This is a Final Report on a conference on cognitive psychology, held January 16-18, 1987 at the Univ. of S. Florida. Leading cognitive psychologists gathered to present integrative summaries of recent research and to discuss current methodological and theoretical issues. Funds from the two Federal Sponsors (the ONR and the NICHHD) were devoted exclusively to reimbursement of the participants' travel expenses. All other expenses (i.e., telephone, lodging, etc.) were covered by funds donated by the Univ. of S. Florida. The Sponsors will receive a copy of the full set of presented papers and a copy of the edited volume based on the conference.
FINAL REPORT
on the Conference

SPARKING, READING, THINKING, AND DEVELOPMENT:
A CONFERENCE ON
THE ACCOMPLISHMENTS AND GOALS OF MODERN RESEARCH

Office of Naval Research, Cognitive Science Program
Grant No. N00014-87-G-0210

National Institute of Child Health and Human Development
Reference No. IR13 HD/NS22342-01

Conference held January 16–18, 1987
College of Social and Behavioral Sciences
University of South Florida
Tampa, FL 33620

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TABLE OF CONTENTS

Report Documentation Page 1
Title Page 2
Table of Contents 3
Report on the Conference 4
Purposes of the Conference 4
Proceedings, The Participants, and Their Affiliations 5
Publication of the Proceedings 7
References 8
Final Expenditure Report 9
Explanation of the Expenditures 10
Report Distribution List 11
REPORT ON THE CONFERENCE

Purposes of the Conference

The purpose of the Conference was to provide a forum in which leading cognitive psychologists would debate questions that are both fundamental to experimental psychology and also directly related to practical concerns. Such questions are: How do people learn to read? What happens during the process of speech perception? How do people acquire problem-solving skills? How do cognitive and motor skills develop?

A great deal of research has been conducted on these important topics in the last two decades, during which cognitive psychology has existed as a recognized speciality area. However, there is a considerable diversity among the research methods that have been used, and among the answers that the research has provided. There is also a divergence of opinion concerning fundamental theoretical issues (Fodor, 1984; Jenkins, 1980; Neisser, 1984). Concurrent with this "ferment" in the field of cognitive psychology has been an increasing interest in important applied topics, such as the nature of cognitive processes in instructional settings, the problem-solving skills of experts, and memory in real-world contexts (e.g., Bransford, 1979; Jenkins, 1983; Neisser, 1982).

The Conference involved both prominent senior scientists and innovative young researchers in discussions of research that lies at the "cutting edge." The conference was organized into Symposia and Discussion Sessions whose topics were suggested directly by the goals of the conference (i.e., reading, skill acquisition, learning, problem-solving, etc.). The presentations involved summaries of available knowledge, aimed at integration. There were also debates about fundamental theoretical issues, including the question of the goals of cognitive psychology.

In order to facilitate discussion among the participants, all conference events were held, through special arrangement, in meeting rooms at the hotel where the participants were lodged. Overall, the conference events ran very smoothly.
Conference Proceedings, The Participants, and Their Affiliations

Welcoming Remarks
Dean Wallace Russell, University of South Florida

Introductory Remarks on the Goals of the Conference
David Palermo, The Pennsylvania State University
"Perceiving, Imaging, and Learning"
Ulric Neisser, Emory University
Discussant: William Mace, Trinity College

Symposium: Reading
"Syntactic Modularity in Sentence Comprehension"
Charles Clifton, University of Massachusetts
"Wholistic Models of Word Processing"
Neal F. Johnson, Ohio State University
"Individual Differences in Reading"
Philip Gough, University of Texas-Austin
Discussant: Charles Cofer, University of Houston

Symposium: Speech and Language
"Auditory Enhancement of Phonological Contrasts"
Randy Diehl, University of Texas-Austin
"A Note on Linguistic Nativism"
Michael Studdert-Kennedy, Haskins Laboratory
"Auditory Modules: Competition and Preemptiveness"
Alvin Liberman and Ignatius Mattingly, Haskins Laboratory
Discussant: Winifred Strange, University of South Florida

