This paper offers a brief description of a course on intrapersonal communication with a home page approach using the World Wide Web. The paper notes that students use the home page for completing assignments, readings, posting responses, self-evaluation testing, research, and displaying some of their papers for the course. The paper contains examples of the array of instructional materials provided for students on the web site. Appendixes present an intrapersonal homepage; site table of contents; textbook contributing authors; library and research links for students; course homepage; a textbook preface; beginning of textbook section 1; and questions for discussion. (Contains 10 references.) (CR)
Teaching Intrapersonal Communication with the World-Wide Web: Cognitive Technology

Paper for Association for the Advancement of Computing in Education, World Conference of the World Wide Web, Internet and Intranet, November 7-12, 1998, Orlando, Florida

Leonard J. Shedletsky, University of Southern Maine
Joan E. Aitken, University of Missouri--Kansas City

"http://cctr.umkc.edu/user/lshedletsky/intra/intrahome.html"

"Many studies suggest our students' ability to reason with abstractions is strikingly limited, that a majority are not yet 'formal operational.' These concrete or transitional students may have difficulty understanding the college-level lectures they hear. They will also have difficulty engaging in metacognition--thinking about their own thinking--an essential skill for effective learning." (Gardiner, 1998, p. 72)

On first thought, intrapersonal communication--which we define as assigning meaning to stimuli and producing meaningful stimuli--and the World-Wide Web would seem to be far apart from one another (see <http://www.usm.maine.edu/~com/intramod.htm>). One points to the mind and the individual; the other prompts images of the globe, connections between millions of people. We have been exploring this apparent contrast over the past few years by offering a course on intrapersonal communication with a home page approach.

In part, we are motivated to use this new medium because we believe that the computer as a means of communication is, in fact, an intensifier of the intrapersonal aspects of communication (Shedletsky, 1993). That is, it enhances the information processing aspects of communication, the assignment of meaning, the use of implication and inference. It encourages the mind to work even harder than in other modes with regard to focusing upon voice and tone and intention. It brings to consciousness fundamental aspects of communication that are more often transparent in other modes, such as turn taking, juxtaposition of utterances, and ambiguity. It promotes cognitive reorganization; reflection on the process of assigning meaning, and, at the same time, promotes active learning and the ability to work cooperatively in teams with people who think differently from oneself.

The study of intrapersonal communication is metacognition. And the WWW component reinforces the social nature of our cognitive selves (<http://www.gonzaga.edu/rr/v3n1/martin.html> Martin, 1997). Harnad (1995) wrote: "Human cognition is not an island unto itself. As a species, we
are not Leibnizian Monads independently engaging in clear, Cartesian thinking. Our minds interact [emphasis added]. That's surely why our species has language. And that interactivity probably constrains both what and how we think" (p. 397 <http://www.cogsci.soton.ac.uk/~harnad/Papers/Harnad/harnad95.interactive.cognition.html>)

At the same time, there is a pressing need for research on the use of computer-mediated communication in education. Proponents are lining up on both sides: some to hail the World-Wide Web as a must for education, and others to call for resistance to its onslaught (see letters to the editor in the June 19, 1998, issue of The Chronicle of Higher Education, "The jury is still out on the wisdom of requiring web pages for courses"; Neal, 1998; Bromley, 1998; Noble, 1998; <http://www.theatlantic.com/issues/97jul/computer.htm> Oppenheimer, 1997; Dialogue with <http://www.amherst.edu/~loka> Richard Sclove, 1998; Van Dusen, 1998). Yet with the growing dependence on the Internet, web pages for courses seems more an expectation than a controversy.

For three semesters, Fall, 1996, 1997, 1998, we have offered the intrapersonal course with a home page and tracked the student response to it (see <http://www.usm.maine.edu/~com/intrap.htm>. The new intrapersonal course development—which includes a full textbook on line—is at <http://cctr.umkc.edu/user/lshedletsky/intra/intrahome.html>.

Students use of the home page for completing assignments, readings, posting responses, self-evaluation testing, research, and displaying some of their papers for the course.

Encouraged by the results, we are team teaching the course on two campuses, at the University of Southern Maine and the University of Missouri--Kansas City. We will continue to use the homepage and links. Students located in Maine and Missouri will be able to meet in electronic groups, note <http://cctr.umkc.edu/user/jaitken/lenny/sct2.html>.

