THE PENN STATE AAC LEADERSHIP PROJECT: DOCTORAL TRAINING IN AAC

Janice Light, Kathryn Drager, Krista Wilkinson,
Erinn Finke, Jessica Currall, Barbara Roberts,
Ji Young Na, Laura Richardson, Michelle Therrien,
Jen Thistle, & April Yorke

Communication Sciences and Disorders
Penn State University

The Problem

- There is an extreme shortage of researchers & university faculty with expertise in AAC.
- This severe shortage has profound negative impacts in two areas:
  - It limits generation of the research that is essential to inform practice & improve results for individuals who require AAC; and
  - It severely restricts the quality & quantity of preservice training in AAC for future SLPs .
- As a result, many individuals who require AAC services do not receive effective AAC services.

Shortage of AAC researchers

- There are extreme shortages of scientists to conduct high quality research to improve outcomes for individuals who require AAC.
  - Fewer than 1,450 speech, language, & hearing scientists nationwide (ASHA, 2011)
  - Of this small number, only a tiny percentage focus on research to address the needs of children who require AAC
    - Fewer than 12 AAC researchers who have published more than 5 papers in the past 5 years

Shortage of Ph.D. students in AAC

- The number of new Ph.D.s in speech language pathology awarded each year is limited
  - Mean of 96 new Ph.D.s per year
  - Of these, only 45% assume positions at universities where research is considered a primary employment function
  - Only a few of these engage in research to improve outcomes for individuals who require AAC

Impact of lack of research

- Given the lack of active researchers in AAC
  - The generation of new research is limited
  - Many unanswered questions remain
- Without a sufficient number of researchers generating scientifically sound research to determine effective evidence-based practices, SLP services are seriously compromised
  - Individuals who require AAC are at grave risk for not meeting their potential in all areas of educational achievement/ development

Lack of preservice training in AAC

- 18-35% of preservice programs in SLP do not offer any coursework at all in AAC
- Many of the programs that offer training in AAC, do so on a limited basis
  - 1-4 hours of AAC content infused in other courses
- Only a small percentage of programs offer full courses in AAC
  - Approximately half of these are not required courses (Costigan & Light, 2010; Ratcliff, Koul, & Lloyd, 2008)

Lack of quality preservice training

- 54-71% of programs do not employ faculty with expertise in AAC
- 64% of programs report that faculty who are not experts in AAC typically teach the AAC courses
- Quantity & quality of preservice training in AAC is severely compromised

Impact of lack of preservice training

- Lack of preservice training in AAC is troublesome since more than 53% of SLPs regularly serve children who require AAC (ASHA, 2010).
- As a result of the lack of adequate preservice training, current graduates of SLP programs are often ill prepared to meet the needs of children who require AAC

Impact of shortages of researchers & university faculty in AAC

- Without research to guide intervention decision making & without evidence-based preservice training of SLPs, children who require AAC are at significant risk for
  - poor communication outcomes
  - misclassification
  - reduced educational expectations/ achievement
  - exclusion from an appropriate education

The Penn State AAC Leadership Project

- The Penn State AAC Leadership Project is designed to prepare doctoral level faculty to:
  - Conduct research to guide effective intervention for children who require AAC;
  - Provide high quality scientifically based preservice training in AAC for future SLPs; and
  - Assume leadership roles within the field.

Recruitment of doctoral students

- The Penn State AAC Leadership Project provides funding support for a total of 12 high quality doctoral students over a 6-year period
  - Full tuition support
  - Monthly stipend
    - More than $18,000/ per year
  - Funding support for travel to national conferences
  - Seed grants to support doctoral research
- Students are recruited on a national basis

Doctoral curriculum

- The Penn State AAC Leadership Project doctoral curriculum is designed to provide training in
  - research methods
  - college level teaching
  - evidence-based practices for high need children who require AAC
  - policy and professional issues
  - interdisciplinary collaboration
  - leadership skills

Training in EBPs in AAC

- Advanced doctoral seminars are designed to build expertise in AAC research & evidence based practices:
  - Communication & language development for beginning communicators who require AAC;
  - Language, literacy, and educational achievement for children who require AAC;
  - Evidence-based services for high need children who require AAC;
  - Interdisciplinary collaborations to advance understanding and improve outcomes for children who require AAC;
  - Hands on lab experiences with state of the art AAC assistive technologies.

