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## Software Review

### *Évaluation d'une ressource informatique*

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#### **Captain's Log - The Complete Computerized Mental Gym**

*Joseph A. Sanford, Richard J. Browne,  
Ann Turner*

**Cost:** \$1995 (US) for all five modules for MS/DOS version. Individual modules may be purchased separately at \$549 each. Apple IIe, IIgs, and II+ versions are also available.

**Publisher:** Braintrain, Dept. 494-5, 727 Twin Ridge Lane, Richmond, Virginia, 23235, USA

**Reviewer:** Steven A. Belanger, School of Human Communication Disorders, Dalhousie University, Halifax

#### **Program Description**

*Captain's Log* is a computerized cognitive retraining program designed to improve attention, concentration, memory, eye-hand coordination, visual scanning and tracking, fine-motor control, and inhibition. Other skill areas addressed include basic mathematical concepts, problem solving, organizational skills, and reading comprehension. The programs are targeted for the traumatic brain injury population, but may also be used with other populations (e.g., individuals with attention deficit disorder) who demonstrate cognitive impairments.

Five modules containing 33 separate programs comprise *Captain's Log*. The objectives and contents of each module are described below.

#### **Module 1. Attention Skills: Developmental**

Module 1 was designed to improve the client's ability to attend and concentrate. Sustained attention, selective attention, and alternating attention are addressed. The module consists of eight programs. Two of

the programs (*Auditory Discrimination/Rhythm and Auditory Discrimination/Tones*) require the client to decide whether pairs of sound patterns or tones are the same or different. Three other programs (*Colour Discrimination/Inhibition, Scanning Reaction/Inhibition, and Stimulus Reaction/Inhibition*) require the client to respond only if the colour of a target stimulus matches that of other stimuli or the colour of a border surrounding the target visual field. The three remaining programs (*Scanning Reaction Time, Stimulus Reaction/Fields, and Scanning Reaction Time*) facilitate scanning and vigilance. They require the client to scan the computer screen from left to right (or top to bottom) and to respond each time a target letter, number or coloured square appears.

#### **Module 2. Visual Motor Skills**

Module 2 was designed to facilitate improvement in eye-hand coordination, visual scanning, visual tracking, and fine motor control. Seven programs comprise the module. *Finger Tapping* requires a client to tap his or her index finger as quickly as possible in response to an auditory signal. *Maze learning* involves moving a cursor through mazes of increasing complexity to get to a "cheese". *Spatial Organization* requires the client to orient a line in the same direction and angle as a target line. *Visual Tracking/Discrimination* requires the client to keep a cursor on a moving "road" while hitting targets and avoiding obstacles. *Visual Tracking/Inhibition* involves moving a "paddle" up and down to either hit a "ball" or to allow it to pass as the ball randomly moves across the screen. *Visuospatial Memory* is similar to the game of *Concentration*. The client attempts to find matching pairs of colours hidden on a grid.

#### **Module 3. Conceptual Skills**

Module 3 was designed to help develop basic reasoning, memory, and perceptual

discrimination skills. The module consists of seven programs. *Pattern Display Match* requires determining whether the patterns of dots on two "dominoes" are the same or different. *Numeric Skills* requires the client to count the number of shapes that appear on the screen. The shapes vary in colour and appear in a row or randomly scattered. *Size Discrimination* involves ranking the relative lengths of four to eight vertical bars that appear on the screen. *Symbolic Display Match* requires the client to decide if two figures on the screen match on the basis of colour, shape, or colour and shape. The basis for determining a match changes after eight correct responses, and it is optional whether or not the client is informed of the rule change. *Trail Sequence A* and *Trail Sequence B* are similar to the Trail Making Tests used in the Halstead-Reitan Neuropsychological Test Battery (Reitan & Wolfson, 1985). In *Trail Sequence A*, the client's task is to sequentially connect letters of the alphabet scattered across the screen. In *Trail Sequence B*, the client's task is to connect consecutive numbers and letters in an alternating sequence (e.g., 1-A, 2-B, 3-C, etc.). For both tests, at the clinician's option, the target sequence may be displayed at the bottom of the computer screen. Finally, *Conceptual Discrimination* requires the client to determine which of six boxes of shapes is different from the other five boxes. Discriminations are made on the basis of shape, size, colour, quantity, and/or pattern.