The Site and Links
In designing the web site, we have provided an array of instructional materials for students. Attached are examples of various elements. To provide illustration of the kinds of materials available, the beginning of several sites is provided.

Intrapersonal Communication Homepage: Appendix A
Site Table of Contents: Appendix B
Textbook Contributing Authors: Appendix C
Library and Research Links for Students: Appendix D
Course Homepage: Appendix E
Editors: Joan E. Aitken, University of Missouri-Kansas City and Leonard J. Shedletsky, University of Southern Maine

This online college course is designed to support students enrolled in relevant courses at the University of Missouri--Kansas City and the University of Southern Maine. A hardcopy of this book is available through the National Communication Association national office.

Preface

Important: Access to copyrighted book links below requires a password.

Pretests: Students, please complete each pretest and bring your results to class or to the online discussion. The tests are intended to provoke thought and should not be taken too seriously. If you find a measure that is more appropriate for a particular section, go ahead and do that test instead and send the url address to your professor and classmates so we can try it.


Part IV: Values: Coping And Change Can Be Accomplished Through Intrapersonal Communication. Pretest (Healthy Lifestyle?). Required Readings. Full Text

Part V: Control: Intrapersonal Communication Is Used In Managing Communication Interaction. Pretest (Locus of Control). Full Text
Editors: Joan E. Aitken, University of Missouri-Kansas City and Leonard J. Shedletsky, University of Southern Maine

This online college course is designed to support students enrolled in relevant courses at the University of Missouri–Kansas City and the University of Southern Maine. A hardcopy of this book is available through the National Communication Association national office.

Preface

Important: Access to copyrighted book links below requires a password.

Pretests: Students, please complete each pretest and bring your results to class or to the online discussion. The tests are intended to provoke thought and should not be taken too seriously. If you find a measure that is more appropriate for a particular section, go ahead and do that test instead and send the url address to your professor and classmates so we can try it.


Part VII: Pedagogy: Instructional Orientations Provide Ways To Teach Intrapersonal
Intrapersonal Communication: Attention Deficit Disorder | Dream Analysis | Filled Pause Research (hesitation in speech) | Intimate Communication | Journal of Consciousness Studies | PsychHelp Links | Student Located Links

Free Mailing List: "Great Communicators" gives facts, tips, and internet links about improving communication skills, including information about effective public speaking, intrapersonal communication, interpersonal communication, listening, nonverbal communication, organizational communication, and communication pedagogy.

Join our mailing list!
Enter your email address below, then click the 'Join List' button:

 Powered by ListBot
Our Appreciation to the Intrapersonal Communication Processes Contributing Authors:

John C. Adams, Syracuse University
Joan E. Aitken, University of Missouri, Kansas City
Terre Allen, California State University
Peter A. Andersen, San Diego State University
Joe Ayres, Washington State University
Tom Baglan, Arkansas State University
Judith A. Barnes, San Jose State University
Terry R. Barrett, Murray State University
David Bashore, College of San Mateo
Kari L. Baumgartner, University of Toledo
Melissa L. Beall, University of Northern Iowa
Julia E. Weikle Blackwood, Greenbrier Community Service, Inc.
Kelly L. Blair, Whitaker Regional Rehabilitation Center
Don M. Boileau, George Mason University
Kevin Brown, University of Utah
Marie Brown, University of Manchester, England
Tom Bruneau, Radford University
Deborah Brunson, University of North Carolina Wilmington
David R. Buller, University of Arizona
Kate Butler, Johnson County Community College
Lori J. Carrell, University of Wisconsin-Oshkosh
Phillippe Castel, Universite de Bourgogne, France
Denise Haunani Cloven, University of Wisconsin-Madison
Audra L. Colvert, James Madison University
Howard W. Cotrell, Bowling Green State University
Lyall Crawford, Weber State University
Library & Research Links

All System University of Missouri-Kansas City Library

http://www.umkc.edu/lib/

Ask ERIC

http://ericir.syr.edu/

Banned Books Online

http://www.cs.cmu.edu/People/spok/banned-books.html

Boston Public Library

http://mbln.lib.ma.us/

Columbia University

http://www.columbia.edu/cu/libraries/

Electronic Books & Text Sites


Gopher Resources by Academic Subject

gopher://path.net:8001/

Harvard University

http://www.harvard.edu/museums/

HotBot Internet Search Engine

http://www.Hotbot.com/

Internet Indexes and Search Engines
http://www.voicenet.com/~bertland/search.html

