather report, discussing how weather can affect daily life (such as choosing appropriate clothing).	Weather understanding, cause and effect	Communication, self-determination, problem solving
Activity 3: *Classroom job fair (social studies & vocational skills)*			
Explore different types of jobs, understand workplace skills, and practice self-advocacy and communication in job settings	Host a job fair where students role-play various employment tasks (i.e., interviewing, sharing materials like resumes and business cards) while learning about work roles and expectations	Vocational skills, critical thinking, research skills	Teamwork, social skills, self-advocacy
Activity 4: *Storyboard of a daily schedule (English Language Arts & time management)*			
Enhance literacy skills while teaching time management and use of routines	Students create a storyboard or visual schedule of their day, breaking activities down into steps and discussing time management.	Reading, sequencing	Self-determination, time management

Activity 5: *Community mapping (social studies & social skills)*			
Help students understand their community and how to navigate it	Students create a map of their local community, marking important locations (i.e., school, grocery store, park) and practice engaging in their community.	Map reading, navigation, communication, transportation	Communication, independence
Activity 6: *Personal hygiene chart (health & self-care skills)*			
Promote health education while teaching self-care and hygiene routines	Students complete a hygiene checklist that lists tasks such as brushing teeth, washing hands, and washing clothes.	Real-world hygiene skills, health education	Independence, self-care routines

In practice, this showcases how cross-curricular planning requires teachers to possess a skill set prior to the planning process. This skill set includes an understanding of multiple subject areas, the ability to collaborate across disciplines, the application of real-world skills, differentiation, and other essential instructional practices. Successful implementation requires teachers to integrate knowledge from various fields and design lessons that are structured to meet the diverse needs of students. In this paper, the focus is specifically on how a cross-curricular approach can be used to seamlessly integrate adaptive skills with academic subjects within the classroom, creating a more comprehensive learning experience. By doing so, educators can offer students a more relevant and engaging education that better prepares them for life-long independence. To support the development and implementation of the strategies discussed in this section, a vignette and supporting IEP materials have been curated to guide practitioners in applying these cross-curricular strategies effectively, ensuring that both academic and adaptive skills goals are addressed in a meaningfully way.

> *Maria Brown is a 14-year-old freshman at Example High School, currently in a self-contained classroom. She enjoys playing video games, watching TV, and spending time with her younger sister and family dog. Maria reads and writes at a fourth-grade level, and her math skills are at a second-grade level. Maria has expressed interest in learning how to live on her own and going to college once she graduates from high school. When the time comes, Maria will be applying to colleges that have a program for inclusive learning for students with an intellectual disability. Maria has further expressed interest in learning how to wash dishes, do laundry, grocery shop independently, and clean her room. At a recent IEP meeting, Maria's team, which included her mother, teachers, a vocational rehabilitation representative, and school staff, discussed how best to incorporate independent living skills into her daily lessons. Mrs. Green, Maria's teacher, recognized the need to combine academic learning with real-life tasks that would help Maria achieve her goals. After collaborating with Maria's IEP team, Mrs. Green decided to implement a cross-curricular approach, integrating life skills into core academic subjects. By planning her lessons to include cross-curricular activities, she is advancing Maria's academic and adaptive skills. This will further allow her to advance the skills necessary for academic success while enriching Maria's skill set for her postsecondary goals.*

Mrs. Green, through collaboration with her colleagues, is now incorporating these cross-curricular activities into Maria's weekly lesson plans. Figures 2 and 3 outline the lesson plan and materials used for Maria's learning, detailing the resources and structure of her learning activities. This strategy allows Maria to engage in both academic learning and adaptive skill development simultaneously, while giving her opportunities for hands-on, real-world learning. The one-on-one instruction Maria needs to succeed is embedded in these activities, making them more individualized. By connecting academic content to adaptive skills, Maria is building both her confidence and ability, preparing her for her future goals of college, employment, and independent living. Through this integrated approach, Maria is gaining the necessary skills to successfully transition to life after high school, while staying engaged and motivated in her education.