#### **Module 4. Numeric Concepts/Memory Skills**

Module 4 is designed to train basic mathematical concepts in a framework that facilitates improved memory, problem solving, and organizational skills. All eight programs provide a memory option such that questions can be presented either concurrently with the stimulus pictures or tasks, before presentation of the stimulus picture or task (thus requiring verbal recall of the question), or after presentation of the

stimulus picture or task (thus requiring visual recall of the stimulus picture or task). Several of the programs also allow for a guided rehearsal option in which a recall strategy is explicitly taught to the client. Alternatively, the clinician can choose to have the client identify and write down relevant information before proceeding with each task item.

The eight programs comprising Module 4 are as follows:

1. *Numeric Discrimination*. Requires responding to a question about which box (from among two to five) has the fewest or most blocks of a given colour.

2. *Numeric Combinations*. Requires the client to identify which of three boxes has the same number of blocks as a target box.

3. *Number Line Logic*: Requires identification of a common member of two sets of numbers. Selected numbers in both sets are covered, but only one number is covered in both sets.

4. *Numeric Distinctions*: Requires answering questions about numbers presented in a game board. Questions are about the distance a number is on the game board from a starting point, the value of the number, or both the distance and the value (e.g., "the biggest prize is \_\_\_ steps away").

5. *Ordinal Numbers*: Requires the client to follow a series of instructions to reveal three large block letters hidden by a series of vertical stripes (e.g., "Click the mouse under the third yellow stripe from the end."). Opportunities are given to guess the three letters as pieces of the letters are revealed.

6. *Numeric Sequences*: Requires the client to determine which of two to five numeric sequences would be completed by a number given at the bottom of the screen.

7. *Numeric Classification*: requires the client to count the number of shapes that meet the criteria described in a question (e.g., "How many green triangles are there above the line?").

8. *Numeric Dimensions*: requires the client to answer a series of questions dealing

with the concepts of "tallest", "shortest", "widest", "narrowest", "more than", and "less than" (e.g., "Pick the tallest blue stripe which is more than one block wide.").

### Module 5. Attention Skills: The Next Generation

Module 5 is a continuation of Module 1 and is designed to develop attention and scanning skills. The module consists of three programs. *Image Scanning/Inhibition* involves monitoring a grid containing designs of various shapes and colours that changes every few seconds. The client's task is to click the mouse when the grid shows a given number of a target design and to inhibit responding at all other times. *Auditory Patterns/Rhythm* involves matching patterns of long and short tones to visual patterns of long and short boxes. *Scanning Location/Time* involves finding target letters on grids of varying complexity. Targeted letters may be a specific individual letter, a letter of a particular colour, or a letter above, below, before, or after some other specified letter.

Each program in *Captain's Log* has three levels of difficulty: beginner, intermediate, and advanced. Levels differ in terms of the complexity of the presented stimuli and the efficiency required to perform the task. However, within each level, difficulty may be increased by a variety of options. These options include: (a) increasing the time a program runs (individual programs may be set to run anywhere from one to twenty minutes), (b) adding distracting auditory and/or visual stimuli to the task, and (c) using the memory options, when available. Only after a client has demonstrated a successful level of performance within a program at various program options is it recommended that they be advanced to a more complex level.

The authors of *Captain's Log* do not recommend a standard order or sequence of administration. Treatment may focus on one or more modules. There is also not a standard order of administration of programs within each module. An evaluation period is recommended in which programs are presented in the "assessment mode". This mode allows the clinician to obtain a baseline of a client's performance against which future evaluations can be compared.

During treatment, programs should be administered in the "training mode". This mode varies the randomness of the stimulus presentations across trials in order to minimize training effects.

