The 15th International Conference of the
Association for the Advancement of Assistive Technology in Europe (AAATE)

Global Challenges in Assistive Technology Research, Policy & Practice

Bologna, Italy
27-30 August 2019

www.aaate2019.eu

The educational session programme

At AAATE 2019 two educational tracks are proposed:

1. **AT assessment (Wednesday, August 28th and Friday, August 30th)**
   1. Measuring outcomes of AT service delivery and interventions
   2. Assessing usability of mobile (rolling) shower chairs
   3. Developing Practice Guidelines in Assistive Technology Assessment and Outcome Measures Using the MPT Model.
2. **AT in Education/AAC (Thursday, August 29th)**
   1. UDL Needs to be a "Bottom-Up" Educational Process
   2. The Assessment, Development, and Implementation of Low and High Technology Augmentative and Alternative Communication (AAC) Systems
   3. Augmentative and Alternative Communication for individuals with complex communication needs: learn by doing

Details can be found on the next pages.

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1.1. Measuring outcomes of AT service delivery and interventions

Desleigh De Jonge (The University of Queensland, Australia) & **Emma Friesen** (Raz Design Inc, Toronto, Canada)

Content

As AT practitioners, we are increasingly called on to demonstrate outcomes of AT provision, by AT funders, regulators, and policy makers. However, research indicates that few AT practitioners incorporate outcomes measurement into routine service delivery. Practitioners need support and guidance to identify what outcomes to evaluate, and to select and utilise appropriate approaches to measure quantitative and qualitative outcomes.

In this workshop, we will explore the use of outcome measurement in service delivery through discussions and case studies. The workshop will begin with an overview of "outcomes" as it applies to health and disability services. From there, we will discuss the development and psychometric evaluation of measurement instruments, and how published data can be used to select and implement appropriate approaches to measuring outcomes. We will have opportunities to explore various stakeholder perspectives on outcomes measurement, such as those of interest to AT users, practitioners, suppliers, manufacturers, and funders. We will discuss various case studies and identify possible resources available for information and support.

Typical target learners
AT practitioners e.g. OTs, PTs, Rehab engineers; policy makers & funders

Learning outcomes of the session
At the end of the session, participants will be able to:
1. Identify three major areas of "outcomes" in delivery of Assistive Technology services;
2. Describe how specific outcomes measures fit into overall service evaluation frameworks and strategies;
3. Evaluate possible data collection approaches, and existing outcomes measurement instruments using ten questions; and
4. Identify existing and potential sources of data available that could be used for measuring outcomes;
5. Identify three "next steps" in locating and evaluating information and existing outcome measurement instruments.

Proposed format
The workshop will use a combination of lectures, group discussion, and small group work. The lecture component will address the major learning topics for Learning Outcomes #1, 2 & 3. The group discussion,

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using case studies, will address the topics in Learning Outcomes #1, 2 & 4. The small group work will require participants to reflect on their AT use or service delivery settings, and develop ideas associated with Learning Outcomes #4 & 5.

1.2. Assessing usability of mobile (rolling) shower chairs

Emma Friesen, PdD (Raz Design Inc.)

Content

Mobile (rolling) shower chairs are used by adults with spinal cord injury (SCI) for activities including showering, intimate hygiene, and bowel management. Workshop participants will explore the use, usability, and assessment of mobile (rolling) shower chairs, and review recent research on the topic by the presenter. Participants will then discuss three validated questionnaires that can be used to assess usability: the *electronic Mobile shower commode ASsessment Tool (eMAST) 1.0*, the devices subscale of the *Quebec User Evaluation of Satisfaction with assistive Technology Version 2 (QUEST 2.0)*, and the modified *System Usability Scale (SUS)*.

Typical target learners

Typical attendees at this session will be AT practitioners and clinicians working in SCI. The session would also be useful for designers, manufacturers, and suppliers of mobile shower commodes and chairs, and also for those involved in AT policy-making and funding.

Learning outcomes of the session

By the end of this education session, participants will be able to:
1. Describe nine major activities that adults with SCI may undertake when using mobile (rolling) shower chairs, that were identified through literature reviews and qualitative research;
2. Define usability as it relates to AT products and devices;
3. Describe three validated questionnaires that can be used for measuring / assessing usability of mobile (rolling) shower chairs; and
4. List the four stage of AT service delivery where these questionnaires can be used.

Proposed format

This workshop involves didactic teaching and small group discussion. Participants learn theory and are then encouraged to discuss and implement this new knowledge through hands-on sessions.

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1.3. Developing Practice Guidelines in Assistive Technology Assessment and Outcome Measures Using the MPT Model.

Marcia Scherer (The Institute for Matching Person and Technology)
Susan A. Zapf, Ph.D., OTR/L, BCP, ATP

Content
Assistive Technology (AT) can be an effective tool to support children and adults with disabilities; however, there remains a high abandonment rate in the use of these technologies that leads to ineffective implementation of AT, poor use of funding provided for AT, and more importantly, loss of a person's dreams and opportunities for participation that can lead to improved quality of life. This session will address the need to develop practice guidelines that address three key principles: Assessment, Implementation, and Follow-up outcomes that are critical for successful match of technology to consumer. Participants will engage in discussion on strategies to develop an effective global approach to matching consumers and AT to support independence and functional participation.

