**Guiding Document Assistive Technology in Transition**

Transitions in education agencies can be from early intervention to early childhood special education (Part C to Part B of IDEA services), early childhood special education to K-12 education, classroom to classroom within the same school, school to school, or school to post-secondary settings or work. There are themes and needs that are consistent across all transitions and planning for these transitions ensures that the student’s use of assistive technology (AT) continues uninterrupted.

Transitions that include AT involve individuals from both sending and receiving settings working together. Transition plans for students who use AT address the ways in which the student’s use of AT devices and services are transferred from one setting to another and how the student’s needs will be met in the new environment. Self-determination and advocacy become increasingly important as the student approaches the transition to a post-secondary setting. In fact, the research about AT use by successful adults shows that in addition to being skilled at operating their AT, success may depend on being able to advocate for themselves and have skills that allow them to be, to the best of their ability, self-determined (Fried-Oken, Bersani, Anctil, and Bowser, 1998).

**1. Transition plans address the assistive technology needs of the student, including roles and training needs of team members, subsequent steps in assistive technology use, and follow-up after transition takes place.**

**Intent:** The transition plan assists the receiving agency/team to successfully provide needed supports for the AT user. This involves the assignment of responsibilities and the establishment of accountability.

As students prepare to transition to new settings within the same school or to a different location, it is important to plan for and address the continued need for AT. When the transition is to a postsecondary setting, a transition plan, which is part of the IEP, is developed and includes a specific focus on transition. The IEP team expands to include key stakeholders from the receiving environment, vocational rehabilitation or other agency personnel as appropriate as the team determines who is important to include on the new team.

The plan includes supports and services needed to ensure functional use of the individual’s AT in the receiving environment. To facilitate accountability the IEP team identifies training needs, assigns individual responsibilities, and establishes specific roles and tasks. Teams establish the expectation that AT will be used in the new environments and identify, in writing, the specifics of what, why, how, when, and where it will be used. Using a planning form such as the *Transition Planning Worksheet for AT Users* to guide planning can facilitate the process. A planning form will help the team address important issues such as those in Figure 7.1 and 7.2. It can also help to identify areas of instruction that the student may need in preparation for the new setting.

|  |
| --- |
| **General Transition Tasks to be Completed** |
| Staff members from current setting observe in future setting.  Student/family visit future setting.  Staff from both settings meet to plan.  Arrange enrollment in needed non-school services (e.g., Developmental Disabilities, Vocational Rehabilitation).  Other: |

**Figure 7.1** General Transition tasks to be completed for transition.

|  |
| --- |
| **Device Specific Tasks to be Completed**  **Name/type of AT Used:­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| Arrange transfer of technology including manuals and service records.  Create artifacts to demonstrate current level of use and independence (e.g., video recording, work samples, etc.).  Identify any new AT that may be needed in future setting.  Identify sources of funding for new AT, if needed.  Identify person(s) to do troubleshooting in future setting.  Other: |

**Figure 7.2** Device specific tasks to be completed for transition.

Once a plan is developed, teams designate individuals to take responsibility for all aspects of implementing it. An individual team member is assigned to monitor accomplishment of the overall plan and the student’s progress toward meeting IEP goals. Perhaps the single most common error that occurs in transition is inadequate communication and coordination between the sending and receiving agencies. The individual student can be left without needed arrangements and supports when he or she arrives in the new setting. Sometimes there is a philosophical difference between sending and receiving agencies that can also lead to a failure to implement the use of AT that was beneficial to the student in the previous setting.

Example:

*Aaron was transitioning from Markham elementary school to Parkview middle school within the same district.  At the elementary school he used a portable computer with word prediction software that assisted him in the writing process and digital text with supported reading software to access textbooks. The team from the elementary school met with the lead teacher and the AT case manager from the middle school.*

*During the meeting, they all worked together to identify concerns that needed to be addressed. Aaron would be transitioning from a single classroom to a setting where he would be moving between classrooms. Concerns included transport of equipment, battery life, charging responsibilities, printer access, assignment completion, and identification of accommodations needed for instruction and testing. The challenges in the new setting included interactions with multiple teachers, security from possible theft, and teachers’ experience with AT.*

