Preparation in Augmentative and Alternative Communication: An Update for Speech-Language Pathology Training

Ann Ratcliff
*Central Michigan University, Mount Pleasant*

Rajinder Koul
*Texas Tech University Health Sciences Center, Lubbock*

Lyle L. Lloyd
*Purdue University, West Lafayette, IN*

**Purpose:** To report on data from the current survey about academic and clinical education in augmentative and alternative communication (AAC), as well as to compare these findings with earlier surveys in an attempt to identify any changes being made as programs in the United States implement the new certification standards of the American Speech-Language-Hearing Association in the area of speech-language pathology.

**Method:** A survey was sent to all speech-language pathology training programs in the United States via e-mail directed to program directors or faculty teaching in AAC.

**Results:** A total of 168 surveys were returned, for a return rate of 57.93%. Seventy-three percent of the respondents had a separate course in AAC, and 80% indicated AAC content was infused in other courses.

**Conclusions:** Academic preparation in AAC, while varying across academic programs, has in general increased over the past decade. Data also suggested a continuing critical need for more academic and clinical preparation in this area.

**Key Words:** preprofessional training, augmentative and alternative communication

Individuals who provide service delivery for those who use augmentative and alternative communication (AAC) are required to understand a multitude of strategies, techniques, technologies, and characteristics of communication partners as well as other professionals (Beukelman & Mirenda, 2005; Glennen & DeCoste, 1997; Lloyd, Fuller, & Arvidson, 1997). AAC has emerged as an internationally acknowledged academic and clinical discipline within the past 25 years (Beukelman & Mirenda, 2005). As such, this area involves teaching and learning a complex, interrelated set of practices based on continually developing research and theory. While AAC remains a multidisciplinary field, training in the area of AAC is important, particularly for speech-language pathologists, since many speech-language pathologists are involved in assessment and intervention of potential users of AAC (Beukelman & Mirenda, 2005; Lloyd et al., 1997).

In 1994, Koul and Lloyd surveyed training programs in speech-language pathology and special education in the United States in order to discover the breadth and depth of training in AAC in these two professions. Results indicated that approximately 62% of the speech-language pathology programs and 24% of the special education programs provided at least one course in AAC (Koul & Lloyd, 1994). Likewise, in 1995, Ratcliff and Beukelman surveyed speech-language pathology training programs for many of the same reasons. They found that 67% of the speech-language pathology training programs offered one course in AAC, with 15% offering more than one course. In summary, both Koul and Lloyd (1994) and Ratcliff and Beukelman (1995) reported some level of AAC training. However, authors of both surveys also raised concerns related to the continued lack of quantity and quality of AAC training, particularly in speech-language pathology training programs. Koul and Lloyd summarized their results in 1994 by stating that the current preprofessional programs were “probably inadequate” to meet AAC service delivery needs. Ratcliff and Beukelman (1995) echoed this summary and
added that training in the technology of AAC was particularly lacking.

The results of these surveys are now more than 10 years old. In the past 10 years, the field of AAC and the training process of speech-language pathologists have undergone a multitude of changes. The purpose of the current study was threefold. The first purpose was to reexamine preprofessional training of speech-language pathologists in the United States in AAC in light of developments within the field of AAC. The second purpose of this study was to provide data that explained the lack of knowledge and skills in AAC among practicing speech-language pathologists. Lastly, the third purpose was to emphasize the importance of meeting and maintaining the new certification standards of the American Speech-Language-Hearing Association (ASHA) relative to AAC. The remainder of this section will discuss issues relative to training in AAC.

**Policy Changes Affecting AAC**

There have been a number of national level policy changes regarding service delivery to people who may be users of AAC as well as in educational programs involved in training professionals for that service delivery. A major policy issue was the reauthorization of the Individuals with Disabilities Education Act (IDEA) and amendments of 2004. This legislation continued to include communication and assistive technology needs as appropriate to be documented in individualized education programs and individualized family service plans. In addition, the Rehabilitation Act Amendments of 1992 also continue to require that assistive technology equipment, including that related to AAC, be included in an individual’s service plan for vocational rehabilitation.