At the end of each program, a client's performance may be evaluated by a variety of scores. Scores generated may include: (a) average reaction times for correct responses, (b) number of times a client has failed to respond when they should have responded, (c) number of responses made at inappropriate times, (d) number of incorrect responses, and (e) number of times the client responded when they should have inhibited a response. In addition, in order to make the programs more interesting and to intrinsically motivate a client, each program allows the client to keep track of points in much the same manner as a video game. Clients are thus motivated to "beat" previous scores.

All programs in *Captain's Log* may be accessed by a variety of input devices. Currently available input devices include a mouse, a trackball, a sip 'n puff switch, and a graphics tablet with a cordless pen. In addition, a TouchWindow version is available for Module 3, Conceptual Skills.

### Program Evaluation

*Captain's Log* is an attractive software package. It has an impressive variety of interesting and challenging programs and a number of attractive design features. The variety of task parameters that can be modified to adjust programs to the skill levels of individual clients is well beyond that of many other similar computer-assisted cognitive retraining programs. The types of data that may be utilized to evaluate task performance is also extensive. Programs are easy to enter and exit. Response requirements are easy to learn and are generally consistent across similar programs.

There are, however, some design flaws. Access to client data is not convenient. One must exit a module and restart *Captain's Log* in order to access the Utilities Menu where performance data is maintained. Also, the data generated for each program are specific to an individual trial. It would

have been more clinically useful if the data reflected the average performance across trials of a task. Program instructions are also repetitious and long, and the nature of the program task and expected response is not always clear. Fortunately, response requirements are easy to follow once a program is actually running. In addition, graphics are adequate but not outstanding.

A more basic concern is the type of approach to cognitive rehabilitation represented by *Captain's Log* and the many similar software programs that are currently available. Programs of this type seek to restore or improve cognitive abilities. They are based on the premise that cognitive functions can be strengthened through drill and practice. The nature of the treatment task is judged to be relatively unimportant as opposed to the opportunity to practice the impaired cognitive function at increasing levels of difficulty. Treatment tasks are often similar to those employed in standard neuropsychological assessments.

The problem with this approach is its efficacy. For example, with regard to memory, almost all neuropsychologists agree that memory cannot be improved through exercise. Clients may show significant improvement on a given memory task, but the improvement is limited to the task itself. Functionally, the client is left as impaired as before training. As Gilsky (1995) has indicated, repeated practice remembering meaningless lists of numbers, letters, shapes, or locations does not result in meaningful benefits regardless of whether or not the materials are presented in a paper-and-pencil format or on a computer.

There is some evidence that attention may be facilitated through computer training. A number of studies have demonstrated post treatment improvements on standard measures of attention. For example, a study by Gray, Robertson, Pentland, and Anderson (1992) reported that a group of brain-injured patients showed greater gains on selected standardized attention tests (e.g., Paced Auditory Addition Task, Gronwall, 1977; Digit Span Subtest from the Wechsler Adult Intelligence Scale, Wechsler, 1955) following computerized training than did a control group. Some investigators (e.g., Sohlberg & Mateer,

1989) have further suggested that improvements in attention might secondarily benefit memory. However, not all studies have yielded positive findings. Wood and Fussey (1987) reported an absence of generalized improvements in attention following 20 hours of computer practice. Malec, Rao, Jones, and Stubbs (1984) also reported negative results. Given the inconsistency among findings, firm conclusions regarding the efficacy of computerized attention training are, at best, premature. Further investigation is warranted.

Cautious use of *Captain's Log* and other similar software packages is recommended. Ideally, training of this type would be pursued as an adjunct to domain-specific training (e.g., learning to carry out a series of occupationally-related tasks) in conjunction with compensatory approaches (e.g., learning to use a memory book). In addition, generalization should be routinely assessed via independent standardized tests and via rating scales designed to monitor the real-world impact of such training.

#### References

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Wechsler, D. (1955). *Wechsler Adult Intelligence Scale*. New York: Psychological Corporation.

Wood, R. L., & Fussey, I. (1987). Computer-based cognitive retraining: A controlled study. *International Disability Studies*, 9, 149-153.