Discussion Session: Language, Speech, and Reading
Moderator: Winifred Strange, University of South Florida
Participants: James Jenkins, University of South Florida
Leah Larkey, Kurzweil Intelligent Systems, Inc.
Terry Halwes, Cognitive Science, University of Colorado
Judith Becker, University of South Florida
Robert Verbrugge, AT&T Bell Labs
Symposium: Cognitive and Perceptual Development

"An Eventful Description of Retarded Cognitive Development"
Penelope Brooks and James Van Hannegan, George Peabody College

"Knowledge Acquisition and Knowledge Restructuring"
William Brewer, University of Illinois

Discussant: Anne Pick, Institute for Research on Child Development, University of Minnesota

"Exploratory Activity and the Learning of Affordances in Infancy"
Eleanor Gibson, Cornell University

Symposium: Skill

"The Visual Guidance of Motor Performance"
Herbert Pick, University of Minnesota

"Developments in the Mathematical Analysis of Skill"
Elliot Saltzman, Haskins Laboratory

"Steps Toward a Theory of Skill Acquisition"
Michael Turvey, University of Connecticut

Discussant: Jerry Fodor, Dept. Philos., CUNY

Symposium: Learning

"Putting the Head Inside the Machine: Implications of Ecological Psychology for 'Connectionism'"
Robert Shaw, University of Connecticut

"Constraints on Access to Knowledge: Costs and Benefits"
John Bransford and Jeffrey Franks, Vanderbilt University

"Cognition, Motivation, and Emotion: Ideology Revisited"
William Dember, University of Cincinnati

Symposium: Problem-Solving

"Naive Physics and Event Perception: Two Approaches to Assessing Knowledge of Physics"
John Pittenger, University of Arkansas-Little Rock

"Perceiving Persistence: Sweeping Memory Under the Rug"
William Mace, Trinity College
Discussion Session: The Goals of Applied Cognitive Psychology
Winifred Strange, University of South Florida
Leah Larkey, Kurzweil, Inc.
Robert R. Hoffman, Adelphi University
John Flavell, Stanford University

Publication of the Proceedings
The two Federal Sponsors will each receive a complete set of the papers that were presented at the Conference. The editing process is currently under way, supervised by Conference Co-Organizers Robert R. Hoffman of the Department of Psychology, Adelphi University, and David Palermo of the Department of Psychology of The Pennsylvania State University. The editing process should be completed within the year (i.e., by December, 1988). The sponsors will also receive a copy of the proceedings when they appear as an edited volume. A contract for publication has been secured with Lawrence Erlbaum Associates, Inc. The Editors’ Introduction to that volume will include full acknowledgement of the Sponsors.
REFERENCES

Jenkins, J. J. (1980). Can we have a fruitful cognitive psychology?
   In H. E. Howe (Ed.) Nebraska symposium on motivation. Lincoln, NE: University of Nebraska Press.
Final Expenditure Report For Grant Entitled
"Conference on Speaking, Reading, Thinking, and Development"

Grant # N00014-87-G-0210
USF # 3101-048 PO

For the Period 1/1/87 through 12/31/87

Award $3,560.00
Expenditures -3,560.00
Balance $ -0-

If there are any questions concerning this report, please contact Marilyn Parinello at (813) 974-2711 extension 303.

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EXPLANATION OF THE EXPENDITURES

The funds contributed by both Federal Sponsors, and referred to in the Final Expenditure Report (page nine), were devoted entirely to reimbursements of the participants' travel expenses. The expenditures from other budget categories (lodging, hospitality services, telephone, etc.) were covered by that portion of the Conference's proposed budget that was donated by the University of South Florida. Overall, the expenses for travel, lodging, telephone, and hospitality services were slightly less than expected. Furthermore, receipts from the modest registration fee were slightly more than expected.
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