

# Curriculum Vitae

**David J. Ertmer**  
**Associate Professor of Speech, Language, and Hearing Sciences**  
**Purdue University**  
**West Lafayette, IN**

## ACADEMIC AND PROFESSIONAL EXPERIENCES

### Academic Record

<u>Degree</u>	<u>Year</u>	<u>Institution</u>	<u>Years Attended</u>
Ph.D.	1994	Purdue University	1990 - 1994
M.S.	1976	University of Wisconsin-Milwaukee	1974 - 1976
B.S.	1973	Marquette University	1969 - 1973

### Academic and Research Appointments

2003 – present	Associate Professor, Department of Speech, Language, and Hearing Sciences (SLHS), Purdue University
1997 - 2003	Assistant Professor, Department of Audiology and Speech Sciences, Purdue University
1995 - 1997	Visiting Assistant Professor, Department of Audiology and Speech Sciences, Purdue University
1994 - 1995	Visiting Assistant Scientist, DeVault Otologic Research Laboratory, Indiana University School of Medicine

### Clinical Experience

1996 - 1997	Coordinator of Medical Externship Program Coordinator of School Externship Program Audiology and Speech Sciences Purdue University
1995 - 1997	Clinical Supervisor M. D. Steer Speech and Audiology Center Purdue University
1990 - 1992	Graduate Clinical Supervisor M. D. Steer Speech and Audiology Center Purdue University

- 1979 - 1990      Speech-Language Pathologist  
Fremont School District, RE-1  
Canon City, CO
- 1978 - 1979      Speech-Language Pathologist  
Cherry Creek School District  
Englewood, CO
- 1973 - 1978      Speech-Language Pathologist  
Milwaukee Public Schools  
Milwaukee, WI

### **Dissertation**

- 1990 – 1994      The Effectiveness of Vowel Production Training with Real-time Spectrographic Displays for Children with Profound Hearing Impairment. Rachel E. Stark, Ph.D. Major Professor. Dissertation committee members: Drs. George Karlan, Michael Lynch, and Mary Joe Osberger

### **Awards and Honors**

- 2007      Outstanding Undergraduate Instructor in the department of Speech, Language, and Hearing Sciences
- 2003      Award for Continuing Education (ACE) from the American Speech-Language and Hearing Association
- “Communication intervention for children with cochlear implants: Two case studies” (Ertmer, Leonard, & Pachuilu, 2002) was cited in the “Best of 2002” in the area of aural rehabilitation. *Hearing Journal*, 56, 46.
- 2002      Two publications, Ertmer & Mellon, 2001 and Ertmer, 2001, were selected for inclusion in “Spoken language development in young children with cochlear implants,” a continuing education self-study program developed by the American Speech-Language and Hearing Association.
- 2001      Second Place, *Learning Software Design Competition, 2001* Sponsored by the Instructional Technology Department, University of Minnesota. Project Title: “An interactive website for instruction in pre-linguistic vocal development.” (Ertmer, D. J. & Galster, J.; www.vocaldevelopment.com)

- 1996 Outstanding Clinical Supervisor, NSSLHA Graduate Teaching Award, Purdue University
- 1992 Doctoral Fellowship, Institutional NIH Training Grant, Purdue University
- 1992 Dissertation Grant, Purdue Research Foundation, Purdue University
- 1990 Doctoral Fellowship, United States Department of Education, Leadership Training Grant in Hearing Impairment, Purdue University

### **Membership in Professional Organizations**

- 1995 - present Indiana Speech-Language-Hearing Association  
 1994 - present Alexander Graham Bell Association for the Deaf  
 1978 - present American Speech-Language-Hearing Association

## **TEACHING**

### **Courses Taught in the Past Three Years**

- SLHS 115: Introduction to Communication Disorders (Fall 2004 - 06)  
 SLHS 349: Introduction to Clinical Practice in Communication Disorders (Fall 2003 - 06)  
 SLHS 450: Introduction to Aural Rehabilitation Across the Lifespan (Spring 2003- 07)  
 SLHS 519-R/590: Audiological Rehabilitation for Children (Spring 2003- 07)  
 SLHS 544: School Methods in Speech-Language Pathology (Summer 2005, 2006)

### **Recent Directed Studies**

- SLHS 490: Speech and Deafness in Children, Fall 2005

### **Publications in Support of Teaching**

#### Books

- Ertmer, D. J.** (2005). *The Source for Children with Cochlear Implants*. East Moline, IL: LinguSystems, Inc. (University textbook and clinical resource)

#### Book Chapters

- Ertmer, D. J.** (2007). Auditory foundations of speech acquisition. In S. McCleod (Ed.) *International Guide to Speech Acquisition*. Clifton Park, NY: Thomson-Delmar Learning.