As of January 2005, ASHA updated certification standards for the practice of speech-language pathology in the United States. Nine core content areas have been delineated that represent knowledge and skills expected of a speech-language pathologist entering the field (ASHA, 2006). One of these nine areas is called “communication modalities.” It includes “oral, manual, augmentative and alternative communication techniques and assistive technology” (ASHA, 2006). Thus, AAC is a subsection of one of the nine major content standards. In addition, as a part of the new standards, ASHA has implemented mandatory continuing education to maintain the Certificate of Clinical Competence (ASHA, 2006).

**Changes in the Field of AAC**

Demographic changes in a variety of populations have served to increase the population of potential AAC users. Thus, more professionals have opportunities to work with people with AAC needs (Binger & Light, 2006; Soto, Muller, Hunt, & Goetz, 2001). Advances in medicine and pharmacology have made it possible to save more lives of medically fragile infants and individuals with severe traumatic brain injuries. Also, early diagnosis and new medical and behavioral treatment techniques have increased the lifespan of individuals with progressive neurological diseases (Beukelman, Yorkston, & Reichle, 2000; Lloyd et al., 1997). All of these populations comprise individuals who may be potential users of AAC. Further, it has become easier to get AAC technology into the hands of those who need it, due to policies regarding third-party funding for AAC devices. For example, Medicare began funding AAC devices in July 2001 (AAC-RERC, 2001). Additionally, an increasing number of school-age AAC users are being included in regular educational settings, thus making AAC use more critical, or at least more salient, to the education mainstream (Soto et al., 2001). Because of these advances in medicine and technology, the area of AAC has entered the mainstream of intervention options for anyone with severe, communication impairment (Glennen & DeCoste, 1997; Marvin, Montano, Fusco, & Gould, 2003). Moreover, service delivery in AAC continues to be mandated by ASHA. The 2001 *Scope of Practice in Speech-Language Pathology* and the subsequent technical report and position statement address the roles and responsibilities of speech-language pathologists in AAC as well as the minimal knowledge and skills for service delivery in AAC expected of a speech-language pathologist in the United States (ASHA, 2001, 2002, 2004, 2005).

**Continued Lack of Confidence in Knowledge and Skills of AAC Service Delivery by Professionals**

Despite changes related to the field of AAC, there is continuing evidence of the need for more and better training in this area. Professionals, primarily speech-language pathologists, continue to report their discomfort with service delivery in the area of AAC and their need for more training (King, 1998; Lebel, Olshain, & Weiss, 2005; Sutherland, Gillon, & Yoder, 2005). Simpson, Beukelman, and Bird (1999) surveyed school clinicians in Nebraska and found that 41% reported needing some continuing education in the area of AAC. Marvin et al. (2003) randomly sampled speech-language pathologists at the 2000 ASHA Annual Convention in Washington, DC. Seventy-two percent indicated their own competence with AAC systems to be fair to poor. In this same survey, 78% of the 72 practicing speech-language pathologists rated their training in AAC as limited or poor. Fewer than 25% found the level of education they received in AAC adequate to their needs (Marvin et al., 2003). In addition, data from a survey sent to speech-language pathologists throughout the state of Michigan in 2003 indicated 32% of the respondents (*N* = 92) believed their lack of knowledge of AAC was a primary barrier to successful service delivery (Ratcliff, 2003b). Similarly, individuals who use AAC themselves and their families have related unfortunate experiences with professionals who are not trained in AAC (Beukelman & Mirenda, 1998).

**Increased Attention to Pedagogy of Preprofessional Preparation in Speech-Language Pathology in General and AAC in Particular**

In the area of communication sciences and disorders, there has been an increase in interest and information regarding pedagogy in general. Specifically, a variety of content has been published in the ASHA Special Interest...
Division 12 Newsletter, Perspectives on Augmentative and Alternative Communication, relating to pedagogy in AAC (Gillette, 2000; Ratcliff, 1999, 2003a). An example of note is the collaboration between the ASHA special interest divisions on Issues in Higher Education (Division 10) and AAC (Division 12) that led to the publication of the newsletter highlighting perspectives on teaching in AAC as well as several exemplary training programs in this area (Cumley, 2004). In summary, the recent attention to pedagogy of preprofessional preparation in speech-language pathology has served as an impetus to the further development of AAC curriculum.

All of the aforementioned issues have implications for training in the area of AAC (Soto et al., 2001). The goal of the current survey was to collect information about the academic and clinical education in AAC in the United States and to compare the findings with those of the earlier surveys in an attempt to identify any changes being made as programs implement the new certification standards of ASHA in the area of speech-language pathology.