Typical target learners
Health Care Professionals (OTs, PTs, SLPs), Educators/Teachers, Rehab Counsellors, Psychologists

Learning outcomes of the session
At the end of the session the participants will be able to…
1. Discuss three constructs of the MPT model;
2. Explain the importance of utilizing outcome measures within the assessment process to measure AT effectiveness;
3. Identify two strategies for successful implementation of an AT service plan.

Proposed format
This session's format will include both lecture with audience discussion.

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2.1. UDL Needs to be a "Bottom-Up" Educational Process

Priscilla M. Danielson, PhD, CCCSLP, ATACP, Linguistic Solutions LLC, (Speech/Language Pathologist, AT/AAC Specialist, Universal Design for Learning Consultant)
Ole N Danielson, Linguistic Solutions, LLC-Technical Support and Instruction

Content
Universal Design for Learning (UDL), a framework for curriculum development, was designed to provide teachers with tools and principles that reduce barriers to educational access. Implementation of UDL is often a "top down" process, characterized by administrative staff delivering content to teachers who then provide implementation in the classroom. This presentation describes why a "bottom-up" approach is a more effective model for implementation. The presenter will identify at least five research-based strategies of using Assistive Technology supporting a "bottom up" model designed to support classroom staff and improved fidelity of curricular design in classrooms characterized by varied educational needs.

Typical target learners
Teachers, SLPs, OTs, School Administrators, UDL Consultants, AT/AAC Coordinators

Learning outcomes of the session
At the end of the session the participants will be able to:

1. Recognize the concepts within Principles of Universal Design for Learning and their potential for positive impact on classroom learning.
2. State 3-5 research-based learning and teaching strategies that support a "bottom up" approach to implementation of the Principles of Universal Design for Learning in the classroom and how this approach strengthens carryover into the classroom in a collaborative manner.
3. Understand how to evaluate curricular design and implementation using the Principles of Universal Design for Learning for fidelity and validity with students who present a wide range of learning needs.

Proposed format
This presentation will utilize 3 formats: of presentation; Formal PPT presentation of research and associated topics, examples of various apps and app features that directly apply to the presentation topic, and encouragement to use personal tablets/computers/Chromebooks to access strategies that support the topic presentation.

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2.2. The Assessment, Development, and Implementation of Low and High Technology Augmentative and Alternative Communication (AAC) Systems

Lauren E. Vaughan, M.A., SLP-CCC/L (Speech Language Pathologist at Heartspring in the United States and member of ASHA, ISAAC, and USSAAC)
Linda Lawrence (Ophthalmologist)

Content
The session will target the development of basic knowledge and skill sets needed for the assessment, development, and implementation of low and high technology Augmentative and Alternative Communication (AAC) systems. The World Health Organization (WHO) cites approximately 1 billion people have a disability. AAC is one means to assist people with disabilities (i.e., acquired and developmental) in communication. AAC can be either low technology (e.g., picture books) or high technology (e.g., speech generating devices). The session will provide and discuss free resources to assist individuals globally that require an alternate means to communicate their wants, feelings, and medical needs.

Typical target learners
The presentation would assist teachers, special education teachers, paraprofessional teachers, psychologists, occupational therapists, speech language pathologists, audiologists, physical therapists, medical doctors, nurses, and additional health care providers.

Learning outcomes of the session
At the end of the session the participants will:
1. Have a deeper insight in the understanding of augmentative and alternative communication (AAC)
2. Be able to understand and implement basic skills in the process of assessment, development, and implementation of AAC
3. Have experienced the process of assessment, development, and implementation of AAC

Format
The educational session will consist of the following: 1) a brief lectures explaining the assessment, development, and implementation process with free assessment resources, 2) a hands on activity with a case study on how to develop a low technology AAC system with minimal and available materials (e.g., a communication book), and 3) discussion time allotted for questions from participants.

Lecturers/teachers/experts/support figures that will be involved
Dr. Linda Lawrence (Ophthalmologist) would assist in the lecture providing additional information on developing AAC systems for patients with cortical vision impairment (CVI).

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2.3. Augmentative and Alternative Communication for individuals with complex communication needs: learn by doing

Elena Radici & Stefania La Rosa (International Society for Augmentative and Alternative Communication (ISAAC))

Content

The session will allow participants to experience Augmentative and Alternative Communication (AAC). By simulations and role play the participants will increase their knowledge in:

- the "why" of AAC interventions. In particular the importance of participation, communication opportunities and the role of communication partners;
- the "how" of AAC interventions. In particular the strategies and techniques that can be used to support communication;
- the "what" of AAC interventions by the use of low-tech and high-tech devices.

Typical target learners

Speech Therapists, Special educators, OTs, teachers, accessibility experts, psychologists

Learning outcomes of the session

At the end of the session the participants will:
1. Have a deeper insight in support participation of individuals with complex communication needs;
2. Have a deeper insight in the creation of communication opportunities
3. Have experienced the importance of AAC to meet communication needs

Format

Participants will increase their knowledge on AAC by making AAC experiences. The teachers envisage a dynamic lecture and will encourage discussions.