Materials

**Ertmer, D. J.** (2003). *Contrasts for Auditory and Speech Training*. East Moline, IL: LinguiSystems, Inc. (Auditory training program, manual, and materials)

**Special Activities Contributing to Teaching Effectiveness**

2000-2001 Developed [www.vocaldevelopment.com](http://www.vocaldevelopment.com), an interactive website for instruction in prelinguistic vocal development. This website provides audio-recordings of vocalizations so that students, clinicians, and parents can learn to classify them according to three developmental levels. The site also provides a self-check for assessing classification skills, information on research in vocal development in children who have cochlear implants, and video examples of parents using language facilitation strategies. The website was reviewed by experts in phonological development before it was launched. It is included in the curricula of SLHS 349, 450, and 519-R.

**CREATIVE ENDEAVOR, RESEARCH, SCHOLARSHIP**

My research examines the initial phases of speech and language development in deaf children who have received cochlear implants before their third birthdays. This work involves longitudinal analysis of speech samples to determine the time-course and sequence of pre-linguistic vocal development and children's progress in acquiring phonological skills and spoken vocabulary. This research is aimed at determining how closely young cochlear implant recipients match the developmental strides of infants and toddlers with normal hearing. As such, it has the potential to inform theories of sensitive periods for language development and can be useful in assessing the impact of auditory deprivation on young children's language learning potential. In addition, this work has led to the development of new assessment tools for children who are implanted at very young ages.

**Published Work**Journal Articles

**Ertmer, D. J.,** Young, N. M., & Nthani, S. (2007). Profiles in vocal development in young cochlear implant recipients. *Journal of Speech, Language, and Hearing Research, 50*, 393-407.

Nathani, S., **Ertmer, D. J.,** & Stark, R. E. (2006). Assessing vocal development in infants and toddlers. *Clinical Linguistics and Phonetics, 20*, 351-369. [NA]

- Ertmer, D. J.** (2004). How well can children recognize speech patterns in spectrograms? Comparisons by age and hearing status. *Journal of Speech, Language, and Hearing Research* 47, 484-495. [1.044]
- Ertmer, D.J.,** Strong, L., & Sadagopan, N. (2003). Beginning to communicate after cochlear implantation: Oral language development in a young child. *Journal of Speech, Language, and Hearing Research*, 46, 328-340. [1.431]
- Goffman, L., **Ertmer, D. J.,** & Erdle, C. (2003). Changes in speech production in a child with a cochlear implant: Acoustic and kinematic evidence. *Journal of Speech, Language, and Hearing Research*, 45, 891-901. [1.431]
- Ertmer, D. J.,** Young, N., Grohne, K., Mellon, J., Johnson, C., Corbett, K., & Saindon, K. (2002). Vocal development in young children with cochlear implants: Assessment and implications for intervention. *Language, Speech, and Hearing Services in the Schools*, 33, 185-196. [0.651]
- Wilkins, M., & **Ertmer, D. J.** (2002). Introducing young children who are deaf or hard of hearing to spoken language: Child'sVoice, an oral school. *Language, Speech, and Hearing Services in the Schools*, 33, 197-205. [0.651]
- Ertmer, D. J.,** Leonard, J. S., & Pachuillo, M. P. (2002). Communication intervention for children with cochlear implants: Two case studies. *Language, Speech, and Hearing Services in the Schools*, 33, 206-218. [0.651]
- Ertmer, D. J.** (2001). Emergence of a vowel system in a young cochlear implant recipient. *Journal of Speech, Language, and Hearing Research*, 44, 803-813. [1.568]
- Ertmer, D. J.,** & Mellon, J. A. (2001). Beginning to talk at 20 months: Early vocal development in a young cochlear implant recipient. *Journal of Speech, Language, and Hearing Research*, 44, 192-206. [1.568]
- Ertmer, D. J.,** & Maki, J. E. (2000). A comparison of speech training methods for deaf adolescents: Spectrographic vs. non-instrumental instruction. *Journal of Speech, Language, and Hearing Research*, 43, 1509-1523. [1.59]
- Ertmer, D. J.,** & Ertmer, P. A. (1998). Constructivist strategies in phonological intervention: Facilitating self-regulation for carryover. *Language, Speech, and Hearing Services in the Schools*, 29, 67-75. [0.671]
- Ertmer, D. J.,** Kirk, K. I., Todd, S. L., Rile, A. I., & Osberge, M. J. (1998). A comparison of vowel production by children with multi-channel cochlear implants or multi-channel tactile aids: Perceptual evidence. *Ear and Hearing*, 18, 307-315. [NA]