*Based on the jointly created written transition plan for Aaron, the team at Parkview Middle School attended a summer workshop to learn the operational features and functional use of the portable computer that he would bring with him from his elementary school. The receiving case manager began the process of acquiring his new textbooks in a digital format. Each of the concerns was addressed with team members accepting specific roles and responsibilities. Aaron was assigned the responsibility to ensure that the portable computer was charged and to inform the case manager immediately if there were any additional issues, such as not being able to print.*

*The case manager for the middle school team wrote a description of Aaron’s needs and the accommodations that would be a part of his program. She scheduled a meeting in one month to include his elementary school teacher, so that Parkview teachers could consult with her and ask clarifying questions about the use of his AT in middle school.*

|  |
| --- |
| Key Questions |
| * What are the guidelines for documenting AT transition needs in the IEP? * How do sending and receiving teams participate in development of an IEP when preparing for transition? * How are roles and responsibilities to support transition documented in the IEP? * How is information about students’ current AT use, skills, and needs conveyed to the receiving environment (e.g., written descriptions, video, observations)? |

**2. Transition planning empowers the student using assistive technology to participate in the transition planning at a level appropriate to age and ability.**

**Intent:** Specific self-determination skills are taught that enable the student to gradually assume responsibility for participation and leadership in AT transition planning as capacity develops. AT tools are provided, as needed, to support the student’s participation.

Self-determination is the ability to be a causal agent in one’s own life and has been identified as a critical factor in the continued use of AT in new environments (Fried-Oken, Bersani, Anctil, and Bowser, 1998). Explicit instruction in skills needed for self-determination in relation to one’s AT can begin as soon as a student starts to use AT devices allowing many opportunities to practice. Wehmeyer & Field (2007) list choice-making, decision-making, problem-solving, goal setting and attainment, self-regulation/self-management, and self-advocacy and leadership as critical skill areas for self determination. When specific instruction is provided in these areas, students developmore self-awareness, self-knowledge, and more positive perceptions of control, efficacy and outcome expectations. Students can also develop self-determination skills such as problem solving and choice making, as those skills relate to AT. Opportunities to use these skills helps students to increase independence, involvement in transition planning, and success in the new setting.

Students who have been appropriately involved in IEP development throughout their school experience have greater access and independence during transitions and are better prepared to participate in transition planning. Participation can include tools and strategies that help the student plan the agenda, organize ideas, present thoughts, or use an AT device as a planning tool (e.g., use an AAC device during transition planning meetings). As members of their own IEP team, they are empowered to participate in expressing their needs and preferences regarding use of AT and other aspects of their program. Over time, students who use AT have the opportunity to learn self-determination skills at a level commensurate with their age, ability, and comfort level.

Example:

*Emily was a junior at Lincoln High School. During her IEP meeting, she advocated for herself using her AAC device to narrate a computer slide presentation she developed explaining the kinds of work she was hoping to be able to do after high school. Emily used her AAC device to ask questions about the kind of assistance she could expect if she entered college or a vocational-technical program and her personal goals were included in her plan. Another meeting was planned after Emily visited two post-secondary settings and learned what strategies she would need for successful transitions.*

|  |
| --- |
| Key Questions |
| * How does the agency ensure that students are active participants in transition planning? * What instruction do students receive to learn and demonstrate self-determination skills at an appropriate level? * How do students use AT to support and increase participation in transition planning? |

**3. Advocacy related to assistive technology use is recognized as critical and planned for by the teams involved in transition.**

**Intent:** Everyone involved in transition advocates for the student’s progress, including the student’s use of AT. Specific advocacy tasks related to AT use are addressed and may be carried out by the student, the family, staff members, or a representative.

As students transition to new environments, advocacy may be needed to support the continued use of AT, provide technical assistance when the AT is not working, and help determine when new AT devices are needed. Some students can self-advocate, while parents, caregivers and others in the new environment may need to provide additional encouragement and support for continued AT use. Advocacy activities, with roles and assigned tasks, ensure the students’ continued progress. To the greatest extent possible, students learn and use self-advocacy skills and apply them before, during, and after transitions to participate in AT decision making as well as other aspects of the transitions.