Method

Development of the Survey

The survey developed for this project was based on two previous surveys (Koul & Lloyd, 1994; Ratcliff & Beukelman, 1995). The questions from both surveys were presented to a group of doctoral students and faculty who were either studying aspects of AAC or had clinical and/or research expertise in AAC. This group served as a “panel” and provided general feedback on the survey as well as comments on specific questions. The authors, individually and as a group, reexamined questions from both surveys and then used feedback from the group to make final decisions about which existing questions provided the most relevant information regarding preprofessional training in AAC. These questions were selected and modified for the present survey. In addition, new questions were added to reflect the trend toward technology-based teaching methods. The final version of the survey consisted of 27 questions designed to obtain updated information regarding individual courses in AAC, practica opportunities in AAC, and expertise levels of faculty/staff teaching AAC content. Other questions solicited information regarding how much AAC content is infused into other courses and the presence of training grants and/or research projects in AAC. Once the content of the survey was finalized, programmers in the Office of Information Technology at Central Michigan University formatted the content into a survey for distribution and submission via e-mail using Active Server Page with Visual Basic script (see the Appendix for a copy of the survey). The survey responses were directed via e-mail to the first author. While submission of the survey online was designed to be anonymous, the respondents were given an option to provide their name and affiliation.

Participants

The targeted respondents to this survey were individuals associated with specific preprofessional training programs in communication disorders/speech-language pathology across the United States who could provide information about the curriculum in terms of AAC. To this end, e-mail lists of potential respondents were created based on the following information: First, lists were created for every department chair of a program/department in speech-language pathology listed on the ASHA Web site of accredited programs (www.asha.org/gradguide) and on the Web site of the Council of Academic Programs in Communication Sciences and Disorders (CAPCSD; www.capcsd.org). The information from these two lists was combined, and if conflicts appeared, they were reconciled using the more recent information. Second, if a person associated with an institution was listed as a member of the AAC special interest division (Division 12), his or her e-mail was used instead of the department chair. The reasoning for this substitution was the premise that a member of ASHA Division 12 would likely be knowledgeable about the AAC areas within the departmental curriculum. Third, the membership roles of the United States Society for Augmentative and Alternative Communication and its international equivalent, the International Society for Augmentative and Alternative Communication, were checked for individuals who were perhaps not chairpersons or a member of Division 12 but possibly were associated with a program in speech-language pathology in a U.S. institution of higher learning. The compiled list using all three sources provided at least an administrator or a person involved in AAC associated with every speech-language pathology training program in the United States. Additionally, in order for the responses to reflect the best knowledge of AAC in a given curriculum, a message was included in the actual survey introduction as well as the e-mail message sent to all potential respondents encouraging the receiver to forward the survey to someone in the department/program who might be better suited to answer the questions.

Survey Distribution

The final version of the survey was distributed via e-mail to 290 individuals associated with institutions with speech-language pathology preprofessional training programs across the United States. The individuals were provided with an introductory paragraph explaining the rationale for the survey and the link to the Web site to access the actual survey. Multiple follow-up e-mails were sent at 6 weeks and 3 months after the initial posting. Because the new ASHA certification standards were being implemented for training programs soon after initial responses were received, the authors re-sent the survey to all 290 individuals 2 years after the initial e-mailing. This follow-up was based on the observation that training programs might have changed their curriculum since the initial e-mailing due to the need to implement the new ASHA certification training standards. This second mailing gave the individuals a chance to respond with updated information regarding AAC content. Follow-up from this second mailing was sent 6 months later.

Because the survey was mailed twice to each program, 15 programs were identified that turned in duplicate responses. For those programs that turned in duplicate responses, only the responses from the most recently completed survey were...
used. Comparison of initial response to the survey to later responses from identical respondents was relatively easy because only 22 surveys were submitted anonymously. Of those, 16 were submitted during the initial mailing, and 6 of those 16 indicated they had an AAC course and provided identifying information such as course prefix and course number. The course and other related information was used to identify and isolate any duplicate responses. Of the 6 anonymous surveys submitted during the second phase, 2 indicated they taught a course in AAC, and the remaining 4 indicated they did not have a separate course in AAC. Data collected from all the returned surveys were carefully compared using the database to rule out overlapping responses from the same respondents.