Sehgal, S. L., Kirk, K. I., Svirsky, M., **Ertmer, D. J.**, & Osberger, M. J. (1998). Imitative consonant feature production by children with multi-channel sensory aids. *Ear and Hearing, 19*, 72-84. [NA]

**Ertmer, D. J.**, Stark, R. E., & Karlan, G. (1996). Real-time spectrographic displays in vowel production training with children who have profound hearing impairment. *American Journal of Speech-Language Pathology, 5* (4), 4-16. [NA]

**Ertmer, D. J.**, & Stark, R. E. (1995). Elicitation of pre-speech vocalizations in a young child with profound hearing impairment: Usefulness of real-time spectrographic speech displays. *American Journal of Speech-Language Pathology, 4* (1), 33-38. [NA]

#### Conference Proceedings

**Ertmer, D. J.** (2003). Vocaldevelopment.com: An interactive Web site for instruction in prelinguistic speech development. Proceedings of the Educational Media World Conference. Association for the Advancement of Computing in Education (CD-ROM).

Robbins, A. M., Kirk, K. I., Osberger, M. J., & **Ertmer, D. J.** (1995). Speech intelligibility of implanted children. Proceedings of the International Cochlear Implant, Speech and Hearing Symposium. *Annals of Otology, Laryngology and Rhinology, 104*, (10, Serial No. 167), 399 - 401.

#### Invited Commentaries

**Ertmer, D. J.** (2002). Auditory training and school-age children with cochlear implants: Addressing speech perception and oral communication needs. *Perspectives on Hearing and Hearing Disorders in Children, 12*, 24 – 28.

**Ertmer, D. J.** (2002). Challenges in optimizing oral communication in children with cochlear implants. *Language, Speech, and Hearing Services in the Schools, 33*, 149-152. (Prologue to special issue on children with cochlear implants).

**Ertmer, D. J.** (2002). Technical innovations and intervention practices for children with cochlear implants. *Language, Speech, and Hearing Services in the Schools, 33*, 219-222. (Epilogue to special issue on children with cochlear implants).

Stark, R. E., & **Ertmer, D. J.** (1996, July). Disyllables as a link between babbling and real words. *ASHA, 38* (3), 44-45.

## Presentations

### International

**Ertmer, D. J.** (2007, April). Speech Intelligibility in Young Cochlear Implant Recipients: Gains and Relationships with Phonological Measures. Poster presented at the 11<sup>th</sup> International Symposium on Cochlear Implants in Children, Charlotte, N.C.

**Ertmer, D. J.,** Young, N. M., & Nathani, S. (2005, March). *Vocal Development in Young Cochlear Implant Recipients*. Tenth International Symposium on Children with Cochlear Implants. Dallas, TX.

**Ertmer, D. J.** (2004, July). *Are you listening? Learning to recognize advancements in infant vocal development*. XXIV World Congress on Early Childhood Education. Melbourne, Australia.

**Ertmer, D. J.** (2004, February). *Helping children with hearing loss learn to listen and speak*. Invited two-day workshop presented at the Research and Education Center for Disabled Children, Ho Chi Minh City, Viet Nam.

