

Successful augmentative and alternative communication (AAC) services require a collaborative team approach, involving the individual who requires AAC, their families, and members from various professional disciplines (Beukelman & Mirenda, 2005; Locke & Mirenda, 1992; Soto, Muller, Hunt, & Goetz, 2001). It is often unrealistic to assume that all AAC services will take place with the client and all professionals present at the same time and location. Effective communication between team members is thus required (Soto et al., 2001). To enable this, AAC team members must not only be comfortable with their own roles but they must also become acquainted with the roles of other team members (Soto et al., 2001). This ensures that team members receive information pertinent to their specific roles in an appropriate, timely fashion, thereby maximizing the quality of AAC services.

The importance of seating and positioning to the AAC client has been well documented (Beukelman & Mirenda, 2005; MacNeela, 1987; McEwen & Lloyd, 1990). Typically, an occupational therapist (OT) or physical therapist addresses this aspect of AAC service delivery (Beukelman & Mirenda, 2005; Locke & Mirenda, 1992). However, an understanding of basic principles of seating and positioning, and clarification regarding their roles in applying them, are essential tools for any AAC team member. This knowledge permits the solving of simple problems and encourages the seeking of expert input as complex issues arise (McEwen & Lloyd, 1990). AAC professionals therefore require a way to access this information at a convenient time in a manner that is acceptable to them.

While providing access seating and positioning information is an initial step towards equipping professionals for the AAC team approach, it does not necessarily guarantee the implementation of this knowledge in the daily practice of clinicians and educators. Rogers (2003) defined diffusion as the method via which a new idea, or innovation, is transmitted to a group. According to Rogers (2003), the diffusion process is composed of the innovation itself, the presenter of the innovation, the group receiving the innovation, and the communication channel via which the presenter and target population are linked. The embracing of the innovation is dependent upon certain features of these components (Rogers, 2003). Consequently, any program aimed at promoting the adoption of an innovation must reflect these specific features. Adoption of an innovation occurs when the target population progresses through the innovation-decision process which consists of five steps: knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003). A favorable innovation decision made by the target population reflects successful diffusion.

“An Introduction to Seating and Positioning for Individuals who use Assistive Technology” is considered the components of the diffusion process. The goal of this webcast is for the presenter (an OT) to successfully lead participants through the first four steps of the innovation decision process resulting in the adoption of the innovation (the understanding and application of basic seating and positioning principles for individuals who use AAC). Features of innovation itself, the presenter of the innovation, the group receiving the innovation (hereafter referred to as the “target population”), and the communication channel are sculpted to promote successful diffusion.

The Innovation

Relative Advantage

For an innovation to be adopted, it must be superior to the idea that came before it (Rogers, 2003). The literature emphasizes the need for proper seating and positioning to promote the use of motor skills required to access AAC techniques and devices (MacNeela, 1987; Taylor, 1987). Sharing this evidence with should demonstrate the

advantages of the innovation over neglect of the principles of basic seating and positioning.

Compatibility

Adoption of the innovation is also reliant on congruence with the needs, values, and experiences of the target population (Rogers, 2003). As individuals who have chosen a helping profession and who will be expected to uphold the mandates of their professional regulatory bodies, AAC team members will likely be concerned with the comfort, safety, and functional performance of their clients. Taylor (1987) listed these very factors as goals of seating and positioning, indicating a fundamental agreement between the aim of the innovation and the likely priorities of the target population.

Complexity

The level of difficulty associated with an innovation will also affect whether it is accepted (Rogers, 2003). The basic concepts and principles of seating and positioning can be communicated as simple messages that are readily applied in clinical practice. The module emphasizes these simple messages (e.g. proximal stability = distal mobility) in order decrease the level of complexity associated with the innovation.

Triability

An innovation may be more likely to be embraced if it can be easily implemented on a trial basis (Rogers, 2003). Since the concepts presented in the module are simple, there is great possibility for AAC team members to trial them in practice without committing immediately to a drastic modification in service provision style.