Training in cognate fields

- Academic coursework to build foundation skills in
  - child language development
  - child language disabilities
  - policy and professional issues for SLPs, etc;
- Independent studies in cognate fields
  - e.g., universal design, cognitive science, motor performance, visual processing, literacy learning, strategy instruction, transitions, personnel preparation, etc.

Research training

- Academic coursework in statistics & research methods
- Training in the responsible conduct of research;
- Mentored research experiences each year
  - Completion of a minimum of 3 research projects

Training in college teaching

- Training in research-based methods of college teaching;
- Development of a teaching portfolio;
- Mentored experiences in college teaching each year
  - A minimum of 3 different teaching experiences

Leadership training

- Leadership training workshops / seminars
- A capstone leadership project designed to build greater capacity in AAC
  - e.g., inservice training, web resources, model demonstration project, etc.

History of successful outcomes

- The doctoral program in AAC at Penn State has a strong history of successful outcomes
  - 100% of graduates over the past 15 years successfully obtained positions at Institutions of Higher Education upon graduation
  - 100% of these graduates (out at least 6 years) successfully obtained tenure at their respective Institutions of Higher Education

Projected grant outcomes

- The impact of the AAC Leadership Project will be felt even before the doctoral scholars graduate
- Each doctoral scholar
  - completes a minimum of 3 new AAC research projects
    - Total of 30-36 new AAC research projects
  - teaches / mentors at least 30 preservice students in EBPs
    - Total of more than 300-360 future SLPs/ service providers with increased competence in EBPs
  - partners with at least one school district /service delivery program to build capacity in AAC
    - Minimum of 10-12 sites providing more effective evidence-based AAC services

Projected grant outcomes

- The impact of the AAC Leadership Project will continue after doctoral scholars graduate & assume faculty positions
- Each project graduate /university faculty is expected to
  - complete a minimum of 1 new AAC research project per year
    - Total of 10-12 new AAC research projects per year
  - teach / mentor at least 25 preservice students in EBPs per year
    - Total of more than 250-300 future SLPs/ service providers with increased competence in EBPs in AAC

Preliminary outcome data

- Preliminary outcome data demonstrate that the grant is on track to meet its projected outcomes
- Teaching outcome data to date for doctoral scholars who have completed at least one year of studies
  - Mean of at least 85 preservice students taught EBPs per doctoral scholar per year
    - Mean student ratings of teaching effectiveness >5.00 on a 7-point Likert scale where 1=poor and 7=excellent

Preliminary outcome data

- Research outcomes for doctoral scholars who have completed at least one year of studies
  - Mean of 3 new AAC research projects per scholar to date
    - Mean of 3 research papers published, submitted, or in progress per doctoral scholar
    - Mean of 3+ peer reviewed conference presentations per doctoral scholar

Benefits for children who require AAC

- The increases in AAC research will result in improved EBPs in AAC
- The improvements in AAC preservice training will result in increased numbers of SLPs with competencies in AAC service delivery
- Increased research and improved preservice training will result in improved services and results for children who require AAC

Acknowledgements

- The Penn State AAC Leadership Project grant is funded by the U.S. Department of Education grant #H325D110008.
- Funding support for the AAC doctoral program at Penn State is also provided through the Hintz Family Endowed Chair in Children's Communicative Competence.
  - The authors do not have any further financial or nonfinancial relationships to disclose.
- For further information, please contact Janice Light at JCL4@psu.edu or visit our website at http://aac.psu.edu