**Ertmer, D. J.** (2003, June). *Vocaldevelopment.com: An interactive Web site for instruction in prelinguistic speech development*. Demonstration presented at the 15<sup>th</sup> annual Educational Media World Conference. Honolulu, HA.

**Ertmer, D. J.** (2000, February). *Prelinguistic vocal development via a multichannel cochlear implant*. Poster presented at the Sixth International Cochlear Implant Conference, Miami, FL.

**Ertmer, D. J.** (1998, June). *Syllable-level speech timing following cochlear implantation*. Poster presented at the Fifth International Symposium on Cochlear Implants in Children, Iowa City, IA.

### National

**Ertmer, D. J.** & Nathani, S. (November 18, 2005). *Vocal Development in Typically Developing Infants and Young Cochlear Implant Recipients*. Annual Convention of the American Speech, Language, and Hearing Association, San Diego, CA.

**Ertmer, D. J.,** & Galster, J. (2001, November). *Vocaldevelopment.com: An interactive website for early speech development*. Computer workshop presented at the annual convention of the American Speech-Language and Hearing Association, New Orleans, LA.

**Ertmer, D. J.** (2000, June). *Early vocal development in a young cochlear implant recipient: Year one*. Paper presented at the Child Phonology Conference, Cedar Falls, IA.

- Ertmer, D. J.** (1998, November). *Prelinguistic vocalizations in a young cochlear implant recipient*. Mini-seminar presented with C. Stoel-Gammon and K. D. Oller at the annual convention of the Speech-Language and Hearing Association, San Antonio, TX.
- Goffman, L. A., & **Ertmer, D. J.** (1997, November). *Speech production characteristics in a child with a cochlear implant*. Technical paper presented at the annual convention of the American Speech-Language and Hearing Association, Boston, MA.
- Ertmer, D. J.**, Ho, K. M., & Pankiw, R. (1996, November). *Language intervention in Landau-Kleffner syndrome: A case study of child with partially restored verbal language*. Technical paper presented at the annual convention of the American Speech-Language and Hearing Association, Seattle, WA.
- Ertmer, D. J.** (1996, April). *The problem of carryover in phonological intervention*. Technical paper presented at the Child Phonology Conference, Iowa City, IA.
- Diefendorf, E. M., Kirk, K. I., Riley, A. I., Todd, S. L., & **Ertmer, D. J.** (1995, December). *Vowel production by children with multichannel cochlear implants or hearing aids*. Poster presented at the annual convention of the American Speech-Language and Hearing Association, Orlando, FL.
- Riley, A. I., Kirk, K. I., Diefendorf, E. M., Todd, S. L., & **Ertmer, D. J.** (1995, December). *Vowel production by children with multichannel cochlear implants or vibrotactile devices*. Poster presented at the annual convention of the American Speech-Language and Hearing Association, Orlando, FL.
- Ertmer, D. J.**, & Stark, R. E. (1994, November). *Spectrographic displays in vowel production training with deaf children*. Technical paper presented at the annual convention of the American Speech-Language and Hearing Association, New Orleans, LA.
- Ertmer, D. J.** (1993, May). *Spectrographic displays in speech training with a young hearing-impaired child*. Paper presented at the Child Phonology Conference, Boys Town Research Hospital, Omaha, NE.
- State
- Inniger, K. & **Ertmer, D. J.** (2006, April). *Spoken Words in Young Cochlear Implant Recipients*. Poster presented at the annual conventions of the Indiana Speech-Language-Hearing Association, Indianapolis, IN, and the Ohio Speech-Language-Hearing Association, Columbus, OH.

Invited Lectures

- Ertmer, D. J.** (2006, March). *Auditory Training for School-age Children with Cochlear Implants*. Invited presentation in the department of Special Education, Peabody College, Vanderbilt University, Nashville, TN.
- Ertmer, D. J.** (2004, May). *Assessing and stimulating vocal development in infants and toddlers*. Presentation at the Arizona Speech-Language and Hearing Association annual convention. Tucson, Arizona.
- Ertmer, D. J.** (2004, May). *Optimizing oral communication for school-age children with cochlear implants*. Presentation at the Arizona Speech-Language and Hearing Association annual convention. Tucson, Arizona.
- Ertmer, D. J.** (2002, March). *Prelinguistic speech development in young cochlear implant recipients*. Paper presented at Vanderbilt University, Nashville, TN.
- Ertmer, D. J.** (2001, April). *Profiles in vocal development in young children with cochlear implants*. Paper presented at Child at Risk symposium, University of Maine, Orono, ME.
- Ertmer, D. J.** (1999, April). *A preliminary investigation of speech timing changes following cochlear implantation*. Paper presented at the Central Institute for the Deaf. St. Louis, MO.