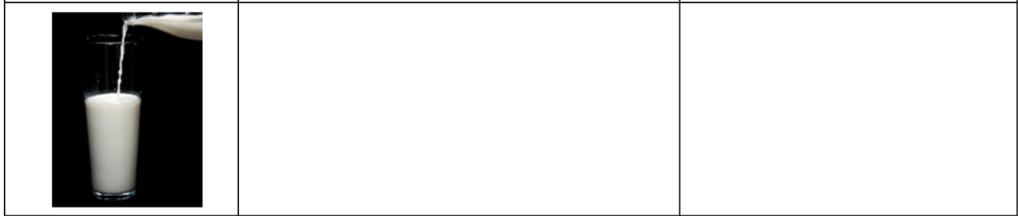**Figure 2**
Cross-Curricular Activity: Lesson Plan

Teacher: *Mrs. Green*		Date: *2/20/2025*
Subject: *English*		Grade: *Self-contained (9-12th)*
Lesson: *Grocery Shopping & Identifying Words*		

Phase	Lesson Details
Objectives	• Students will learn how to grocery shop in groups. • Students will identify items with their assigned pictures. • Students will correctly spell items.
Information	• Students will travel 1.5 miles away from their school, on a school bus, to the local grocery store. The teacher, Mrs. Green, as well as two assistant teachers, Mrs. Adams, and Ms. Cowan will all be in attendance to ensure the assignment goes smoothly and there is proper supervision of all students. • Mrs. Green has called the grocery store ahead of her class's arrival to inform them of the assignment her students will be completing while in the store. • Students will have a clipboard and printed out assignments provided to them ahead of arriving at the grocery store. • Students will be given clear expectations of how to behave in the grocery store prior to arriving, as well as clear consequences if this expectation is not met. • Students are expected to complete this assignment in the two hours provided to them at the grocery store.
Verification	• Students will have all work checked by teacher in store and will be sent to re-try items they have missed until mastery is achieved. • Mastery will be determined on words spelled correctly, and items property matched to pictures & areas of the store where items are located.

Activity	• Prior to arriving to the grocery store, students will be put into groups to do their "shopping" and will be given a clip board with a printed list of pictures of items to shop for, as well as an area to write down the names that they have observed for their product, and where they found the product. • Once students arrive, they will "shop" around the grocery store until all items have been written down. • After all items have been written down, they will meet their teacher at the front of the store to have her check over their work. If it is found to not have reached mastery (2 or more items were missed) they will re-try those items until mastery is met.

Figure 3

Cross-Curricular Activity: Lesson Plan

Activity: Grocery Shopping Assignment

Group Members:

Item	Name of Item	Where did you find the item?

If Mrs. Green, Maria, and the IEP team decide that the inclusion of a transition plan within the IEP is necessary to provide greater support, Figure 4 introduces an example potential transition plan. Given Maria's shared interest in learning independent living skills and her goal of attending an inclusive college program for students with intellectual disability, the plan focuses on helping her develop adaptive skills alongside her academic curriculum. This could include setting clear objectives while ensuring the activities are integrated into her daily learning. The transition plan would provide a structured plan for Maria, preparing her to successfully navigate life after high school.

Figure 4
Maria's Transition Plan

Student: *Maria Brown*	School Year: *2024-2025*
Public Agency/School District: *Example School*	Today's Date: *7/19/2024*

Individual Transition Plan

Post Secondary Goals:

Education:	*Maria Brown will explore postsecondary programs by September 2025.* *Maria Brown will research and compare at least three postsecondary programs (e.g., college, vocational training, or certification programs) and identify which ones align with her interests and goals by the end of September 2025.*
Employment:	*Maria will explore at least three different job fields and identify her top one or two career interests by the end of September 2025, to begin planning for future employment.*
Independent Living:	*Maria will independently complete one household chore (laundry, washing dishes, or vacuuming) at least three times per week through September 2025, to build independent living skills.*

Transition Services	
Transition Services Student Will Receive from School:	*Example School will provide academic instruction in independent living skills, and employment skills while providing her with the necessary accommodations for her to be successful in her courses. Example Schools will provide Maria with transportation to and from school each day, and a computer to do schoolwork on. Maria will have career planning, career and job cluster surveys provided to her by Example High School. Maria will learn some independent living skills at Example High School (e.g., how to do laundry, wash dishes, money management).*
Transition Services Student Will Receive from Outside Organizations:	*Vocational Rehabilitation services will start working on employment skills, and internships with Maria Brown. Vocational Rehabilitation will provide Maria with employment services (i.e., instruction, coaching and counseling) to help her gain an internship or supported employment and employment instruction. Maria will receive instruction regarding adult benefits planning.*
Transition Services Student Will Receive from Parents:	*Maria's parents will assist in providing Maria with transportation to and from work, once she acquires employment. Maria's parents will help Maria identify post-secondary programs that she is interested in attending, as well as aiding in touring postsecondary programs. Maria's parents will assist her in opening a bank account and will assist her in learning about money management.*