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## Book Reviews

### *Évaluation des ouvrages écrits*

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#### **Audiology Business and Practice Management**

*Holly Hosford-Dunn, Daniel R. Dunn and Earl R. Hartford.*

**Publisher:** Singular Publishing Group, San Diego, CA.

**Available from:** Singular Publishing Group, 1-800-521-8545

**Cost:** \$94.25

**Reviewer:** Catherine Sagle, London Audiology Consultants, London, Ontario

The objectives of *Audiology Business and Practice Management* are to outline and explain sound business and practice management principles used in the independent practice of audiology and to relate these principles to the quality of patient care. The information presented does not focus solely on the traditional owner-operated model of private audiology practice but, rather, outlines principles applicable to a variety of independent audiology practice models with varying degrees of autonomy. The book is intended for audiologists who are in the process of starting an independent practice. The book could also serve as a reference for audiologists who currently work in a variety of independent practice settings.

Overall the book is a pleasure to read. Chapters walk the reader through the entire process of setting up a private practice. Each chapter focuses on a specific topic relevant to the creation or management of a private audiology practice. Chapters consist of a discussion section followed by specific examples that help to illustrate the material presented. Each chapter can be viewed as a self-contained review of the topic of interest. This format allows the book to be used easily as a reference by audiologists already in independent practices.

The earlier chapters discuss the history and underlying philosophy of private practice audiology and outline a variety of independent audiology practice models.

The importance of independent practice to the long term viability of the profession is discussed. Topics such as developing a business plan, choosing a location, leasing space and equipping the office are then presented. These chapters would be of use to the individual in the process of setting up a new practice and would help avoid costly or inconvenient mistakes.

Later chapters outline the practicalities of running a private practice. For example, topics include the use of computers, hiring staff, accounting, pricing, and marketing. Even an experienced private practice audiologist will find many useful tips to help an existing practice operate more efficiently. The book finishes with a discussion of quality of care issues including managed care and risk abatement.

Overall the book provides excellent information about the management of independent audiology practices. However, for Canadian practitioners, the book has one major drawback: it is based on a U.S. model of private practice. As a result, the material presented about legal, tax, and safety issues can not be directly applied to Canadian audiology practices. Also, little information is provided about how independent audiology practices could be established under a government-provided health care structure. In spite of these concerns, the book is considered very worthwhile reading for any audiologist who is currently a private practitioner or is considering starting a private practice. It provides a complete overview of many areas that make up the private audiology practice. Because of this thoroughness on the part of the authors, the book could serve as a first introduction to the subject of audiology business and practice management, but has enough depth to also become a valuable reference.

#### **Children with Cochlear Implants in Educational Settings**

*Mary Ellen Nevins and Patricia M. Chute*

**Publisher:** Singular Publishing Group  
**Cost:** \$58.00

**Reviewer:** Susan Hudson-Peters, Glenrose Rehabilitation Hospital, Edmonton

Finding a child with a cochlear implant on your caseload or in your classroom can be a daunting prospect. There has been a great need for books that provide information that is accessible to readers with minimal knowledge of cochlear implants and aural habilitation. *Children with Cochlear Implants in Educational Settings* is one book in a series addressing the special needs of school-age children. The purpose of this text is to educate readers about the process of cochlear implantation and the impact the educational setting has on that process. It provides the reader with information about the knowledge and skills required to help a child maximize the potential benefit of a cochlear implant device.

Nevins and Chute have organized the book into twelve, well-written chapters. Much of the content is derived from their work at the Cochlear Implant Centre at the Manhattan Eye, Ear, and Throat Hospital. This book is unique in its exploration of topics not often addressed elsewhere. Chapter 1 describes the social, political, and educational contexts of deafness and the deaf community that must be considered when choosing implantation for a young child who is hearing impaired. The importance of a child-centred approach to the process and an interdisciplinary team which includes representatives from the child's educational setting is discussed in Chapter 2. The third chapter provides a history of the technology and a description of two of the devices currently in use. Details regarding the surgical procedure are also provided. Photographs and illustrations