**INVOLVEMENT IN GRADUATE AND UNDERGRADUATE RESEARCH****Doctoral Committees**

April Robillos (R. Webb, Major Professor)  
 Department: Communication  
 Dissertation title: "Enduring metaphors and the persistence of stigma: The case of prelingual deaf children with cochlear implants."  
 Defended: Summer, 2005

**Masters and Au.D. Committees**Major Professor –Thesis Direction

Kelli Inniger (SLP student)  
 Thesis title: "Early word learning in young children with cochlear implants"  
 Committee: D. Ertmer (chair), K. Kirk, R. Novak, and D. Snow  
 Defended: April 21, 2006

AuD Research Advisor

Emily Bondus (2<sup>nd</sup> year Au.D. student)  
Project title: “Effectiveness of Analytic Auditory Training for Individuals with Cochlear Implants”

**RESEARCH GRANTS**

Extramural

Title: Speech development in young cochlear implant recipients  
Role: Principal Investigator  
Agency: National Institutes of Health (NIDCD)  
Type: R01 DC007863  
Duration of Funding: 5 years (July 1, 2006 – June 30, 2011)  
Total Direct Costs: \$1,845, 425

Title: Hearing-impaired infants: Indicators of auditory benefit  
Agency: National Institutes of Health (NIDCD)  
Role: Principal Investigator  
Submitted June, 2004  
Total Direct Costs: Not funded

Title: Early vocal development in young cochlear implant recipients  
Role: Principal Investigator  
Agency: National Institutes of Health (NIDCD)  
Type: R03 (DC04226)  
Duration of Funding: Three years (March, 2000 – February, 2003)  
Total Direct Costs: \$214,700

Title: The effects of multi-channel cochlear implants on pre-linguistic vocalizations  
Role: Principal Investigator  
Agency: Deafness Research Foundation  
Duration of Funding: 1 year (January 1999 – December 1999)  
Total Direct Costs: \$15,000

Intramural

Title: Development of speech perception measures for infants and toddlers with hearing loss  
Role: Principal Investigator  
Agency: Liberal Arts Research Incentive Grant  
Duration of funding: February – December 2004  
Total Direct Costs: \$350.00  
Role: Principal investigator

Title: The long-term effects of cochlear implant use on syllable-level speech timing in prelingually deaf children

Role: Principal Investigator

Agency: Purdue Research Foundation

Duration of Funding: Summer, 1998

Total Direct Costs: \$5,000

Title: Prelinguistic vocal development following cochlear implantation

Role: Principal Investigator

Agency: School of Liberal Arts Faculty Incentive Grant

Duration of Funding: Fall, 1997

Total Direct Costs: \$748

## TEACHING GRANTS

### Intramural

Title: A virtual clinic in communication disorders

Role: Co-developer with Mary Lou Poole

Agency: Teaching and Learning Technology, Purdue University

Type: Teaching and Learning Technology grants

Duration of Funding: Spring, 2007

Total Direct Costs: Not Funded (\$4,000 requested)

Title: A virtual clinic in communication disorders

Role: Co-developer with Joanne Gutek

Agency: Teaching and Learning Technology, Purdue University

Type: Teaching and Learning Technology grants

Duration of Funding: Spring, 2006

Total Direct Costs: Not Funded (\$4,800 requested)

Agency: Purdue University Multimedia Instructional Development (MIDC)

Title: *An interactive website for instruction in pre-linguistic vocal development*