Internet Public Library
http://www.ipl.org/

Library of Congress
http://lcweb.loc.gov/homepage/lchp.html

Library of Congress Catalogs
http://lcweb.loc.gov/homepage/online.html

Research It Search Engine
http://www.iTools.com/research-it/research-it.html
Fall, 1998

http://www.usm.maine.edu/~com/intrap.htm

Lenny Shedletsky
Department of Communication
51 College Avenue
780-5388 (home:774-5147)

lenny@portland.maine.edu

Class Announcements

The Day's Events

Mail to the Class NEWSGROUP

Read the Class Documents

Course Syllabus

Meet the Class!
Intrapersonal communication is communication with oneself. Intrapersonal communication includes imagined interactions, mental verbal exchanges with oneself, voice mail to oneself, letters, and more. As a member of the Speech Communication Association’s Commission on Intrapersonal Communication Processes and Social Cognition, I have observed several characteristics or assumptions held by many scholars who study or teach intrapersonal communication.

**Focus.** Those who study intrapersonal communication may be more open to ideas from other fields of study. Certain scholars who study intrapersonal communication processes teach a variety of courses, and intrapersonal communication processes provide the framework for conceptualizing and studying communication in a variety of contexts.

**Separation.** The study of intrapersonal communication processes usually happens in conjunction with other contexts. Certain aspects of communication and certain instances, however, are clearly intrapersonal communication. One may find the processes so integrated, however, that the processing cannot be clearly separated from interpersonal, public, or mass communication.

**Psychology.** Because ours is an interdisciplinary field, most communication scholars find themselves exploring areas that are studied elsewhere; English, sociology, journalism, education, and psychology are examples of closely aligned fields. Although the communication scholar may study some of the same ideas as those of other fields, she or he may bring a unique perspective. Intrapersonal scholars, of course, focus on certain communication aspects. Although most of the authors in this volume are in the field of communication, you also will read the perspective of some scholars from psychology.

**Thinking.** Some critics say that intrapersonal communication processing is the same as thinking. Thinking is a general term, however, while intrapersonal communication deals with the more specific aspects of how we communicate with ourselves. Intrapersonal communication can include the mental reconstruction of communication, the imaging of future communication, and direct or indirect communication using language that treats the self as both sender and receiver.

**Broad-base.** The concept of intrapersonal communication is relatively narrow, but it can be used in conjunction with all types communication interactions. Some faculty who focus on intrapersonal communication teach a range of subjects at smaller colleges and universities. For them, intrapersonal communication serves as a way of providing continuity and unification in teaching diverse concepts within the field of communication.

**Theory.** A concern for more theory has been expressed about all communication studies. Those who study intrapersonal communication processes may use a blend of types of research and scholarly traditions. The Commission of Intrapersonal Communication Processes and Social Cognition is a relatively new area of theoretical development. Intrapersonal communication scholars contribute a unique perspective to the field. As we continue our theory building, intrapersonal communication processing continues to
become a viable area of study within our field.

• Definition. Although some scholars cannot agree on a definition of intrapersonal communication processing, the same problem exists among scholars who try to define communication. Probably no scholars better understand the challenges created by individual perceptions than do those studying intrapersonal communication processes. Several articles in this book should help define the concept of intrapersonal communication processes.

• Inner-speech. Inner-speech is a specific kind of intrapersonal communication; inner-speech is when one uses direct language to "talk" to oneself. Those who question the existence of inner-speech may have poorly developed skills and thus are unable to understand the concept. Because of social taboos associated with inner speech or talking to oneself, people seldom discuss inner speech. The improvement of inner-speech skill competency should be an objective of all effective communicators.

• Instructional Value. Intrapersonal communication competency can be taught. This volume includes examples of instructional techniques which can be used in the classroom.

This book of readings contains current trends of research and conceptual developments in the study of intrapersonal communication processes. An outgrowth of the Speech Communication Association's (SCA) Commission on Intrapersonal Communication Processes and Social Cognition, the Speech Communication Association has endorsed this publication. The reader assumes the need for a free exchange of ideas about intrapersonal communication. Thus, this book represents one way to increase the dialogue among intrapersonal communication scholars, teachers, and students.