are used to support the explanations. The wonderful chapter, entitled "Paediatric Cochlear Implant Candidacy", describes a decision-making tool called the Children's Implant Profile (CHIP) which was developed by the team at the Manhattan Eye, Ear & Throat Hospital. Historically, candidacy selection has been very vague and ill-defined. Nevins and Chute, however, have clearly identified and described ten factors that are critical in assessing implant candidacy. The needs of the parents and the various support activities required throughout the implant process are discussed in Chapter 5. The sixth chapter describes the post-surgical tune-up process and the introduction of the child back into the school environment. Steps for performing daily equipment checks and trouble-shooting the device are presented as well. Chapter 7 discusses the development of an auditory learning program and the premises which should serve as the foundation for such a program. The authors provide practical examples including sample instructional dialogues. Notably, specific intervention ideas and strategies are discussed in a manner that is not biased to any one specific habilitation philosophy. Chapters eight through ten address the needs of the young implant recipient, the school-age recipient, and the teenage user respectively. Overall management and rehabilitation strategies are provided in each chapter. Performance data on the use of the implant in children are reviewed in Chapter 11. The final chapter addresses the issue of mainstreaming.

A thorough index, glossary, and reference list are provided. Specific references are found throughout the book for those readers interested in obtaining more information on subject areas that fall beyond the scope of this text. Appendices are practical supplements to the book. Parent dictionaries are provided for both the Clarion and Nucleus 22-Channel cochlear implants. Instructions for troubleshooting are easy to follow. The Mainstream Checklist is a very practical guide to assist in determining the appropriateness of a child's classroom placement.

My one criticism of this book is the lack of information regarding use of FM systems with children who have cochlear implants. There is some controversy regarding if, when, and how an FM system should be

coupled to a speech processor, and perhaps this is why the topic was excluded. Many implant centres are avoiding this issue by recommending sound field systems which will improve the signal-to-noise ratio for an entire class. A portable version of this can be achieved by coupling a child's personal FM system to a single, battery-operated speaker situated on the child's desk. The quality of the signal received is critical to a child's successful performance with a cochlear implant, especially in a potentially horrendous listening environment such as a classroom.

Many readers can potentially benefit from this book. It is highly recommended reading for all school-based personnel, clinical professionals, and parents working and living with children with cochlear implants. This reviewer considers the book a necessary addition to the library of any professional currently serving on a cochlear implant team.

**Coping with  
Communication Challenges  
in Alzheimer's Disease  
(1993)**  
*Marie T. Rau*

**Publisher:** Singular Publishing Group & the National Council of Senior Citizens (USA)

**Available from:** Login Brothers Canada, 324 Saulteaux Cres., Winnipeg MB R3J 3T2, 1-800-665-1148

**Cost:** \$27.50

**Reviewer:** J.B. Orange, University of Western Ontario, London, Ontario

Dr. Rau's book is one of several volumes from the extensive Coping with Aging series published by Singular Publishing Group in cooperation with the National Council of Senior Citizens in the United States. The series, edited by John Rosenbek and Molly Carnes, includes several other titles that examine topics of caregiving for older adults such as vision changes, hearing impairment, losses of independence and mobility, medication use, and coping with aphasia. The purpose of Rau's book is to familiarize the reader with the importance of human communication and to provide suggestions about how to

deal with the communication difficulties that arise in interactions with individuals who suffer from Alzheimer's disease.

The targeted audiences for the book are family members and other non-professional care providers of individuals with Alzheimer's disease. The book is intended to be used as a guide by family care providers, to help them understand and cope with the myriad communication problems associated with the progressive declines in linguistic and cognitive processes of Alzheimer's disease.