Duration of funding: April, 2000

Total amount of award: \$16,499

Role: Web site content developer

Agency: Alumni grant to promote clinical instruction

Title: *Computers in Speech-Language Pathology*

Duration of funding: Awarded 1996

Total amount of award: \$2,500

## COLLABORATIVE RESEARCH PROJECTS

- 2005- present    *Word learning in infants with hearing loss.*  
 Collaborator: Mary Pat Moeller, Ph.D.  
 Boys Town National Research Hospital  
 Funding Source: NIH/NIDCD Grant 00681  
 Date Begun: Fall, 2005
- 1998              Completed an evaluation of the clinical effectiveness of visual feedback during speech training as part of a U.S. Department of Education SBIR: *Visual biofeedback for speech skills maintenance* (#EDOSER-98-008139) awarded to Language Vision, Inc., Idaho Falls, ID (report completed December, 1998).

## CONTRIBUTIONS TO PROFESSIONAL ORGANIZATIONS

### Editorial Positions

- Associate Editor: *Language Speech and Hearing Services in the Schools* (2004 – 06)  
 Editorial Consultant: *Journal of Speech-Language and Hearing Research* (2000 – 02, 06)  
 Editorial Consultant: *Advances in Speech-Language Pathology* (2005 – present)  
 Guest Associate Editor: *Language, Speech and Hearing Services in the Schools*  
 (Volume 33[3], 2002)  
 Guest Associate Editor: *American Journal of Speech-Language Pathology* (2007)  
 Reviewer: *American Journal of Speech-Language Pathology* (2005)  
 Reviewer: *Ear and Hearing* (2000 – 2002, 2005 - 2006)  
 Reviewer: *Speech Communication* (1998 – 2000)  
 Reviewer: *Speech-Language and Hearing Services in the Schools* (1998 – 2000)

### Leadership

- 2003              Co-chair of *Educational Management of Children with Hearing Loss* topic for ASHA convention, Chicago, IL.
- 1996 – 97        School Services Committee, Indiana Speech-Language and Hearing Association

## CONSULTATION

- 2005 – Present    Title: Test of Academic Language and Literacy  
 Developer: Nicola Wolf-Nelson, Ph.D.  
 Funding Source: U.S. Dept. of Ed.; Institute of Educational Science  
 Role: Member of Advisory Board  
 Date Begun: Fall, 2005

1997 – 98      Consultant for LanguageVision, Inc. (Idaho Falls, ID) in the development of *SpeechPrism Pro™* a real-time spectrographic display for speech production training.

### **WORK IN PROGRESS**

#### Articles Submitted

Inniger, K. J. & **Ertmer, D. J.** The emergence of spoken words in two young cochlear implant recipients. (Submitted to *Journal of Speech, Language, and Hearing Research* August, 2006).

**Ertmer, D. J.** Speech Intelligibility in Young Cochlear Implant Recipients: Progress in Year Three. (Resubmitted to *Volta Review*, May, 2007)

### **SERVICE ACTIVITIES**

#### **National**

Reviewer: National Institutes of Health, Student Loan Repayment program (2007)  
Reviewer: National Science Foundation, Doctoral Research Proposal (2001 – 2002)

#### **University**

Campus Appeals Board committee (2006 - 2008)

#### **College of Liberal Arts**

Nominations and Elections committee (2001 – 2002)  
SLHS representative to Faculty Senate (1999 – 2002)

#### **Department**

General Curricular Issues and Undergraduate Curriculum committee (Chair, 2002 – present)  
SLP clinical curriculum and standards committee (2003- present)  
Steer lecture (Chair, October, 2004)  
Graduate committee (1998-99, 2004, 2005)  
United Way Campaign representative (Fall, 2004)  
Zippy and Sandy Ostroy Scholarship Selection committee (2005)  
Graduate Curriculum committee (Chair, 1999 – 2001, Member, 1997)  
Teaching Evaluation and Awards committee (1999 – 2000)  
Alumni committee (Chair, 1997 - 1998)  
Audiology Faculty Search committee (1997 –1998)

SLHS representative on Indiana Department of Special Education taskforce on the shortage of school Speech-Language Pathologists (1997 – 1998)  
Advisor for students participating in the Engineering Projects in Community Service (EPICS) program (1996 – 1998)  
Mentor for undergraduates in the Horizons summer research program (1999, 2002)