In addition to supporting the work of the Speech Communication Association Commission on Intrapersonal Communication Processes and Social Cognition, this publication was created to: (a) increase the audience for current research in intrapersonal communication processes, (b) focus Speech Communication Association interest and commitment to scholarship and instruction in the field of intrapersonal communication studies, (c) increase publications about intrapersonal communication studies, and (d) pave the way for inclusion of more intrapersonal instruction in textbooks and other scholarly books.

Accepted articles include original works, top paper convention awards from the Speech Communication Association Commission on Intrapersonal Communication Processes and Social Cognition and other conferences, and reprints from selected journals. The approach helps formulate a body of work related to intrapersonal communication processes. The first set of criteria for article selection was that each article: (a) focus on intrapersonal communication processing, (b) discuss another communication area within the context of intrapersonal communication processing, or (c) provide work relevant to the study or instruction of intrapersonal processing. The second set of criteria for selection was scholarship that focused on providing new or developing ideas, new research, clarification to prior lines of research, instructional ideas, or new perspectives to the study of intrapersonal communication. The third set of criteria was that the essay fit one of the
three styles of presentation listed below.

- **Full length articles** include theoretical foundations, survey of literature of specific areas of study within the field, areas outside of intrapersonal communication which are related to intrapersonal communication processing, model construction, and specific research projects. A variety of methodologies, points of view, and topic areas were encouraged.

- **Short essays** contain information about specific topics within the study of intrapersonal communication. Short essays are designed to give an overview to a particular topic, prompt thought and discussion, explain key assumptions and findings about a particular line of research, or propose needed directions in research.

- **Instructional perspectives** are generally brief activities designed for use in the undergraduate or graduate classroom. These articles give meaning to the study of intrapersonal communication and social cognition.

I believe that we can create a significant area of communication research and instruction if we provide an open forum of ideas from both established and new thinkers in our area of emphasis. Thus, while some articles were invited, most were obtained through open submissions. Articles that failed to fit the objectives of the book or lacked adequate quality for the reader were rejected. There is a wide range of authors—from leaders in our field to students—and all are presented with equal potential for validity. I also believe there is an exigency to allow those scholars who normally explore other areas of communication studies to examine their area of emphasis from an intrapersonal processing perspective. Such a varied approach gives us an opportunity to challenge each other through an eclectic collection of essays which contain instructional, theoretical, and empirical approaches to the study of intrapersonal communication.

The reader should be warned that some of my editorial changes altered previously published and directly quoted material. The changes were made to improve style consistency between authors and to avoid perpetuating the use of certain gender-biased language.

I express my gratitude to Leonard Shedletsky of the University of Southern Maine who assisted in the final editing stages, including the formidable task of proofing the manuscript. Dr. Shedletsky's eye for detail is amazing. More importantly, he wrote the analyses at the end of articles ("Response from Leonard Shedletsky"). These responses are designed to provoke thought and discussion. I think you will find Dr. Shedletsky's comments interesting. Here is what Dr. Shedletsky says about his responses:

"My brief critiques are intended to elicit reaction; they are to take a position on the piece, to help to clarify the piece, and to raise questions about the piece in such a way as to encourage discussion. Often I neglect to say how much I like and learn from the article; instead, I move right on to questioning it. So, please do not confuse my critique or questioning with liking or not liking the work. Of course, in my opinion, some are better done than others, but my intention in these short commentaries is to raise questions that will lead to discussion and clarification, not to judge the article."
Acknowledgments

Not only do I appreciate the extensive help from Leonard J. Shedletsky, but I value the efforts of other colleagues on behalf of this project. Rodger D. Palmer of the University of Missouri—Kansas City provided continuous computer assistance. Caroline Price of Midnight Oil Media, Inc. and Hayden—McNeil Publishing, Inc. made the publication happen. Roy Berko of the Speech Communication Association National Office guided the process. Gus Friedrich of the University of Oklahoma, who is the Series Editor for the Speech Communication Association, supervised the blind review process which enabled Speech Communication Association co-publication. And finally, this book exists because of the encouragement and help of the SCA Intrapersonal Communication Processes and Social Cognition Commission members, particularly Frank E. X. Dance of the University of Denver, Charles Roberts of East Tennessee University, and Richard L. Weaver III of Bowling Green State University. I thank them all.