The book is divided into 17 readable chapters and contains a reasonably complete glossary of important dementia-related terms. Human communication and dementia are discussed in appropriate lay terminology in the first two chapters. Communication features of and supportive strategies for individuals in each of the three clinical stages of Alzheimer's disease are presented in the next seven chapters. With a non-professional audience in mind, Rau presents material in a clear and concise style. The next five chapters discuss family care providers' communication with other relatives and professionals about Alzheimer's disease. How family members exchange information with their relatives, health care professionals, legal and financial advisers, and government and private service agencies is highlighted. The last two chapters in this section (legal and financial advisers, government and private services) have less relevance for Canadians. An important chapter in the book discusses the relationship between problem behaviours and communication difficulties. This chapter provides valuable advice to family care providers about possible reasons for the expression of their relatives' difficult behaviours. More importantly, the discussion should help absolve family care providers' guilt that their care triggers the expression of problem behaviours. The final two chapters summarize the critical issues in communicating with those who are affected by Alzheimer's disease (i.e., individual with Alzheimer disease, family, relatives, professionals, and agencies who provide support) and identify several supportive agencies and resource materials. The agencies and support services are all American-based and may be less useful for Canadian readers. The resource materials (i.e., books, guides, and videos), however,

are well-known and suitable for a Canadian audience.

The book functions as a helpful, readable guide about communication and Alzheimer's disease. Used on its own or as a companion to a similar Canadian version authored by Campbell-Taylor (1991), the book will serve as a valuable resource for family care providers of individuals with Alzheimer's disease. Speech-language pathologists should feel comfortable recommending this book to family and non-professional care providers.

#### Reference

Campbell-Taylor, I. (1990). *A practical guide to communication in Alzheimer's disease*. Toronto: ConMed Associates.

### Language and Communication in Mental Retardation: Development, Processes, and Intervention (1993)

Sheldon Rosenberg and Leonard Abbeduto

**Publisher:** Lawrence Erlbaum Associates  
**Available from:** Copp Clark Longman, 1-800-263-4374  
**Cost:** \$40.95 (soft cover), \$89.95 (cloth)  
**Reviewer:** Luigi Girolametto, Graduate Dept. of Speech-Language Pathology, University of Toronto

This text is designed for university students in advanced undergraduate or first year graduate study who have a specific interest in mental retardation and its impact on language development. True to its purpose, the text provides interesting and well-researched information on the development of content, form, and use in individuals with mental retardation, from infancy to adulthood. The book consists of nine chapters, organized into an introduction followed by separate chapters on language development in non-handicapped individuals, phonology, semantics, morphosyntax, pragmatics (called linguistic communication), adult-child interaction, and intervention.

The first chapter emphasizes the heterogeneity that is present in both cognitive and linguistic development among individuals with mental retardation. A drawback of this chapter, and of the text in general, is that it collapses information across a wide variety of etiologies, which makes it difficult for an SLP to use it as a resource for acquiring knowledge about a specific disability, such as Down syndrome, William syndrome, or Fragile-X.

Chapters 3 to 8 review studies describing phonological, semantic, morphosyntactic, and pragmatic developments in individuals with mental retardation. Each chapter is preceded by a brief description of typical development in a specific area of language. This introductory section is followed by a series of research reviews of studies which are summarized. A closer look at the studies included in the chapters reveals that most, but not all, focus on individuals with Down syndrome. Only the chapter on morphosyntactic development is divided into distinct sections reviewing data separately for individuals with Down syndrome, Fragile-X, and "other etiologies". In general, the chapter summaries are ambiguous and uninformative because of the diversity and heterogeneity of the populations included.

It is important to note that this text is not written for clinicians. Although the title purports to provide information on intervention, Chapter 9 is the weakest chapter in the text. The authors describe the various approaches to intervention, such as Milieu Teaching and behavioural approaches, and review a small number of studies in this area. Conclusions about the modifiability of language in individuals with mental retardation are tentative at best.

In conclusion, this text meets its stated purpose for the university student for whom this is a first exposure to the area. It is a well researched, basic reference text, appropriate for a researcher to have on hand. Unfortunately, it is of limited value to the practising clinician who is looking for specific information about etiological profiles of impairment, long-term outcomes for making prognostic statements, and guidelines for intervention outcome.

