

## **Family education program about language and alternative communication: an e-learning Brazilian model.**

Many children and young people have difficulties in communicating through speech. The techniques, procedures and resources developed in Augmentative and/or Alternative Communication (AAC) aims, in short, to promote effective communicative interaction among these individuals and their interlocutors. This goal necessarily implies in training the communication partners of people who use AAC or may come to use it (BEUKELMAN; MIRENDA, 2007; DELIBERATO, 2010). This way, the family members are the interlocutors who need special attention (KENT-WALSH, J.; McNAUGHTON, D., 2005).

According to Anderson et al. (2012) "Telepractice offers a potentially cost-effective service delivery mechanism to provide clinical AAC services at a distance to the benefit of underserved populations in the United States and worldwide". It is expected that Tele-AAC can help disabled individuals and their families in Brazil.

Considering the relevance of to develop different models of family education in alternative communication, and the few systematized programs on this issue, the goal of this paper is to present a Brazilian e-learning family education program about language and alternative communication for families of non-speaking people with disabilities aged between two and twelve years old. Thus, the research was structured in two phases: planning and development.

In the first phase, the following actions were taken: goals definition, logical sequencing of the content, structure in thematic topics, identification of literature indicators, definition of each topic goal and the choosing of the audiovisual resources.

The second phase, the development one, was divided into elaboration of the textual content and of the audiovisual content.

Regarding textual content, the researchers followed these steps: writing of the main texts, (2) selection of words to make up the glossary, (3) writing of short guidelines/tips, (4) learners' tasks definition of each topic, (5) text selection for supplementary reading, (6) writing of the texts for the agenda, and (7) participant guide writing.

The procedures for the audiovisual content elaboration were: (1) selection of audiovisual resources, (2) definition of features and elements of the illustrations, (3) making of illustrations, (4) animation production, and (5) opening course video production.

The illustrations were made by a graphical designer following specific instructions from the researchers about scenario features, characters and communicative situations. The inclusion of the multimedia content in the virtual learning environment was made by a webdesigner. Photos from UNESP AAC Lab (LabTeCa) were used to exemplify the real AAC systems and resources. The animation production was made using the GoAnimate software, in a version known as GoPremium, that allows the production of FullHD videos. The pictograms used in the program, as well as in the resources and AAC systems exemplified, are from Picture Communication Symbols (PCS) (Mayer-Johnson, 1994) and from Aragonese Portal of Augmentative and Alternative Communication (ARASAAC - <http://catedu.es/arasaac>), under Creative Commons license.

The family education program, named Edulinca (the acronym of *Educação em Linguagem e Comunicação Alternativa*, in Portuguese; *Alternative Communication and Language Education Program*) consists of twelve topics with multimedia content, including: text, images, animations and videos.

The twelve topics and their goals were defined as:

*Introduction – How to use this course tools online?*

Aim: introduce the virtual learning environment of Moodle platform and the participant guide.

*Topic 1 – Hello! Nice to meet you!*

Aim: introduce the goals of the program and describe the desirable dynamics of participation.

*Topic 2 – How and why do we communicate? The role of all families in the child language scaffolding.*

Aim: introduce concepts related to language and communication, emphasizing the different expressive modalities and the role of the interlocutor in the development of communicative abilities.

*Topic 3 – And the speechless ones? How can our kids learn how to communicate?*

Aims: explain about the language development in typical and atypical situations. Also, introduce alternative communication.

*Topic 4 – Identifying children's communication abilities.*

Aim: help participants to identify the language abilities of their kids.

*Topic 5 – What can help kids develop their communication?*

Aims: provide technical recommendations for the language development in the case of lack of orality or late one. Teach concepts on AAC.

*Topic 6 – Selecting and elaborating resources for communication.*

Aims: present AAC technologies and discuss the relevance of motor and sensory abilities for the selection and elaboration of AAC systems.

*Topic 7 – How to use the AAC technologies on a daily basis?*

Aim: deepen the AAC concept, its systems, resources and strategies.

*Topic 8 – How to elaborate and use the AAC technologies at home?*

Aim: teach about AAC technologies, procedures and strategies for using them at home.

*Topic 9 – Helping the child use the alternative communication at school.*

Aim: teach about AAC technologies, procedures and strategies for using them at school.

*Topic 10 – So, what have we learned?*

Aims: assess the participants' perception of the program and its results in learning. Promote discussion about applying the AAC in everyday life.

#### *Topic 11 – That's the end of it!*

Aims: summarize the previous content of the topics, encourage the application of learning activities along with the kids and thank the participants for the collaboration.

Some activities were planned in order to promote active learning such as: questionnaires and games about the content, demo videos of communicative situations, propositions of activities with the kids using AAC in a natural environment and discussion making use of forums and chat rooms.

The chat rooms and forum are instruments that allow the e-distance course tutor to have contact with the participants and to have access to their perceptions, thoughts and ideas. Thus, specific activities were planned to promote a dynamic communication among the participants and to involve them as active learners.

The program is hosted in the Moodle platform of UNESP with restricted access for now.

### **DECLARATION OF INTEREST**

The authors disclose they have no financial or other interest in objects or entities mentioned in this paper.

### **REFERENCES**

ANDERSON, K.; BOISVERT, M. K.; DONESKI-NICOL, J.; GUTMANN, M. L.; MORELOCK, C; COHN. E. R. Tele-AAC Resolution. **International Journal of Telerehabilitation**, v. 4, n. 2, 2012.

ARASAAC. Aragonese Portal of Augmentative and Alternative Communication. Available: <http://catedu.es/arasaac>. Pictograms created by Sergio Palao.

