EDITARTICLE

2 Editor

More than ". . . for All Americans"

GUEST EDITARTICLES

On the proposition that technology education leaders have neglected important qualities of industrial arts education.

4 Dennis Herschbach

Supporting the Proposition

8 Ernest Savage

Opposing the Proposition

ARTICLES

15 William D. Paige

Essential Components of Doctoral Programs in Industrial Technology Education

John C. Dugger

William D. Wolansky

21 Linda Rae Markert

Gender Related to Success in Science and Technology

30 Nina M. Powlette

Career and Other Factors Influencing Postsecondary Decisions: Survey of High School Students in Alberta, Canada

Darius R. Young

SPECIAL SECTION

On an organizational change process: The structured approach of the Mississippi Valley Industrial Teacher Education Conference

38 Editor's Note

39 G. Eugene Martin

Balancing Traditions and Contemporary Needs

42 Rupert N. Evans

The Historic Role of the Mississippi Valley Industrial Teacher Education Conference

47 Scott D. Johnson

The National Association of Industrial and Technical Teacher Educators (NAITTE)

Rupert N. Evans

Jacob Stern

IDEAS

58 1. Building a Model for Technology Studies by John W. Sinn

60 2. Survey Results Guide Total Quality Management (TQM) Course Development in Industrial Technology by Ahmad Zargari

62 3. The Enterprise Training System and Training Content Analysis of Large Companies in Taiwan by Mike Chu-Hsun Kuo

64 4. A Primer on the Taguchi System of Quality Engineering by Vedaraman Sriraman

67 5. Toward Employability in an Era of Globalization: The Need to Change Regional Communication Traits by Beverly deGraw & Charles Patrick
The Journal of Technology Studies
A Refereed Publication of
The International Honorary for Professions in Technology

Board of Editors

A. R. (Raj) Chowdhury
College of Graduate Studies
Mankato State University
Mankato, MN 56002
507/389-2321
FAX: 507/389-5974
raj_chowdhury@msu.mankato.msu.edu

J. Barry DaVall
Department of Manufacturing
East Carolina University
Greenville, NC 27858-4353
919/757-6905
FAX: 919/757-4250
itkhavall@homer.sit.ecu.edu

Michael J. Dymentwirth
University of Missouri-Columbia
105 London Hall
Columbia, MO 65211-0001
314/882-2782
FAX: 314/882-9935
paytmke@showme.missouri.edu

James G. Edwards
Department of Design & Industry
San Francisco State University
1600 Holloway Ave.
San Francisco, CA 94132
415/338-2211
Ce Ce Iandoli
Department of Design & Industry
San Francisco State University
San Francisco, CA 94132
415/338-1954
FAX: 415/338-7770
iandoli@sfsu.edu

Jane Liedtke
Department of Industrial Technology
Illinois State University
Normal, IL 61761-5748
309/438-1661
FAX: 309/438-5037
liedtke@indtech.it.edu

Linda Rae Markert
Department of Technology
State University of New York at Oswego
Oswego, NY 13126-3599
315/431-3071
FAX: 315/431-3363
markert@oswego.oswego.edu

Norman Mathew
7012-185 Street
Edmonton, AB
Canada T5L 2L8
403/487-4799
FAX: 403/481-5116

Dominic A. Mohamed
College of Education
Florida International University
Miami, FL 33199
305/348-2005
FAX: 305/348-2086

James DeLaura
(representing the Board of Directors)

Editorial Staff

Jerry Streichler, Editor
Lee Meiser, Assistant Editor
Nancy House, Editorial Consultant
Christin Mackling, Production Coordinator

The Journal of Technology Studies (ISSN 1071-6084) is the official magazine of Epsilon Pi Tau, Incorporated, a nonprofit educational honorary with editorial offices at the Technology Building, Bowling Green State University, Bowling Green, Ohio 43403-0305. This publication is provided to all members in good standing. Copyright 1996 by Epsilon Pi Tau, Inc. Opinions expressed by contributors are not necessarily those of the Honorary.

Manuscripts on topics of interest to a leadership group, consistent with ideals of social proficiency, technical skills, and research are invited. Contributions must follow form and style described in the PUBLICATION MANUAL: Fourth edition 1994 of the American Psychological Association, particularly as pertains to citations, references, tables, figures, and headings. Authors should submit word processed diskettes and three hard copies to Editor, The Journal of Technology Studies, P. O. Box 12332 La Jolla, CA 92039-2332. Submissions will be judged by the Journal’s Board of Editors and contributors will be informed within two months of submission regarding the status of their manuscripts. Author’s guidelines which detail Journal policies and referee procedures are available upon request.

Inquiries concerning purchases of copies by members and nonmembers should be addressed to The Editor, address as above. Foreign subscriptions quoted on request. Rates subject to change without notice. Printed in the United States of America by Gray Printing Company, Fostoria, Ohio. Indexed in Current Index to Journals of Education; separate articles or complete issues available on microform or hard copy from University Microfilm International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Board of Directors

Region 1 (The Nations of Europe, the Eastern Provinces of Canada, the North Eastern United States)

James DeLaura
Vice Chair, Board of Directors
School of Technology
Central Connecticut State University
New Britain, CT 06050-4010
860/832-1804
FAX: 860/832-1804
e-mail: deLaura@ccsu.ctstateu.edu

Region 2 (The Nations of Africa, the Caribbean Islands, and the Southeastern United States)

Earl Yadroough
Chair, Board of Directors
School of Technology
North Carolina A & T State University
Greensboro, NC 27411-0001
919/334-2427
FAX: 919/334-7098
e-mail: yarboough@garfield.ncat.edu

The Journal of Technology Studies

Region 3 (All members-at-large, the Canadian Province of Ontario, the North Central United States)

Don Lux
Industrial Technology Education
The Ohio State University
190 West 19th Avenue
Columbus, OH 43210
614/292-7471
FAX: 614/292-2662
e-mail: emreece@magnus.acs.ohio-state.edu

Region 4 (The Nations of Central and South America, the Canadian Northern Territory and Central Provinces, and the Central United States)

Lester Russell
1213 7th Street
Peru State College
Peru, NE 68421
402/872-5200
FAX: 402/872-2240

Region 5 (The island nations of the Pacific and Indian Oceans, the nations of Asia, Australia, the Canadian Yukon Territory and Western Provinces, and the Western United States)

C. Thomas Dean
4602 Hazellbrook Ave.
Long Beach, CA 90808-1023
310/425-9975
FAX: 310/429-1219

Executive Director
Jerry Streichler
P. O. Box 12332
La Jolla, CA 92039-2332
Voice & FAX 619/355-0960
e-mail: jstreic@bgnet.bgsu.edu

Associate Executive Director
Barry D. Piersol
Bowling Green State University
Bowling Green, OH 43403-0305
419/372-2423
FAX: 419/372-2800
e-mail: piersol@bgnet.bgsu.edu