### Disabilities in School-Age Children and Adolescents (1994)

Geraldine Wallach and Katharine Butler

**Publisher:** Prentice Hall Canada, 1-800-567-3800  
**Cost:** \$72.95  
**Reviewer:** Judy Williams, Halifax County, Bedford District School Board

This book is a multi-authored text profiling diverse perspectives on the connections between language and literacy learning, while emphasizing the relationship between oral and written language within the context of education. It was written as a revision to *Language Learning Disabilities in School-Age Children* (1984), and includes contributions from several of the same authors, 10 additional years of research, and the work of some new contributors.

The book was written to be of interest to anyone working in the area of child language acquisition and disorders, particularly those in an education context. The book is well organized into four major sections: Part I, Introductory Consideration, Oral Language Connections to Literacy in the Classroom; Part II, Focus on Assessment: Potential and Progress; Part III, A Closer Look: Discourse Across Ages, Stages, and Language Styles and Abilities; and Part IV, Special Issues: Understanding the Nature of Language Disorders Across Tasks and Time. Each section has several chapters contributed by different authors and representing various perspectives on the theme. At the end of each section there is a reflection, summarizing some of the ideas which have been presented and discussed. The final chapter, Chapter 16, consists of questions, asked of well-known experts in the field, about some of the "most-discussed issues of the day".

This book looks at language learning disabled children in the schools, their assessment and their treatment, moving theory and practice forward through the 1990s and into the year 2000. It discusses many areas of cognitive and linguistic processing and metastrategies relating to language learning and literacy learning. It looks at alternatives to standardized testing such as the application of dynamic assess-

ment, including proficient, skilled, and systematic observation. The need to be skeptical of packaged programs is discussed, while looking at alternatives such as the concept of reciprocal teaching as a language-based intervention strategy. Intervention in more naturalistic contexts is presented as being much more effective and rewarding to both teachers and students while also recognized as more difficult to do

This book is a worthwhile resource for anyone working with language learning disabled children and adolescents in an educational context. It provides a current discussion of language and literacy learning, recognizing literacy as a broader concept, that includes both oral and written language.

## Second Language Acquisition: An Introductory Course

*Gass & Selinker*

**Publisher:** Lawrence Erlbaum Assoc.  
**Available from:** Copp Clark Longman, 1-800-263-4374  
**Cost:** \$51.95 (soft cover), \$120.00 (cloth)  
**Reviewer:** Theresa Young, Durham Board of Education

This text provides an introduction to second language acquisition (SLA) in adults. It is designed to be used in an introductory course for undergraduate or graduate students, who may or may not have language or linguistics background. Thus, speech-language pathologists are well equipped with schema for the information presented in this text.

Chapter 1 provides an introduction to the components of language. Key concepts of interlanguage and fossilization are introduced, for later elaboration. In Chapter 2 the basics of research are introduced for the novice. Chapters 3 and 4 target the importance of native language in the process of acquiring a second language. The significance of contrastive analysis, error analysis, and morpheme order studies are illuminated in the evolution of the field of SLA. The concept of interference/negative transfer is clarified in a discussion of facilitation/positive transfer, as a product versus a process of learning. Interference is further classified as

having a proactive effect (i.e., language loss) or reactive effect upon subsequent learning. These are concepts that are critical in the analysis of language behaviours of clients who speak more than one language.

The relevance of universal grammar, a major contribution from the field of linguistics, is the focus of Chapter 5. Chapter 6 presents and critiques prominent models in the field of SLA, focusing on Krashen's Monitor Model. Chapter 7 focuses on the concept of interlanguage, as well as the roles of social context and discourse. A discussion of pragmatics in this chapter is highly relevant to communication break down. Speech-language pathologists would benefit from a more in-depth coverage of the pragmatic issues that pertain to learning a second language, given the relevance of pragmatics in determining if a language disorder exists in the presence of language differences.

The influences of input and interaction on the acquisition of a second language are explored in Chapter 8. Chapter 9 addresses how non-language variables such as age, aptitude, motivation, and personality impact on second language acquisition. Chapter 10 highlights the significance of lexicon in the process of learning a second language. In the final chapter, Gass and Selinker effectively lead readers to the model of SLA that they propose. The authors integrate the various issues that have been discussed in the text (which cannot independently account for SLA) into a model that presents second language acquisition as a dynamic and interactive process.

