# Augmentative and Alternative Communication Mediator Training in Ontario

## *La formation des intermédiaires de la communication suppléante en Ontario*

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### Abstract

The training of communication mediators (i.e., individuals who communicate with non-speaking persons within their community environments) is a complex process that is affected by many factors. The original intention of this study was to develop a mediator training program. However, it became apparent that information about the need and possible use of such a program had to be examined first. A survey of clinicians who specialized in the area of augmentative communication within the province of Ontario was conducted to determine current practices, difficulties with mediator training, and levels of satisfaction. Fifty-one surveys from clinicians working within designated provincial augmentative communication clinics were received. Respondents indicated that they used both "formal" and "informal" training procedures. The most frequently identified issues associated with mediator training included: mediators with differing perspectives on the functional/potential skills of augmentative communication users, mediator turnover, differing levels of understanding of AAC, lack of opportunities or time for trainers to do follow-up, and lack of mediator initiative to contact trainers when problems arise.

### *Abrégé*

*La formation des intermédiaires de la communication (c.-à-d. des personnes qui communiquent avec des sujets non-oraux dans leur environnement communautaire) est un processus complexe sur lequel influent de nombreux facteurs. À l'origine, cette étude visait à élaborer un programme de formation des intermédiaires. Il est toutefois devenu évident qu'on devait d'abord examiner l'information sur la nécessité et sur l'utilisation possible d'un programme de ce genre. En Ontario, on a mené un sondage auprès de cliniciens spécialisés dans le domaine de la communication suppléante, afin de déterminer les pratiques actuelles, les difficultés posées par la formation d'intermédiaires et leur degré de satisfaction. Cinquante-et-un questionnaires ont été renvoyés par des cliniciens qui oeuvrent dans des cliniques utilisant la communication suppléante désignées par la province. Les répondants ont révélé qu'ils utilisent à la fois des méthodes «officielles» et des méthodes «officieuses». Voici certaines des questions le plus fréquemment décrites en ce qui concerne la formation des intermédiaires : intermédiaires qui ont des opinions divergentes sur les compétences fonctionnelles/potentielles des utilisateurs de la communication suppléante, roulement des intermédiaires, divers degrés de compréhension de la CS, manque d'occasions ou de temps pour le suivi par les formateurs et manque d'initiative de la part des intermédiaires lorsqu'il s'agit de communiquer avec les formateurs advenant un problème.*

Differences in interactions between nonspeakers and speakers have been well documented (Blackstone, 1991; Kraat, 1985; Light, Collier, & Parnes, 1985). Blackstone (1991) stressed the importance of training communication partners/mediators in how to interact with individuals who use augmentative communication systems. In most cases, mediators include parents, teachers, educational assistants, special needs workers, and recreation staff. Trainers are typically a speech-language pathologist, but may include educators, occupational therapists, technologists, and others who are responsible for facilitating knowledge about implementing the use of an augmentative communication system or approach. Training can include vocabulary selection, symbol selection (pictures, words, Blissymbols), the organization of messages/symbols (for communication boards or voice output devices), strategies for using the communication system or approach, and for the enhancement of functional communication.

The initial study objectives were: a) to examine the feasibility of using a modular mediator training approach, b) to incorporate multiple training methods in the training to better reflect various adult learning styles, c) to pilot the format with clinicians working in the augmentative communication field to determine its appropriateness.

A list of commonly known mediator training problems were generated (see Table 1). These problems were cate-

**Table 1. Mediator Training Problems: Categories**

| Categories | Specific Issues | Current Situation |
|---|---|---|
| • Trainer-related | • Should therapists be trainers or should there be mediator training specialists? | • Presently most trainers are therapists who work directly with clients. |
| | • How should the trainer's goals match those of the client or the mediator(s)? | • Goals are not always enmeshed effectively. |
| | • Are the resources available to develop mediator training programmes? | • There is often minimal preparation time for mediators or use of prepared materials.<br>• Informal training is dependent on mediator's availability to clinicians. |
| • Mediator-related | • How should mediators be selected? | • Selection criteria vary. |
| | • Are mediators able to cope with technology? | • Coping skills are variable dependent on mediator's experience or problem solving skills. |
| | • Are mediators able to access clinicians during and after training? | • This depends on distance and financial situation/ |
| | • Is mediator turnover a problem? | • When frequent turnover occurs, re-training is done on an informal basis. |
| | • Is accountability of mediators to trainers a problem? | • The accountability is often vague and unclear. |
| | • What is the best method/content of instruction for mediators? | • Methods and content of instruction are variable. |
| | • Do mediators receive feedback after training? | • Mechanisms for ongoing feedback often do not exist. |
| | • What are the expectations of mediators regarding the outcome of functional use of a communication system within a client's environment? | • This often depends on the mediator's past knowledge and experience. |
| • Client-related | • What is their communicative competence? | • This varies by individual. |
| | • What is their motivation to communicate? | • This varies by individual. |
| | • What are the expectations of clients around their communication goals, their use of an AAC system, and the time frame in which they want to become competent? | • This varies by individual. |
| • Environment- related | • Is transportation/distance a problem? | • This issue is specific to where an individual lives. |
| | • Does the service delivery model of the agency providing primary care matter? | • A variety of models exist. |
| | • Do we need different models for family members vs external mediators? | • Service models don't always take into account these variable needs. |
| | • How should one integrate the goals set by the team? | • This process is often adhoc and variable. |