Results

A total of 168 surveys were completed and returned, for an overall return rate of 57.93%. An online statistical software program was used to determine whether the completed 168 surveys would provide results that are reflective of the population (i.e., 290) at the 95% confidence level and at the 5% confidence interval (Creative Research Systems, 2003). Results indicated that the sample size of 165 returned surveys was sufficient to determine results at the 95% confidence interval. Thus, the return rate of this study was acceptable, as the sample size was more than what is required to infer results at the 95% confidence level.

Responses from those who chose not to be anonymous came from virtually every part of the United States. Detailed demographic information is presented in Table 1. A summary of that table indicated that the percentage of training programs that responded to the survey in major geographical areas of the United States (Southeast, Southwest, Northeast, Northwest, and Midwest) fell between 70% and 100%. Seventy percent of the training programs in the Southeast responded, while 100% of the training programs in the Northwest responded.

Survey data were analyzed to determine the number of freestanding AAC courses, number of non-AAC courses that offer AAC content as part of the course, and clinical clock hours dedicated to AAC practice. Additionally, data were also presented on perceived clinical competence in AAC upon graduation, expertise levels of teaching staff, and training and research grants in AAC obtained by programs. Data presented in percentages were approximated to the nearest whole numbers.

AAC Courses Offered and Their Characteristics

Of those programs that responded to the current survey, 122 (73%) indicated they had one or more separate courses in AAC. Further, 77% (94 of the 122) of the courses in AAC were offered at the graduate level, 20% (24 of the 122) were offered to both graduate and undergraduate students, and only 3% (3 of the 122) were offered exclusively to undergraduate students. Additionally, 68% (83 of the 122) of the respondents reported that an AAC course was taught using a traditional on-site lecture course format with or without Internet-based supplemental information. Only 11% of the respondents reported that the AAC course work was offered via the Web. Just over half (52%) of the respondents (63 of the 122) reported that the AAC course was required, and another 48% (58 of the 122) reported that it was an elective course in their program. In addition, 14% (11 of the 122) of the respondents indicated that the AAC course was required for students in special education programs. Further, 53% (65 of the 122) of the respondents who offered a separate AAC course also provided laboratory instruction that was focused on requiring their students to demonstrate specific operational competencies with AAC technology. About 56% of the respondents reported that on average, 11 to 20 students enrolled in the AAC course. Figure 1 depicts the major characteristics of AAC courses offered by respondents.

The questions on type of readings for the AAC courses revealed that 53% (88 of 168) of the respondents reported that the Beukelman and Mirenda (1998, 2005) textbook was the required reading in the AAC course, followed by the Glennen and DeCoste (1997) textbook, which was used by 20% (34 of 168) of the respondents. The Lloyd et al. (1997) textbook was used by 15% (25 of 168) of the respondents.

Infusion of AAC Content in Other Courses

Overall, 80% of the programs responding reported infusing AAC content into other courses. Seventy-seven percent (94 of 122) of the respondents who offered a separate course in AAC reported including AAC content in other courses, and 87% (40 of 46) of the programs who did not offer a separate course in AAC infused AAC content in other courses.

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage responding</th>
</tr>
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<tbody>
<tr>
<td>Northwest (OR, WA)</td>
<td>100 (N = 4)</td>
</tr>
<tr>
<td>Southwest (AZ, CA, CO, NM, OK, TX)</td>
<td>71 (N = 14)</td>
</tr>
<tr>
<td>Southeast (AL, AR, DC, FL, GA, LA, MD, MS, NC, SC, TN, VA, WV)</td>
<td>70 (N = 37)</td>
</tr>
<tr>
<td>Northeast (CT, MA, NH, NJ, NY, PA)</td>
<td>82 (N = 28)</td>
</tr>
<tr>
<td>Midwest (IA, IL, IN, KS, KY, MI, MO, ND, NE, OH, SD, WI)</td>
<td>83 (N = 46)</td>
</tr>
</tbody>
</table>

TABLE 1. Percentage of training programs responding to the survey by geographical areas.
Approximately 48% of the respondents (22 of 46) who did not offer a separate course in AAC spent about 1 to 3 hr of class time infusing AAC content in other courses. In contrast, only 11% of the respondents spent more than 6 hr of class time infusing AAC content in other courses. Overall, these data indicated that AAC content is being covered to varying degrees in other courses. For the majority of programs where AAC is being infused, very few hours were spent on AAC instruction in other courses.