Observability

If the impact of the innovation is evident, it may be more readily adopted (Rogers, 2003). Studies exist that have documented the observable effects of seating and positioning on motor skills (MacNeela, 1987). So, upon application of knowledge acquired through completion of the module, it is hypothesized that AAC team members will be able to perceive the positive impact of the innovation.

The Presenter

According to Rogers (2003), a target population may be more likely to adopt an innovation if it is presented by someone who has already adopted the innovation and with whom they share fundamental characteristics such as values, social status, and education. As the OT is a potential member of the AAC team (Beukelman & Mirenda, 2005; Locke & Mirenda, 1992; Soto et al., 2001) who will assist in the development of mutual team goals (Soto et al., 2001), it is hoped that the target population will recognize fundamental similarities between themselves and the presenter. Several AAC specific sources refer to the expertise of the OT in seating and positioning (Beukelman & Mirenda, 2005). The notion that an OT will have experienced and adopted the innovation in question should be believable to the target population.

The Target Population

The American Speech-Language-Hearing Association included familiarity with seating and positioning in their documentation of competencies for therapists providing AAC services (1989). Moreover, practicing speech-language pathologists have indicated that their training has been insufficient, and have expressed interest in gaining more AAC education (McCall & Moodie, 1998). Given the professional expectation of certain competencies and the potential deficiency of educational opportunities to achieve these, training in seating and positioning for AAC team members is justified.

The Communication Channel

Web-Based Approach

The web-based design of the module is congruent with learning preferences of the target population. It allows much flexibility and is well suited to adult learners due to the customizability and self-directedness inherent in the design (Lebel et al., 2005).

Structure of the Module

Person-Environment-Occupation model. A version of the Person-Environment-Occupation Model (Law et al., 1996) provides structure to the in-depth discussion of basic seating and positioning concepts. This model is compatible with current methods of service delivery in promoting consideration of environmental and task characteristics, rather than just those of the person involved, when evaluating performance (Law et al., 1996).

Case studies and quiz questions. Case studies and quiz questions have been provided at the end of the module to foster engagement in the learning opportunity and encourage application of information to real world experiences.

Proposed Outcomes

The following outcome measures are being considered to assess the webcast effectiveness: (a) number of online accesses; (b) demographics of course participants; (c) qualitative and quantitative evaluation of course quality through surveys post participation; (d) qualitative evaluation of long term impact on practice.

References

American Speech Language Hearing Association. (1989). Competencies for speech-language-pathologists providing services in augmentative communication. *ASHA*, 31, 107-110.

Beukelman, D. R., & Mirenda, P. (2005). *Augmentative and Alternative Communication: Supporting Children And Adults With Complex Communication Needs*. Baltimore, MD: Paul H. Brookes Publishing Co.

Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., & Letts, L. (1996). The Person-Environment-Occupation model: A transactive approach to occupational performance. *Canadian Journal of Occupational Therapy*, 63, 9-23.

Lebel, T., Olshtain, E., & Weiss, P. L. (2005). Teaching teachers about augmentative and alternative communication: Opportunities and challenges of a web-based course. *Augmentative and Alternative Communication*, 21, 264-277.

MacNeela, J. C. (1987). An overview of therapeutic positioning for multiply-handicapped persons, including augmentative communication users. *Physical and Occupational Therapy in Pediatrics*, 7(2), 39-60.

McCall, F., & Moodie, E. (1998). Training staff to support AAC users in Scotland: current status and needs. *Augmentative and Alternative Communication*, 14, 228-238.

McEwen, & Lloyd, L. L. (1990). Positioning students with cerebral palsy to use augmentative and alternative communication. *Language, Speech & Hearing Services in Schools*, 21, 15-21.

Rogers, E. M. (2003). *Diffusions of Innovations* (5th ed.). New York: Free Press.

Soto, G., Muller, E., Hunt, P., & Goetz, L. (2001). Professional skills for serving students who use AAC in general education classrooms: a team perspective. *Language, Speech & Hearing Services in Schools*, 32, 51-56.

Taylor, S. J. (1987). Evaluating the client with physical disabilities for wheelchair seating. *American Journal of Occupational Therapy*, 41, 711-716.