gorized into one of four categories: trainer-related, mediator-related, client-related, and environment-related. The rationale for using modules was based on the premise that having training materials and suggested activities/methods readily available would reduce the time needed to prepare for formal or informal mediator training. The following ten modules were identified for possible development: a) selection of mediators, b) coping with technology, c) strategies for mediators, d) feedback to mediators, e) clinical contracts and how to cope with turnover, f) goal-setting, g) communicative competence, h) motivating the client towards communicative independence, i) vocabulary selection, j) mediator training models/approaches.

## Development of Modules

A general format for the modules (Table 2) and a demonstration topic entitled Coping with Technology were developed. This particular demonstration topic was chosen because the authors' own clinical experiences indicated that a significant number of mediators experienced difficulties dealing with technological breakdowns or related problems. Two modules were developed for this topic. Each focused on a different voice output communication system: specifically the Touch Talker and the Intro Talker. Both electronic devices have displays and/or keyboards which can be programmed with words or phrases; messages can then be retrieved by the user and spoken out loud using the device. The Intro Talker and Touch Talker devices represent different options along the voice output communication device continuum. The Intro Talker is considered to be an introductory level, digitized voice device while the Touch Talker is a more complicated synthetic speech output device. Both devices are accessed by direct key selection. The prepared modules included a review of the device, what to do when the device broke down, reprogramming the device, and memory back-up.

As these modules were being developed, the authors realized that it was unclear what clinicians were using for mediator training and whether a modular format would in fact be helpful. It was decided that a baseline survey would help provide information about the status of mediator training in Ontario augmentative communication clinics.

The revised study objectives were:

1. To develop a survey to obtain information on the status of mediator training in Ontario.
2. To collate the survey data to determine the utility of a modular training program.
3. To complete appropriate modules based on initial survey feedback.
4. To develop a follow-up evaluation protocol on any modules developed.
5. To pilot modules and the evaluation protocol.
6. To analyze evaluations of module use.
7. To write conclusions and recommendations.

**Table 2. Module Format**

**Purpose of Module:**
State the overall purpose of the module and any specific objectives or topics to be discussed within the parameters of the module.

**Time Frame**:
State amount of time necessary to complete all of the activities in the module. Do timed trials during pilot phase.

**Trainer Materials**:
Indicate list of all materials required to complete the module. The training materials will be included in the module.

**Activities**:
Describe the activities / training approach to be used - didactic, demonstration, simulation, role playing, hands on.

**Handouts**:
List handouts to be given to participants.

**Resource Materials**:
Give references to other resource materials such as journal articles, books, videotapes, etc. This section would be updated as new information becomes available.

**Assignment**:
Describe any tasks to be done during the training session or as homework by the participants.

**Related modules**:
List other modules which should be presented in conjunction with the select module.

## Survey Development

From the mediator training problems previously identified, a baseline survey was constructed. Copies of this survey are available from the first author. The survey focused on: the format of mediator training (formal or informal, group or individual), the amount of preparation time devoted to training sessions, topics covered, teaching methods used, problems encountered in training mediators, and desired content for modules or training packages.

## Participants

A list of staff located at Ontario augmentative communication clinics was obtained from the Centralized Equipment Pool Project affiliated with the Ontario Ministry of Health's Assistive Devices Program. One hundred surveys were sent via mail directly to these clinicians. Of the 51 surveys returned (a 51% response rate), 15 were from general level clinics, 21 were from expanded level clinics, and 15 were from research and education clinics. Thirteen were completed by occupational therapists, 23 by speech-language pathologists, and 15 by other disciplines such as special needs workers. Participants were instructed to refer only to their work with face-to-face communication users when considering the issues related to mediator training.