**Clinical Practica**

Respondents were asked what percentage of their students obtained clinical clock hours in AAC during their practicum experiences. Eighty-one percent (136 of 168) of the respondents answered this question. Figure 2 provides data on the percentage of students who reportedly obtained clinical clock hours in AAC. Practicum sites for obtaining hours in AAC varied from the university clinic to skilled nursing facilities, the most popular being the university clinic, schools, and outpatient rehabilitation facilities.

**Percentage of Students Perceived to be Prepared to Work With AAC Clients Upon Graduation**

Figure 3 provides data on the percentage of students who were perceived by respondents to be prepared to work with clients with AAC needs upon graduation. Overall results indicated that 13% (18 of 134) felt that none of their students were prepared to provide services to people with AAC needs upon graduation. In contrast, 33% (43 of 134) felt that 76% to 100% of their students were prepared to work with people with AAC needs. The remaining 54% felt that between 1% and 75% of their students were prepared to provide services to AAC clients.

**Expertise Levels of Teaching Staff**

Figure 4 provides data on the percentage of tenure-track faculty and non-tenure-track clinical supervisory staff that had AAC as their primary or secondary area of expertise. Data indicated that 29% (49 of 168) of respondents reported at least one person on their staff had AAC as a primary area of expertise. In contrast, 20% (34 of 168) reported that their teaching staff had minimal expertise in AAC, and another 34% (56 of 168) reported no expertise in AAC within their faculty. Thus, over half of the respondents indicated that their teaching staff had minimal to no expertise in AAC.

**AAC Training Grants and Research Projects**

Several questions in the survey were designed to find out whether the respondents’ programs currently and/or previously had received training grants in AAC. Results revealed that 80% (134 of 168) of programs had not received any such training grants. Only 9% (15 of 168) of respondents indicated that they currently had an AAC training grant, and 10% (16 of 168) indicated that they had received an AAC training grant in the past.

Further, data indicated that 120 master’s theses and 55 doctoral dissertations in AAC were produced at respondents’ programs. The number of master’s theses and doctoral dissertations varied across programs. Three programs accounted for about one third (37 of 120) of the master’s theses defended in the area of AAC. Along similar lines,
FIGURE 2. Percentage of students offered clinical clock hours in AAC.

FIGURE 3. Percentage of students perceived to be prepared to work with clients with AAC needs upon graduation.
two programs accounted for about 67% (37 of 55) of doctoral dissertations defended in the area of AAC.

Discussion

AAC Preservice Course Work

The results of this survey clearly indicated that during the past decade the number of speech-language programs that offer a separate course in AAC has increased. Specifically, respondents currently were offering 41 more courses in AAC than reported in 1994 ($N = 81$) and 24 more courses in AAC than reported in 1995 ($N = 98$). Although these results illustrated a positive trend, the absence of a separate course in AAC in about 25% of the responding programs was a concern because in a number of surveys, at least half of practicing speech-language pathologists responding reported feeling underprepared to work with AAC (Lebel et al., 2005; Marvin et al., 2003; Ratcliff, 2003b). This lack of preparation in AAC was further exacerbated by only about half of the respondents listing AAC as a required course. Thus, while these results indicated an increase in courses in AAC at the preprofessional level, they also indicated that many speech-language pathologists still graduate without taking a course in AAC as a required course. Further, only 10% of the respondents reported that they offered more than a single course in AAC. However, even those programs that offered separate course work in AAC reported that only about half have any requirements for students to demonstrate competencies with AAC technology. While the field of AAC is not limited to technology, it remains imperative that any AAC practitioner have some knowledge of the technological aspect of AAC (Beukelman & Mirenda, 2005; Light & Binger, 2006).

On a more positive note, it was apparent that whether or not there was a separate AAC course in a given program, AAC content was being included in other courses within the curriculum. Of those that did not report a separate AAC course, 87% included AAC content in other courses within the curriculum. Further, 77% of those who offered a separate course also included AAC in other courses within the curriculum. However, the time spent on AAC content in other courses appeared to be minimal, with the majority of respondents reporting between 1 and 3 hr of class time on AAC content. Thus, while there was some evidence that AAC was covered to some extent in courses dealing with clinical management of various speech and language disorders, the infusion appeared to be very limited.