For some students, the complexity of the disability makes it difficult to self-advocate. In these situations, it is important that a family member, supportive adult, friend, or professional who understands the student’s AT use and preferences for future use of AT, can advocate during and after the transition. Without someone to advocate for continued AT use, the chances that AT will be a part of a successful transition are significantly reduced. For students who have limited advocacy skills there are processes that can help ensure that their interests are well represented. One of these processes, Person Centered Planning (Amado & McBride, 2001), can be used very effectively in transition planning that includes the use of AT. Using a process such as Person Centered Planning assists students, educators, family members, and other advocates chosen by the student to identify dreams, goals, and concerns for the future. It also helps to create a vision of how the student can begin to take leadership and advocate for quality of life issues. When AT is included in person-centered planning discussions, everyone on the team can better understand the purpose of AT use in new environments.

Example:

*When Sven entered Kindergarten, his IEP included the services of a teacher of the Deaf and Hard of Hearing (DHH).  One of her responsibilities was to check his hearing aid batteries on a regular basis to make sure that they were functioning properly.  By the third grade, the DHH teacher had taught Sven to check his own hearing aid batteries on the same schedule. He had also learned to replace batteries himself and he used a chart to keep track of the times when he had to replace the batteries.*

*After Sven had become independent with the management of his own hearing aides, his teachers began to help him develop some new self-advocacy skills. In fourth grade, Sven attended meetings with his DHH teacher and general education teachers.  The DHH teacher explained the accommodations that Sven needed because of his hearing loss and helped teachers identify the things they needed to do in order to provide the accommodations that were listed on his IEP.  By the time Sven moved to middle school, he had learned to lead the conversations about accommodations with his new teachers and the DHH teacher attended the meetings as an observer and extra support.  In high school, Sven began to talk with his teachers independently.  If his IEP accommodations were not being provided, he knew how to contact the DHH teacher and ask for help.  By the time he moved from the K-12 educational system to a community college program, he knew what accommodations were important for him and how to request them from the college.*

|  |
| --- |
| Key Questions |
| * How do team members actively advocate for students? * How do students demonstrate self-advocacy skills during planning? * If a student needs assistance to advocate for AT in the new environment, what is the process for identifying an advocate? |

**.**

**4. Assistive technology requirements in the receiving environment are identified during the transition planning process.**

**Intent:** Environmental requirements, skill demands, and needed AT support are determined in order to plan appropriately. This determination is made collaboratively and with active participation by representatives from both sending and receiving environments.

The transition process includes opportunities for communication between settings; visits by the students, parents, and teachers; and planning meetings that include all needed team members. Team members from both sending and receiving environments work collaboratively during transition planning. In order to plan appropriately, team members identify environmental requirements, new tasks, equipment needs, and training needs, as well as services, service providers, and supports that will be needed in the new setting. Examples of tasks related to AT that may be necessary in the new environment include the need to move the technology from class to class, to access a remote printer for written assignments, or to use a new computer platform. In some instances, the new setting will have increased demands to communicate with multiple teachers, school staff, and peers. Team members in the sending environment help prepare the student by providing experiences and practice in using new skills that will be needed before the time for transition arrives.

Example:

*Shayna used text-to-speech and word prediction software for all writing tasks of more than three sentences. As Shayna’s team began to plan for her move to middle school, the middle school team members pointed out that the new school has Windows platform computers rather than the iOS computers used at the elementary school. The team made plans to help Shayna with her transition by acquiring a Windows platform computer and the Windows based version of the software she used for reading and writing. The team developed a plan to provide training for her in the operational use of the Windows computer and software during the spring before she moved to her new school.*

|  |
| --- |
| Key Questions |
| * What does a review of the new environment reveal about the range of required tasks? * What changes in the AT, if any, will be needed for the student to participate and achieve in the new environment? * What opportunities to practice needed skills will the student have before the transition? |

**5. Transition planning for students using assistive technology proceeds according to an individualized timeline.**

**Intent:** Transition planning timelines are adjusted based on specific needs of the student and differences in environments. Timelines address well mapped action steps with specific target dates and ongoing opportunities for reassessment.

Timelines are developed and adjusted based on specific student needs or changes in the environment, required tasks, and changes in student abilities. Timelines include action steps, when they will be taken, persons responsible for those actions, and target dates for completion. Skills and use of AT are reviewed periodically and the review includes plans for ongoing re-assessment before, during, and after the transition. New timelines and new use of tools may be necessary based on data gathered.