Gass and Selinker have developed a well organized format that enables effective cross referencing within the text. Major strengths as a teaching tool are found in the depth and range of "Points for Discussion" which conclude each chapter, providing ways for readers to interact with relevant data and issues. At times, key points appear to lack sufficient referencing. However "Suggestions for Additional Reading" provide general references at the end of each chapter.

Overall, the text highlights key issues and influences in the evolution of the field of SLA. The authors acknowledge that selections have been made, for example, to

represent the contributions of other disciplines. The influences of the fields of education and speech-language pathology are not explored. There appears to be limited Canadian content.

As practitioners work with increasingly culturally and linguistically diverse populations, second language acquisition is an area in which greater knowledge is needed. This text provides information which should be complemented by similar texts on SLA in children to highlight simultaneous versus sequential bilingualism, pedagogy and/or best practices, and the role of the speech-language pathologist. Further to this, we need to understand what is known about and the implications of language loss, cultural influences, dialects, and code switching. *Second Language Acquisition: An Introductory Course* is a worthy contribution in broadening our base of knowledge in an area, which has become essential in the delivery of speech-language pathology services in many regions across Canada.

## Working With Dysfluent Children: Practical Approaches to Assessment & Therapy

*Trudy Stewart and Jackie Turnbull*

**Publisher:** Winslow Press  
**Available From:** Psycan Corp., PO Box 290, Station V, Toronto, Ontario M6R 3A5. (905) 731-8795  
**Cost:** \$80.00  
**Reviewer:** Paula Moss, Speech and Language Services, Brampton, Ontario

In the preface of this book, the authors state their intentions to: "analyze the practical experiences of dysfluency in children, to look at ways of approaching those difficulties in collaboration with the child, parents and carers and to share ideas about therapy techniques which we have found useful" (p. ix). The authors have written an eclectic text which pulls from a wide variety of therapies to provide practical solutions for managing stuttering. Information about the incipient stages through to the confirmed pattern seen in older children and adolescents is presented.

Throughout the book the authors' basic principles that should be fundamental to any therapy program are stressed: collaboration, flexibility, problem solving and a family-centred focus. These principles are incorporated into a holistic approach, which is never more important than in the management of the complex and multi-faceted problem of childhood dysfluency.

The authors provide a clear overview of the research, history, and early theory relating to stuttering. They draw heavily on the Demands and Capacities model of Starkweather to account for the development of early stuttering and the Personal Construct Theory of George Kelley to explain the later transition from "stuttering" to "stutterer", in which the child internalizes increasingly frequent struggles. The text provides valuable insights into the child's changing attitudes and feelings and

the critical role these play in the maintenance of stuttering and the child's perception of self. The authors stress the importance of exploring these feelings in the context of family dynamics in an empathetic, non-judgemental way. They also emphasize the need to work in close partnership with parents to assist them in helping their child. The authors provide an excellent overview of ways to adapt the environment to facilitate more fluent speech. These components of the intervention process are modelled in a variety of well-presented case studies. The text also provides practical guidelines for planning group therapy, delineates the different group options available (e.g., parent education and support groups, intensive programs, adolescent social skill training groups), and identifies some key principles for making a group work. For clinicians practising in the preschool and

school setting, there are lots of helpful suggestions regarding how to educate students and staff, assess and observe in the school setting, and collaborate with teachers in planning programs and running groups. The authors emphasize the influence of the school system on the student who stutters.

The final chapter of this book underlines the importance of working together to solve the many questions that remain unanswered about stuttering and to share skills, knowledge, and experiences. This book would be an asset to the library of any student clinician or clinician who is working in a variety of settings with dysfluent children, of any age. Far from presenting a one-stop-shopping approach, the authors combine a wide variety of approaches and provide many practical suggestions for dealing with the individual sometimes very personal, needs of our clients.