In summary, future efforts should focus on not only increasing the number of separate AAC courses but also devoting significant amount of class time to AAC content in other relevant courses. This has become apparent because at the same time the population of individuals who may be candidates for AAC is increasing, ASHA has included AAC in the content area expected of speech-language pathologists to know about to obtain certification. In addition, rapid advances in assistive technology and AAC theory as well as clinical and educational practices make it necessary to provide in-depth AAC preservice course work.

Clinical Preparation in AAC

It is critical that preservice programs in speech-language pathology not only offer academic course work in AAC but also provide opportunities for clinical clock hours so that graduating students are independently able to provide AAC

![FIGURE 4. Level of expertise of faculty across programs.](image)
clinical services to children and adults with severe communication impairments. Data obtained indicated that about half of the respondents reported that between none and one fourth of their students received any opportunities for clinical clock hours in AAC. These results indicated that a significant majority of students graduating from speech-language pathology programs obtained minimal to no hands-on clinical preparation in the area of AAC and thus may not be fully prepared to offer services to persons who have AAC needs. These data were substantiated by well over half (67%) of the respondents, indicating that either none or only some of their students were prepared to work with AAC clients upon graduation.

These data regarding academic course work and clinical preparation were of concern in view of the fact that a majority of practicing speech-language pathologists reported a lack of knowledge and skills in the area of AAC service delivery. According to Marvin et al. (2003), a random sample of practicing speech-language pathologists revealed that only about one in four reported the level of education they received in AAC was adequate to meet their clinical needs. In addition, one third of responding speech-language pathologists in the state of Michigan indicated a belief that lack of knowledge of AAC was a primary barrier to successful service delivery (Ratcliff, 2003b). This lack of expertise in AAC was a serious concern in view of the fact that over half (62%) of speech-language pathologists employed in schools in the United States reported serving children with AAC needs (Moore, 2000). Thus, there was a clear discrepancy between the resources dedicated to clinical/educational preparation in AAC and the expertise required to successfully deliver services to persons with AAC needs. This discrepancy was also manifested by the fact that service delivery for individuals with AAC needs continues to be mandated by IDEA (2004) and the Rehabilitation Act (1992), and is supported by ASHA (2006). These national level policies mean that AAC is no longer a “specialty fringe area” reserved for those professionals with special training (Glennen & DeCoste, 1997). This discrepancy is apparently being realized by practitioners across the United States, based on the growing demand for AAC materials and resources and the fact that the ASHA special interest division in AAC is rapidly growing, with a current strength of approximately 1,600 members (Beukelman & Mirenda, 2005; Glennen & DeCoste, 1997; Marvin et al., 2003).

Thus, the aforementioned factors make it imperative that academic programs focus on providing substantial course work and clinical experiences to students in the area of AAC in order to meet growing demands for AAC services from diverse client population groups. It is also critical that ASHA enhance its effort in providing as well as facilitating continuing education in AAC.

Faculty Expertise in AAC

About 34% of the respondents reported that their teaching staff had no expertise in AAC. Only about a third (29%) of the respondents reported having a faculty member in their program whose primary interest was in the area of AAC. It is important to note that lack of course work in AAC in approximately one third of the academic programs and minimal or no clinical experience in AAC in about two thirds of the programs may be due, in part, to lack of faculty expertise in the area of AAC. The lack of faculty with expertise in AAC could be attributed to both the critical shortage of doctoral students in speech, language, and hearing sciences (CAPCSD, 2002) and the small number of academic programs that offer doctoral degrees with an emphasis on AAC. This observation was further supported by data indicating only a few (9%) of the respondents currently had a training grant in the area of AAC. In addition, research in AAC associated with degree completion (e.g., master’s thesis or a doctoral dissertation) appeared to be concentrated among two to five programs. In summary, it is critical that to meet the growing demands of speech-language pathologists with expertise in AAC, both academic programs and ASHA focus their efforts on increasing the number of PhD level speech-language pathologists with expertise in the area of AAC.