Achieving Individualized and Sustainable Learning

There is often an assumption that students receiving special education services have similar learning support needs (Garcia-Carrion et al., 2018). However, it is crucial to have an objective approach that considers the diverse qualities within student groups, beyond diagnoses, by focusing on their individual interests and goals. Recognizing and respecting diversity in learning and the practicality of the skills students develop is critical. The most effective instructional methods are discovered when educators understand each student as an individual, teaching with respect and value for their unique qualities, maximizing both their academic and personal growth (Berman et al., 2024). In a study by Ishartiwi et al. (2023), teachers were surveyed to understand their experiences with implementing individualized adaptive skill development for students with ID. The results showed a high percentage of educators emphasized the importance of individualized education methods for adaptive skill development. Many teachers faced challenges in applying IEPs in large classroom settings, as it is often difficult to balance the needs and requirements of each student's IEP. However, the successful transition to postsecondary life for students with ID depends on their preparedness to pursue individual interests, understand the resources that best serve these interests, and develop skills for future

success. To increase the sustainability of learning, school personnel can incorporate creative outlets and diverse teaching methods across pedagogies (Sims & Desmarais, 2020).

With long-term development in mind, it is important to set goals with students that are achievable beyond the school environment, using community-based resources to prepare them for postsecondary success. This not only helps students develop skills that can be supported after school but also encourages learning that aligns with the expectations of becoming active members of the community, a key goal for students receiving special education services. Implementing the concept of lifelong learning in academic planning ensures students' education not only meets their immediate needs but also prepares them for continuous growth beyond the classroom. This allows students to apply their knowledge across various contexts, adapting to new challenges and increasing demands for independence (Berman et al., 2024). Planning for the future is a bi-directional experience for both students and educators, beginning in the classroom and continuing to evolve from there. Understanding that students with disabilities are active members of society helps create opportunities for them to develop lasting skills through their engagement and participation in activities beyond core academics while still in school. An integrated approach to learning improves the likelihood that students will use the skills they gain beyond the classroom, enhancing their long-term success.

Findings in special education emphasize academic elements typically linked to state learning standards, yet it also places similar importance on nonacademic skills and experiences (Morningstar et al., 2017). Individual learners inherently possess diverse characteristics and needs, all of which can influence their academic outcomes (Al-Azawei et al., 2016). To address this challenge for educators, the widely accepted concept of Universal Design for Learning (UDL) has made strides in promoting accessibility and independence (Rao et al., 2017). However, a gap persists in structured UDL approaches that intentionally integrate adaptive skills across academic content (Bukaty & Delisio, 2019). This paper contributes to the conversation by offering a cross-curricular framework to bridge the gap. It complements current practice by offering a cohesive strategy aligned with current research on inclusive education, including postsecondary transition planning.

Conclusion

Research suggests children's skills are strongly influenced by their early experiences (Williams & Price, 2024). By addressing students' support needs and goals early and continuously throughout their education, predictors of postsecondary success can be identified and supported (Williams & Price, 2024). Early engagement in the adaptive skill development process through sustainable IEP goals allows educators to create individualized plans tailored to each student's future goals. This proactive approach helps identify and address potential challenges before they become barriers to success. This paper highlights the importance of understanding intellectual disability, IEPs, and adaptive skill development for educators, advocating for an approach that integrates adaptive skills into the academic curriculum to provide resources for early independence development. Expanding best practices for IEP planning and prompting the use of cross-curricular activities is strongly emphasized. In conclusion, four actionable recommendations for implementation are proposed: 1) integrate adaptive skills into the core curriculum, 2) facilitate cross-curricular activities, 3) begin adaptive skill development early, and

4) promote research on changes in self-determination and self-reported adaptive skill development in students. By adopting these strategies, educators can better support students with ID, fostering their independence and success in both academic and postsecondary settings. This provides the foundation for future growth and achievement. Through continued research and reflective practice, educators can refine their practices to ensure students are encouraged to develop the skills necessary for long-term success.

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