## Results

Fifty-seven percent (57%) (n=29) of all the responding clinics indicated that they had "formal" training programs. When asked if they offered informal training, 92% (n=47) indicated that they did. Research and education clinics had the highest rate for formal mediator training and expanded clinics had the highest rate for informal mediator training (see Figures 1 and 2). Difficulty in meeting the needs of all mediators during the same training session was the most commonly identified reason for why informal mediator training occurred. Most clinics did not have set schedules for training but in the course of a year, sessions generally occurred monthly. Over all of the clinics, 70% provided group mediator training sessions and 94% provided individual training sessions.

Topics most commonly covered in mediator training sessions were vocabulary selection, communication strategies for mediators, communication strategies for users, operation and maintenance of communication devices, and communicative competence/functional communication. Table 3 shows the seven most frequently covered topics for each clinic type.

**Figure 1. Percent of clinic level with formal mediator training programs**

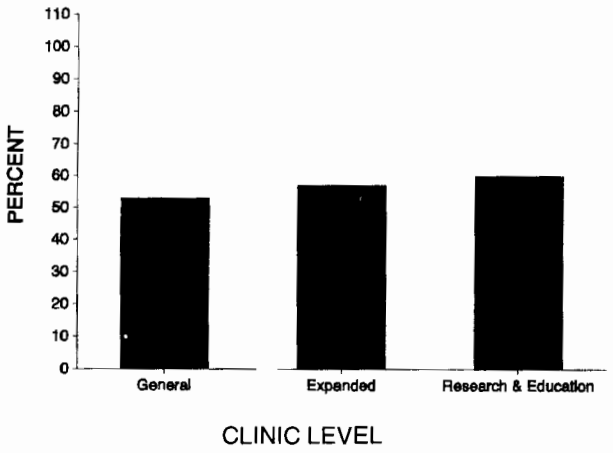
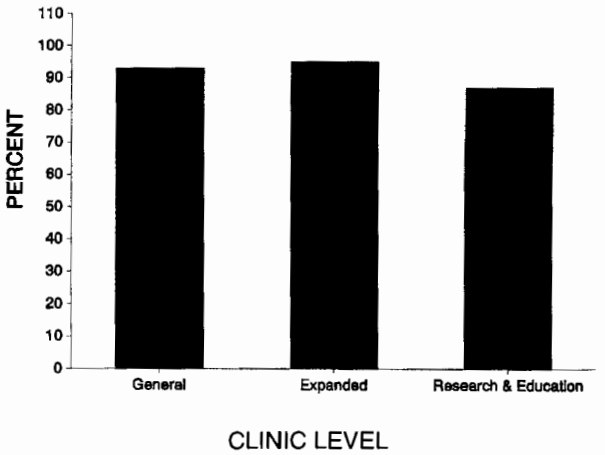



**Figure 2. Percent of clinic level with informal mediator training programs**




Of the mediator training topics, 94% were taught through demonstration, 92% by "hands-on" experience, and 82% by modelling. 'Hands-on' was the most preferred method of teaching and the didactic approach was least preferred. Typically, clinicians/trainers used their preferred methods of instruction.

Clinicians/trainers took between a half and a full day to prepare for training sessions. This involved practical tasks such as furniture and audiovisual set up along with the organizing of client-specific content. Generally, two staff were involved in each training session - a speech-language pathologist and another team member (teacher, occupational therapist, facilitator, or technologist). Availability of training facilities and audio-visual equipment were not concerns.

The twelve most frequently identified mediator training problems are listed in Table 4. The top five problems identified were: mediators with differing perspectives on the functional/potential skills of augmentative communication users, mediator turnover, differing levels of understanding of AAC, lack of opportunities or time for trainers to do follow-up, and lack of mediators' initiative to contact trainers when problems arise.

In terms of satisfaction, 77% of clients and mediators were very or mostly satisfied with the mediator training program, while 51% of the trainers were very or mostly satisfied (see Figures 3 and 4). In addition, 27% of the trainers were very or mostly dissatisfied with the training process. Many commented that more time was needed to prepare customized mediator training materials and to devise systematic post-training processes.