Survey Implications

It is important to note that the number of respondents offering separate course work in AAC across the United States has increased over the past decade. In addition, the number of respondents reporting coverage of AAC content in other courses has also increased within the past decade. The data also pointed to a small yet stable group of training programs that have chosen to commit resources to focus particularly on AAC training. These were the programs that offered more than one AAC course as well as a variety of research and clinical opportunities.

However, the lack of clinical experience in the area of AAC as reported by respondents to this survey is a serious concern, as it will negatively affect service delivery to the population with AAC needs and will perpetuate the knowledge and skill barriers that limit services to people who could use AAC. Given the current data, too many professionals still operate with the attitude that Robert Williams calls the “greatest crippler”—that is, “the greatest crippler is not [the client’s] disabilities but others’ severe ignorance and profound underestimation of [the client’s] abilities” (Williams, 2000, p. 251).

While these data have underscored advances in both clinical practice and AAC research and theory made over the past decade, there is still a critical shortage of education and clinical training in AAC. It is hoped that the results of this survey will serve as a catalyst in expanding the implementation of AAC courses, clinical work, and research in speech-language pathology professional preparation programs. Further, these data should help illustrate the shortage of PhD level speech-language pathologists and emphasize the critical need for those with expertise in AAC.

References

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Survey of Preprofessional Preparation in AAC in Speech-Language Pathology Programs

Hello,

We would like to ask your help with a survey involving preprofessional preparation. It is an online survey and will take about 10 to 15 minutes of your time. This 27-question survey has been designed to solicit up-to-date information relative to the training practices in Speech-Language Pathology university programs in the area of Augmentative and Alternative Communication (AAC). Your input, whether or not you do any training in AAC in your program, is important for us to get an idea of current practices.

If you know someone else in your department who is better suited to answer these questions, please forward this on to him/her.

To begin the survey, please scroll down.

Thanks so much for your help.

Ann Ratcliff, PhD
Central Michigan University

Lyle Lloyd, PhD
Purdue University

Whether or not you have a course in AAC, please answer the following questions regarding AAC training at your university or college.

Individual AAC course(s)

1. Do you currently offer one or more separate courses in the area of AAC?
   a. No (Skip to question 18.)
   b. Yes (Continue with question 2.)

2. For each course you offer that has AAC as its primary content please answer the following: (If you offer more than one course, complete these same questions listed in Form 2 for the other course.)
   Department and course number: ___________
   Course title: ___________
   Number of credits for course: ___________
   Credits are (Check one):
   a. semester
   b. quarter
   Name of most recent instructor: ___________
   E-mail contact of most recent instructor: ___________
   This course is taught at:
   a. graduate level only
   b. undergraduate level only
   c. combined graduate/undergraduate levels
   This course is required for students in the following programs: (Check all that apply.)
   a. Special Education — All majors
   b. Special Education, Mental Retardation
   c. Special Education, Severe and/or Multiple Disabilities
   d. Special Education, Physical Disabilities
   e. Special Education, Other specific areas (specify): ___________
   f. Speech-Language Pathology — All majors
   g. Speech-Language Pathology, adult emphasis
   h. Speech-Language Pathology, child emphasis
   i. Speech-Language Pathology, Other emphasis (specify): ___________
   j. Occupational therapy
   k. Physical therapy
   l. Educational psychology
   m. Engineering
   n. Computer science
   o. Regular education
   p. Other (specify): ___________

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Survey of Preprofessional Preparation in AAC in Speech-Language Pathology Programs

10. This course is an elective for students in the following programs: (Check all that apply.)
   a. Special Education — All majors
   b. Special Education, Mental Retardation
   c. Special Education, Severe and/or Multiple Disabilities
   d. Special Education, Physical Disabilities
   e. Special Education, Other specific areas (specify): ___________
   f. Speech-Language Pathology — All majors
   g. Speech-Language Pathology, adult emphasis
   h. Speech-Language Pathology, child emphasis
   i. Speech-Language Pathology, Other emphasis (specify): ___________
   j. Occupational therapy
   k. Physical therapy
   l. Educational psychology
   m. Engineering
   n. Computer science
   o. Regular/General education
   p. Other (specify): ___________

11. Check the type of readings required in this course:
   a. Journal articles, but no text.
   b. Both articles and text(s) (SEE LIST BELOW)
   c. Text(s), but no articles (SEE LIST BELOW)
   d. On-line materials
   e. None