BEUKELMAN, D. R.; MIRENDA, P. **Augmentative & alternative communication: supporting children & adults with complex communication needs**. Baltimore: Paul H. Brookes Publishing, 2007.

DELIBERATO, D. **Caracterização das habilidades expressivas de um aluno usuário de comunicação alternativa durante intervenção fonoaudiológica**. (Characterization of expressive abilities of a student using AAC during the speech and language intervention.) 178f. Tese de Livre-Docência - Faculdade de Filosofia e Ciências de Marília, Universidade Estadual Paulista, Marília, Brasil, 2010.

KENT-WALSH, J.; McNAUGHTON, D. Communication partner instruction in AAC: present practices and future directions. **Augmentative and Alternative Communication**, v. 21, n. 3, p. 195-204, 2005.

MAYER-JOHNSON Company. **The picture communication symbols**. Solano Beach, CA: Author, 1994.



The U.S. Society of Augmentative & Alternative Communication is approved by the Continuing Education Board of the American Speech-Language Hearing Association (ASHA) to provide continuing education activities in speech-language pathology and audiology. See course information for number of ASHA CEUs, instructional level and content area. ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.



**Program Planner/Instructional Personnel Relationship Disclosure Form**

In compliance with American Speech-Language Hearing Association's Continuing Education Board's Requirements, ISAAC Conference 2016 requires program planners and instructional personnel to disclose information regarding any relevant financial and non-financial relationships related to course content prior to and during course planning.

Based on the information provided, ISAAC Conference 2016 will engage the program planner /instructional personnel in a guided interview process which seeks to understand how the relevant financial or nonfinancial relationship may influence the content of the course.

Program Planner/Instructional Personnel's Name:

Course Title:

**HIPAA REQUIREMENTS**

To comply with the Health Insurance Portability and Accountability Act (HIPAA), we ask that all program planners and instructional personnel insure the privacy of their patients/clients by refraining from using names, photographs, or other patient/client identifiers in course materials without the patient's/client's knowledge and written authorization.

I am in compliance with these policies:  (INITIAL HERE)

**Relevant financial relationships** are those relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, gift, speaking fee, consulting fee, honoraria, ownership interest (e.g., stocks, stock options, or other ownership interest, excluding diversified mutual funds), or other financial benefit. Financial relationships can also include "contracted research" where the institution gets the grant and manages the funds and the individual is the principal or named investigator on the grant.

Do you have relevant financial relationships to disclose?

No  Yes (if yes complete Financial Relationship Disclosure Form)

**Relevant non-financial relationships** are those relationships that might bias an individual including any personal, professional, political, institutional, religious or other relationship. May also include personal interest or cultural bias.

Do you have relevant non-financial relationships to disclose?

No  Yes (if yes complete Non-Financial Relationship Disclosure Form)

I attest that the information in this disclosure is accurate at the time of completion and I agree to notify ISAAC Conference 2016 ([conference2016@isaac-online.org](mailto:conference2016@isaac-online.org)) of any changes to this information between now and the scheduled presentation date. **I also understand that all completed Disclosure Forms must be incorporated within my paper proposal, as part of my Long or Extended abstract upload to the ISAAC Conference 2016 paper submission system.**

Signature

Date



The U.S. Society of Augmentative & Alternative Communication is approved by the Continuing Education Board of the American Speech-Language-Hearing Association (ASHA) to provide continuing education activities in speech-language pathology and audiology. See course information for number of ASHA CEUs, instructional level and content area. ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.



**Program Planner/Instructional Personnel Relationship Disclosure Form**

In compliance with American Speech-Language Hearing Association's Continuing Education Board's Requirements, ISAAC Conference 2016 requires program planners and instructional personnel to disclose information regarding any relevant financial and non-financial relationships related to course content prior to and during course planning.

Based on the information provided, ISAAC Conference 2016 will engage the program planner /instructional personnel in a guided interview process which seeks to understand how the relevant financial or nonfinancial relationship may influence the content of the course.

Program Planner/Instructional Personnel's Name:

Course Title:

**HIPAA REQUIREMENTS**

To comply with the Health Insurance Portability and Accountability Act (HIPAA), we ask that all program planners and instructional personnel insure the privacy of their patients/clients by refraining from using names, photographs, or other patient/client identifiers in course materials without the patient's/client's knowledge and written authorization.

I am in compliance with these policies:  (INITIAL HERE)

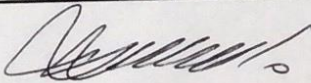
**Relevant financial relationships** are those relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, gift, speaking fee, consulting fee, honoraria, ownership interest (e.g., stocks, stock options, or other ownership interest, excluding diversified mutual funds), or other financial benefit. Financial relationships can also include "contracted research" where the institution gets the grant and manages the funds and the individual is the principal or named investigator on the grant.

Do you have relevant financial relationships to disclose?  
 No       Yes (if yes complete Financial Relationship Disclosure Form)

**Relevant non-financial relationships** are those relationships that might bias an individual including any personal, professional, political, institutional, religious or other relationship. May also include personal interest or cultural bias.

Do you have relevant non-financial relationships to disclose?  
 No       Yes (if yes complete Non-Financial Relationship Disclosure Form)

I attest that the information in this disclosure is accurate at the time of completion and I agree to notify ISAAC Conference 2016 ([conference2016@isaac-online.org](mailto:conference2016@isaac-online.org)) of any changes to this information between now and the scheduled presentation date. **I also understand that all completed Disclosure Forms must be incorporated within my paper proposal, as part of my Long or Extended abstract upload to the ISAAC Conference 2016 paper submission system.**

Signature   
 DEBORA DELIBERATO

Date