**Table 3. Most Frequently-Covered Topics in Each Type of Clinic**

| Topics | Percent of Clinics Covering This Topic | Clinic Level |
|---|---|---|
| Communication strategies for mediators | 87 | General |
| Communicative competence/ functional | 80 | |
| Vocabulary selection | 73 | |
| Developing communication boards | 73 | |
| Communication strategies for users | 73 | |
| Operation and maintenance of communication devices | 60 | |
| Team goal setting | 60 | |
| Operation and maintenance of communication devices | 95 | Expanded |
| Vocabulary selection | 86 | |
| Communication strategies for users | 81 | |
| Communication strategies for mediators | 76 | |
| Communicative competence/ functional communication | 76 | |
| Developing device overlays | 71 | |
| Motivating the AAC user | 71 | |
| Vocabulary selection | 100 | Research & Education |
| Communication strategies for mediators | 100 | |
| Communication strategies for users | 100 | |
| Operation and maintenance of communication devices | 93 | |
| Developing device overlays | 93 | |
| Developing communication boards | 93 | |
| Communicative competence/ functional communication | 93 | |

It was also found that most clinics had not performed formal evaluations of their training programs, especially in the general and expanded level clinics (see Figure 5).

Approximately 50% of the participants indicated a high interest in the following four mediator training modules: communication strategies for mediators, communication strategies for users, communicative competence/functional communication, and vocabulary selection. Over 80% of participants indicated they would like handout materials, audiovisual materials, and training strategies and activities included in the modules.

**Table 4. Percent of clinics identifying mediator training problems as significant or moderate**

| Problem | Percent of Clinics |
|---|---|
| Mediators with differing perspectives concerning functional/potential skills of the AAC user | 84 |
| Mediator turnover | 81 |
| Differing levels of understanding of AAC | 73 |
| Lack of opportunity/time for trainer to do follow-up or provide feedback to mediators | 67 |
| Mediators don't initiate contact with you if there are problems | 67 |
| Mediators reluctant to develop their own problem-solving strategies | 65 |
| Lack of accountability by mediators to you as the trainer/clinician | 64 |
| Mediators resistant to change | 62 |
| Difficulties determining mediators' goals and expectations | 61 |
| Lack of opportunity/time to develop new skills in adult training | 61 |
| Lack of information on mediator training strategies in the AAC field | 56 |
| Mediators with negative attitudes about AAC system | 55 |

*Note:* Percents are calculated within each type of clinic.

## Discussion

Effective mediator or facilitator training has been identified as critical to the successful use of augmentative communication systems and approaches. The user's ability to function-

**Figure 3. Percent of clients' and mediators' satisfaction with mediator training programs across clinic levels (rated by trainer)**

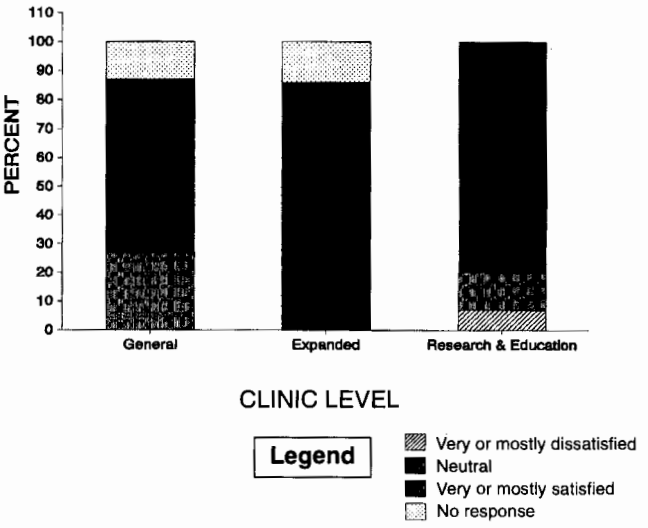


**Figure 4. Percent of trainers' satisfaction with mediator training programs across clinic levels**

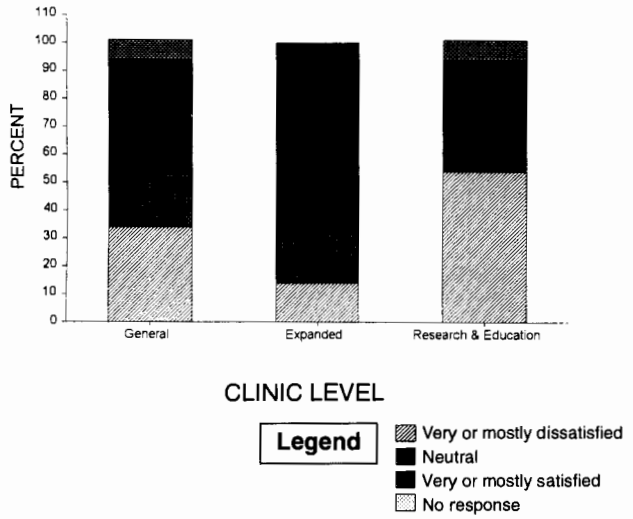
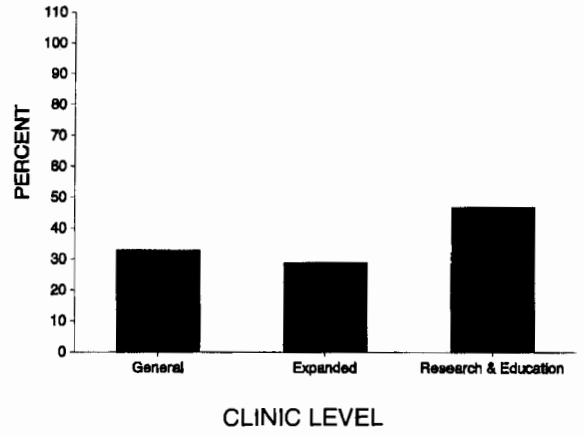