For transitions to post-secondary services, federal law requires that an individualized timeline is developed and documented for the transition no later than age 16. In some states, the age required to begin transition planning is earlier than age 16. It is important to know the specific rules for your state when beginning transition planning. In the timeline, AT needs and activities that require use of AT are addressed. The timeline may include tasks such as acquisition of a new device or software, AT practice in the new environment, direct instruction in communication with new people, guidance in independent AT use, visitations to potential settings, and meetings with service providers.

Example:

*Kristoff began using an AAC device during his early elementary years. His device was upgraded as upgrades became available and moved with him from setting to setting, including from elementary to middle school. Before each transition, meetings were scheduled with staff in the new setting to share information regarding use of his AAC device, introduction of new skills, development of new vocabulary, and inclusion strategies for instruction and assessment.*

*Because of Kristoff’s complex communication needs and the number of teachers involved, planning for his transition to high school started in February. The team from the high school attended training on his AAC device in May, so that they knew the basics of operating and managing his AAC device and had a plan to address potential issues. They also visited the middle school to observe classroom strategies that were effective for him in that setting. A contact person was identified from both the middle school and the high school to quickly address any issues that might arise. They also met with the high school vice-principal, so that she would be aware and informed about Kristoff’s needs and their plan to address them should specific support be needed.*

|  |
| --- |
| Key Questions |
| * How and when are timelines for preparing for transition developed? * When are timelines reviewed and adjusted? * Where and how are timelines and responsibilities documented in the IEP? |

**6. Transition plans address specific equipment, training, and funding issues such as transfer or acquisition of assistive technology, manuals, and support documents.**

**Intent:** A plan is developed to ensure that the AT equipment, hardware, and/or software arrive in working condition accompanied by any needed manuals. Provisions for ongoing maintenance and technical support are included in the plan.

Equipment, training, and funding needs are identified and addressed when students transition to new environments. A review of the tasks that the student will need to accomplish in the receiving environment includes an evaluation to determine if the student’s current AT is appropriate in the new environment or if different equipment is needed. If new equipment is needed, local funding options are explored as appropriate and a plan to obtain equipment, training, and supports for the student in the receiving environment becomes part of the transition planning process. Next steps are identified, roles are assigned and appropriate agencies are notified. If necessary service providers have not been identified, the plan includes developing strategies to include the needed providers.

During any transition, whether the student remains in school or moves on to a new program or setting, just providing equipment is not enough.  People who have never seen the student in action will need help in understanding how AT helps with functional capabilities and what is needed to support that AT use. For example, when Lance moved from middle school to high school, he stopped turning in the written assignments created on his portable computer. When his new teachers asked him why, he reported that he needed a printer cable that was accessible from the front of the computer attached to printers in each of his classes.  Once cables were provided, Lance began to turn in his written assignments with the same frequency that he had in middle school.  When a student stops using AT in the new environment, it may be because day-to-day management of equipment is not supported making AT use difficult.

Example:

*Ahmed and his transition planning team, which included representatives of the school district, developmental disabilities services, the supported work site, and the group home to which Ahmed was moving, identified the specific equipment he had been using at school. This included a direct select augmentative and alternative communication (AAC) device with 32 options, a single talking switch used to ask for assistance, and a jig for an electric stapler that allowed proper alignment and insertion of papers. The school also provided a portfolio of information about how Ahmed used the AAC devices.*

*The supported work site had the equipment needed for the stapling task but was not able to provide either of the communication devices. The team determined that additional funding would be required to purchase these and also realized that services available to Ahmed did not include a speech language pathologist (SLP). A community-based SLP was identified and the team acquired funding through Medicaid for equipment purchase and periodic review and updating of vocabulary on Ahmed’s AAC device.*

|  |
| --- |
| Key Questions |
| * When the school owns the current AT, what arrangements are made to provide needed AT in the new environment? * If needed, when and how are funding options for new AT identified and accessed? * In post-secondary transitions, what is the process for identifying AT services and potential providers that will be needed in the new setting? * In post secondary transitions, what are the referral processes for the agencies that should be contacted? |