12. For “b” or “c” above, please specify the textbook used by checking below all that apply.
   d. OTHER, please specify Author(s), title, and Date: ___________
   e. OTHER, please specify Author(s), title, and Date: ___________

13. What is the course format/delivery? Please check all that apply:
   a. On site classroom and/or laboratory (lecture, discussion, demonstrations, problem solving, and/or other activities)
   b. On site classroom and/or laboratory with Internet based supplemental information
   c. Distance learning via correspondence
   d. Distance learning via synchronous video (on-line/real-time interaction/video conferencing)
   e. Distance learning via asynchronous video
   f. Distance learning via the Web (e-mail, Listserv, chat room, etc.)
   g. Other (specify): ___________

14. Indicate the average number of students enrolled in the course per term over the past 3 years.
   a. less than 5
   b. 5 to 10
   c. 11 to 15
   d. 16 to 20
   e. 21 to 25
   f. 26 to 30
   g. more than 30

15. What percentage of the course time is devoted to “laboratory” activities (i.e., learning the AAC technology and associated methods/strategies)?
   a. less than 1 hour
   b. 2 hours
   c. 3 hours
   d. 4 to 6 hours
   e. 7 to 9 hours
   f. 10 hours or more

16. What types of practical training do students get in terms of learning AAC technology and associated materials/strategies?
   Check all that apply:
   a. Students observe instructor demonstrate activities and/or technology.
   b. Students get hands on but no requirements for operational competency of AAC technology and/or strategies.
   c. Students are required to demonstrate specific operational competencies of AAC technology and/or strategies.
   d. Other (specify): ___________
   e. None
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Survey of Preprofessional Preparation in AAC in Speech-Language Pathology Programs

17. What types of unaided communication techniques are discussed? Check all that apply:
   a. Sign language (e.g., ASL)
   b. Sign Systems (e.g., Manually Coded English, SEE II)
   c. Gestures
   d. Other (specify): ___________
   e. None

Please answer the 16 questions above for each course in AAC in your curriculum. These questions related to specific course information are repeated in Form 2 and Form 3. Therefore, after you finish this part of the survey, complete the questions in Form 2 if you have a second course in AAC and Form 3 if you have a third course. These forms can be accessed at the upper left of the screen.

AAC content infused into other courses in the curriculum

18. Do you offer AAC content included in other courses?
   a. No
   b. Yes

19. If so, how many courses have:
   a. Approximately 1 hour of classroom time devoted to AAC?
   b. Approximately 2 hours of classroom time devoted to AAC?
   c. Approximately 3 hours of classroom time devoted to AAC?
   d. Approximately 4 to 6 hours of classroom time devoted to AAC?
   e. Approximately 7 to 9 hours of classroom time devoted to AAC?
   f. Over 9 hours of classroom time devoted to AAC?

Practica

20. Of the total number of students who leave your program to enter the profession, what percentage of them actually have clinical clock hours in AAC as a part of their practicum experience? ___________

21. Check below all the clinical sites in your program in which students may obtain clinical experience in AAC.
   a. university clinic
   b. acute care facility
   c. outpatient rehabilitation facility
   d. specialized center for AAC
   e. skilled nursing facility
   f. schools (public and private)
   g. home health care
   h. other (specify):___________
   i. None

22. On the whole, what percentage of your students are prepared to provide services to individuals with AAC needs when they graduate? ___________

Expertise level of faculty/staff and training grants

23. Of the tenure track faculty who teach in the area of AAC, how many
   a. have AAC as a primary area of expertise
   b. have AAC as a secondary area of expertise
   c. have AAC as a minimal area of expertise

24. Of the clinical supervisors/non tenure track faculty who teach in the area of AAC, how many
   a. have AAC as a primary area of expertise
   b. have AAC as a secondary area of expertise
   c. have AAC as a minimal area of expertise

25. Does your program currently have and/or previously had AAC training grants?
   a. no
   b. yes, currently; Funding Source: ___________
   c. yes, currently and previously; Funding Source: ___________
   d. yes, previously but not currently; Funding Source: ___________

26. How many research projects related to AAC have been produced or are in progress? Please indicate by numbers:
   a. projects not tied to theses
   b. master theses
   c. PhD dissertations
   d. Published articles

27. Of the projects listed above, how many are
   a. completed
   b. in progress