**Figure 5. Percent of clinic level with a formal evaluation of mediator training programs**




ally communicate depends to a large extent on the knowledge and skills of her communication partners or mediators, ranging from technical information about the communication system to implementation strategies.

Almost all Ontario augmentative communication clinics reported having some type of mediator training process for clients with augmentative communication systems and devices. The format of the training was quite varied; most used informal training, but some offered formalized programs.

Most clinicians felt that their clients were satisfied with the training programs, but a noticeable number of the clinical staff were very or mostly dissatisfied with their training programs. Less than half of the respondents had actually performed formal evaluations of the training programs in their centres. This type of quality measurement could provide valuable information concerning improvement of services to clients and their families.

A main concern was mediator turnover - when key caregivers in the life of the individual using an augmentative communication system leave for various reasons (maternity leave, change of job, incompatibility) and are replaced by persons not familiar with the individual or with augmentative communication. This problem did not seem to be directly addressed during training sessions according to the survey results. Since changes in key mediators such as teaching assistants and teachers may occur annually for school-aged children, clinicians need to anticipate such change and help the individual involved to determine appropriate action. As this survey was not intended to derive detailed information on this subject, further investigation of the problem of ongoing training of mediators is needed.

Other problems noted in the survey comments included lack of information on effective mediator training strategies, and limited opportunity to do follow-up with or give feedback to mediators. The survey did not probe the reasons why these concerns occurred. Professional development opportunities and service delivery options could explain it to some extent.

Many clinicians indicated in their comments a lack of time or opportunity to develop skills in training mediators. Large caseloads and budget restrictions may have prevented speech-language pathologists and other trainers from attending professional development activities that would assist in developing these skills. Typically, teaching programs have taught speech-language pathology students to work directly with individual clients rather than with caregivers. Clinicians may not have an extensive knowledge base concerning the principles of adult learning (Knowles, 1978; Kolb, 1984; Arndt & Underwood, 1990) which are at the heart of mediator training. Weitzman (1992) stressed that to facilitate learning, trainers need to become aware of how to provide feedback to caregivers in a nonjudgemental way.

With respect to the content of their training programs, most clinicians were satisfied with the range of content presented. Approximately half of the respondents did indicate a desire for training modules on strategies for mediators and users, functional communication, and vocabulary selection. This implied that some clinical staff did not have adequate time to prepare for mediator training sessions, which was consistent with the above findings.

### Recommendations

Based on the general trends found by the survey, the following recommendations are made about the process of mediator training:

1. Include team goal setting, including mediators, as part of the training process.
2. Use clinical contracts as a tool for improving the accountability of mediators to trainers.
3. Implement formal program evaluations to determine effectiveness of mediator training within clinics and to ensure that the needs of clients, families, and other caregivers are met. There are various methods to obtain feedback or perform this type of evaluation, including phone interviews, consumer and clinician surveys, or data collection by mediators on the user's communication abilities with the augmentative communication device.
4. Incorporate adult learning principles into mediator training programs to support learning.
5. Encourage clinicians to acquire skills in consulting, negotiating, and problem-solving (Block, 1980; Piepgrass, 1989; Fisher & Ury, 1981) as well as family/group intervention.
6. Obtain further information on how we train mediators and the techniques that are most successful. Clinicians must begin to document and share information about their training programs.
7. Develop mediator training modules for the topics of:
   - strategies for mediators
   - communication techniques
   - vocabulary selection.

## Conclusions

This study identified that clinicians were providing diverse mediator training programs in Ontario to augmentative communication users. Some support was indicated towards the development of training modules. However, these needs were specific and limited. As clinical staffing resources diminish, the need for standardized training programs might be a necessary clinical reality. Research on effective training strategies needs to continue.

### Acknowledgements

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