Joan E. Aitken, Editor, University of Missouri—Kansas City
Part I: Foundations

Large file: Patience please

This first section contains articles that demonstrate the unique conceptualizations scholars have about intrapersonal processing. It seems useful to begin by discussing some of the controversies in this field of study. You will find topics at the core of this growing area of scholarship.

Where Do We Locate 'Intrapersonal Communication' Within The Cognitive Domain? (Leonard J. Shedletsky)

Gender-based Differences in Intrapersonal Communication (Kari L. Baumgartner)

Intrapersonal Perception and Epistemic Rhetoric: Playing Ball with the Neglected Umpire (Scott D. Johnson and Russell F. Proctor II)

Where Do We Locate 'intrapersonal communication' within the Cognitive Domain?

Leonard J. Shedletsky

About the Author: Leonard J. Shedletsky is on the faculty of the Department of Communication, The University of Southern Maine, 51 College Avenue, Gorham, Maine 04038. An earlier draft of this article was presented at the Scholars' Views, Western States Communication Association, Phoenix, Arizona, 1991.

Abstract: In this article, Dr. Shedletsky defines intrapersonal communication. He discusses the relationship of sensation and perception in advocating a cognitively-based definition. He ties the study of communication to the notion of meaning.

Perspective:

1. Does this article give you insights into the points of view expressed in Dr. Shedletsky's responses at the end of articles in this book?

2. What is meaning and how does it work in intrapersonal communication?

3. What sorts of cognitive operations are involved in the act of communication?


If we fully appreciate the role of the imaginative aspects of reason, we will give them full value, investigate them more thoroughly, and provide better education in using them. Our
ideas about what people can learn and should be learning, as well as what they should be doing with what they learn, depend on our concept of learning itself. It is important that we have discovered that learning for the most part is neither rote learning nor the learning of mechanical procedures. It is important that we have discovered that rational thought goes well beyond the literal and the mechanical. It is important because our ideas about how human minds should be employed depend on our ideas of what a human mind is. (Lakoff, 1987)

Intrapersonal communication is about communication at the level of the individual. Some would define this level of communication as communication with one's self (Barker & Edwards, 1980; Weaver & Cotrell, 1985). While there is a sense in which such a definition is true, it is also misleading and not specific enough to be useful. It suggests that we are talking to ourselves, as if we are both sender and receiver. But when would we say we are talking to ourselves and when would we say we are thinking about something? These do not seem to be the same thing. Is one intended to be intrapersonal communication and the other not? Such a definition suggests that the number of people involved is somehow critical but the number of selves is not, nor is the nature of self. Such a definition does little to differentiate between the individual and the self. Such a definition says something about the structure of the event, but tells us nothing about the nature of the event, the processes underlying the event. In this essay, I will offer a definition of 'intrapersonal communication' that is based in the cognitive processes that underlie intrapersonal communication; in that way I will attempt to locate intrapersonal communication within the cognitive domain. I hope you will bear with me, because I will take a giant step backward and several hops, skips and jumps to the side before I gather in the oomph to take a baby step forward.

Robert Fulghum (1989) got me wondering about what school is all about. He is the author of the best seller in which he proclaims that all he really needed to know he learned in kindergarten. He says he learned ideas like: put things away where you found them and don't hit people. At first, what he had to say sounded right to me, but it led me to wonder about what I learned after kindergarten. (To be honest, all I remember learning in kindergarten was how to zip up my jacket, or was that first grade?) Perhaps because I value speculation so much, it occurred to me that everything I needed to ponder engaged my mind during junior high school years. During those years, I took to peering through my microscope at creatures found in a drop of water. What gripped my imagination then was the response of a microscopic organism to the stuff of its environment. It seemed to me that even one cell paramecia bump into objects and adjust their trajectory; they seem to go around obstacles. In some way these simple organisms react to stimuli. This image of a one cell organism colliding with a speck and seeming to respond to it set in motion for me a curiosity about how living things negotiate their way about. I believe that some of the questions that struck me then are still the questions that motivate my interests in communication today.

What does my microscopic microcosm hold for one interested in communication? Picture, if you will, the image of a paramecium bumping into an obstruction. Further, picture the paramecium working its way around the obstruction. What can we say of this contact? Is this communication? If not, why not? What is missing? In essence, the question that is raised here is this: Is communicative behavior a special case of behavior, or is all behavior communication? For instance, are there particular internal, cognitive behaviors that are
criterial to communication? Recently, Motley (1990) argued that not all behavior is communicative behavior and therefore that the Watzlawick, Beavin, and Jackson (1967) axiom that one cannot not communicate is false. In this article, I agree with Motley's rejection of the Watzlawick, Beavin, and Jackson axiom, but for different reasons.

I will argue that the paramecium responding to the obstruction is not performing an act of communication, but it makes for behavior that is easily mistaken for communication, since, from the human perspective, at least from the Western human cultural perspective, we conceptualize this behavior as avoidance (see end note 2). It is worth noting that here, as elsewhere, the way we decide whether or not communication is occurring is not simply by reference to the outward behavior, but rather by the inward, cognitive behavior. That is to say, the concept avoidance suggests an act as opposed to a behavior, it suggests a plan (Miller, Galanter, & Pribram, 1960). When we avoid something we act on a mental model of the situation. Such a cognitive reference is, of course, exactly what is required by the widely held view that intention is a criterial feature of communication.

The paramecium example, however, takes us headlong into the world of sensory psychology and not communication. Sensory psychology, where organisms and parts of organisms respond to the stimuli of their environment, is similar to a widespread concept of communication in that it is concerned with the transformation of energy into codes which deliver information to the organism (See Mueller, 1965). Roughly speaking, sensory psychology is involved with how the organism gains information from its environment, and roughly speaking that is what communication is about. But "roughly" needs to be smoothed out a bit, because sensory psychology and "communication" are not the same thing.

The study of sensation is concerned with the ways in which stimuli provide information, such as sound, vision, touch, temperature, movement, and smell. More specifically, sensation is about such variables as pitch and loudness, color, pressure, force, adaptation, intensity, acceleration, speed, location, size, weight, electrical change, sensitivity, threshold, discrimination, noticeable difference, acuity, and masking. It takes a close look at the relationship between the physical environment and the physiology of the organism. It is concerned with the physics of stimuli and the cellular and organ structure of the organism.

It is not clear just where sensation ends and perception begins. In fact, William James begins the second volume of his The Principles of Psychology with this: "Perception always involves Sensation as a portion of itself; and Sensation in turn never takes place in adult life without Perception also being there. They are therefore names for different cognitive functions, not for different sorts of mental fact" (p. 1, Vol. II).

At the same time, let us keep in mind that most theories of human communication are cognitively based. That is, theories of communication are concerned with perception, with how the mind assigns meaning. They are concerned with how we gain information about the environment, what that information is, and how we respond to it. If we are to sharpen communication theory, we need to examine closely its semantic and cognitive roots. We need to take a close look at the pervasive idea within communication theory that communication is an active rather than passive process. The idea that communication is an active process, by which reality is constructed, clearly has its roots in theories of perception.
Discussion Questions

1. What is 'intrapersonal communication' as it relates to computer use?

2. Turkle called "the second self," representing a manifestation of the ultimate vehicle for communicating with oneself. In what ways can the computer facilitate intrapersonal communication?

3. How can individuals focus on the computer for such long periods of time?

4. What is the attraction of email?

5. Why is a MOO so involving that two people who are sitting next to each other will actually communicate via computer instead of speaking aloud?

6. What is the relationship between intrapersonal communication and Internet activities?

7. What is the nature of interactivity online?

References


Would you like to put your paper in ERIC? Please send us a clean, dark copy!

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:
Title: *Teaching Interpersonal Communication with the World-Wide Web: Cognitive Technology.*
Author(s): Aitken, Joan E. And Shedletsky, Lenny
Publication Date: November 20-24, 1998

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2A</th>
<th>Level 2B</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="level1.png" alt="Sample" /></td>
<td><img src="level2a.png" alt="Sample" /></td>
<td><img src="level2b.png" alt="Sample" /></td>
</tr>
</tbody>
</table>

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: Aitken, Joan E.
Printed Name/Position/Title: Aitken, Joan E. Assoc. Professor
Organization/Address: U of Missouri, Kansas City
E-Mail Address: jaitken@umkc.edu
Phone/Fax: 816-235-1337/816-235-5639
Date: 1-22-99

(over)