

Feedback on the May-August 2000 Issue of the Journal of SMET Education: Innovations and Research

The mission of the Journal of SMET Education: Innovations and Research is to meet the need for high-quality case studies and papers that integrate real-world issues with theories in engineering, business, mathematics, and science subjects. In order to achieve this mission, we wanted to get some feedback from our readers. An e-mail was sent to 2,460 of the journal's readers asking their opinions of the May-August 2000 issue of the journal. Of these, about 20% of the queries were returned since the e-mail address was in error. Of the people who received the e-mail, a total of 69 people responded, for a response rate of 3.5%.

The questions asked were:

Please type in your response for each question where H indicates High, M indicates Medium, and L indicates Low. □
Please type either H, M, or L for each question. □

□

1. Quality of the articles and case studies: □□
2. Visual appeal (photo, charts):
3. Usability in classrooms:
4. Overall utility of the journal to educators:

The letter evaluations were converted into a Likert scale where H was replaced by a 5, M by a 3, and a L by 1. The evaluations were analyzed and the averages and standard deviations for the sample were computed as follows:

1 – LOW	3 – MEDIUM	5 - HIGH
Category	Mean (standard deviation) Respondents = 69	
Quality of the articles and case studies	4.49 (0.88)	
Visual appeal (photo, charts)	4.25 (1.11)	
Usability in classrooms	3.51 (1.21)	
Overall utility of the journal to educators	4.19 (1.06)	

These data show that the journal was perceived by those who responded to have excellent quality articles and case studies. The visual appeal was rated high. The overall utility of the journal was perceived to be high, and the respondents graded the usability in classrooms as above medium.

Overall, the responses show that the journal is perceived to be valuable, visually appealing, and containing high quality articles and case studies. In addition to the letter evaluations, many respondents provided written comments, some of which are quoted below:

“This response is long overdue, but heartfelt none-the-less. I want to let you know how wonderful I think the new journal is. Of course I’m a bit biased since I’ve had one article published - but I really think this journal is long overdue in SMET education. It is innovative and informative and contains a lot of useful ideas for SMET educators. In addition, the information presented is timely and can have immediate applications in so many different classrooms. I am proud to have had an article published and look forward to submitting another article sometime soon. As I mentioned earlier, I’ve been doing a lot of work with writing in the classroom - especially in the courses I teach for non-majors. I personally feel that we have a major obligation to provide non-majors with relevant material related to SMET education. This journal is a wonderful forum for such information. Again I commend you for your quality work and look forward to receiving the next issue. In fact, I might add that yours is one journal that I get that I actually sit down and literally read from cover-

to-cover. I've had several people write to me about the article I submitted which tells me if I'm getting that kind of feedback – other authors must be too. In fact, I received a lot of nice feedback while just at the FIE conference in October. Again, thank you for your dedication to this journal. It is sorely needed and greatly appreciated."

Teresa Larkin-Hein, Ph. D.

Assistant Professor of Physics Education
Department of Physics
American University

"Thank you very much for allowing me to review your journal. I do find it worthwhile."

□

William Altenhof, Ph.D., P.Eng.

University of Windsor
Department of Mechanical, Automotive and Materials Engineering

"The format is pleasing to the eye and easy to read. There was some difficulty in following the order of figures and finding them in a couple of the articles, especially the case study by J. Northern where figures were called in a different order than they appeared in the text. The schematics in that article appeared grainy as well, distracting from the overall quality of the rest of the issue.

The case studies presented in this issue seem well suited for a course in engineering management or engineering economics. The case studies provide a wealth of information on how to run projects, promote ideas, or test economic feasibility. It provides solid examples that put the engineering method into practice. In my opinion, the SMET journal will be most useful in classes and programs geared toward turning out project managers and engineers for large industries. It is less useful for those of us engaged in programs geared toward developing hands on problem solving skills that are needed by students going into graduate school, into careers in research, or to work in companies where technical innovation is valued above continuous improvement of existing processes."

William G. Fahrenholtz

Assistant Professor-Ceramic Engineering
University of Missouri-Rolla

Thank you very much for the complimentary copy of the J SMET. I read through the journal and came to the following conclusions:

It is a professionally produced journal. It is rather slim at this time; but I'm sure this will change over time. The writing style of the authors is very good. The articles such as on the EV and Wheelies on the Beltway may be of some use in the classroom. Best wishes to you on your publication endeavor.

Prof. Charles Yokomoto

Professor of Electrical Engineering
Indiana University – Purdue University – Indianapolis (IUPUI)

- 1. Quality of the articles and case studies: Good quality.*
- 2. Visual appeal (photo, charts): Excellent as well*
- 3. Usability in classrooms: The Car article and the physics video article are both useful to me. The car article we are reviewing for use as a 1 or 2 lecture foundation for the "clean vehicle" content in one of our classes... and the video article is being used to provide background research for some multimedia work we are doing.*
- 4. Overall utility of the journal to educators: Very helpful*

Dr. Dan Jensen

Assoc. Professor of Engineering Mechanics
U.S. Air Force Academy

Visual appeal (photo, charts): Low! The dark blue ink bleeds through to the page on the opposite side of the paper, making parts unreadable. This was especially true of the Digital Video article, which I was particularly interested in reading. Research articles appear to be very good.

Robert J. Beichner

Associate Professor

North Carolina State Univ

Thank you for the opportunity to comment on the May-August 2000 issue of the Journal of SMET EDUCATION. I find the Journal an excellent blend of theory and application. It should appeal to educators as well as practitioners in the areas of science, math, engineering and technology. I encourage you to keep up your focus on problem solving via the case study method. The case study method of instruction has evolved considerably since Harvard Business School and others introduced it in the first decades of the twentieth century. The Journal of SMET EDUCATION with its emphasis on innovations and research is a primary example of the "communications revolution" that will influence technological innovation in case writing and instruction in many fields in the 21st century. Your work as Editors-in-Chief of this publication is admired and respected as you discover new horizons in participative learning and instruction in real world issues.

James W. Camerius

Professor of Marketing

Northern Michigan University

I found the quality of the article by Larkin-Hein and Zollman to be quite good. Usability in classrooms for Digital Video article (Larkin-Hein and Zollman) rated high.

Dr. Ruth Streveler

Director

Colorado School of Mines

This is an excellent journal. As a matter of fact, some good friends of mine, Teresa Larkin-Hein and Dean Zollman contributed an article in the issue which you sent to me. I am the fellow who wrote the software VIDSHELL which they used as part of the digital video analysis. Keep up the good work. It is an excellent resource for anyone who is the PI of a current ATE grant or may be in the future. Plus it has a wide appeal to SMET educators across the world.

Doyle Davis

Principal Investigator

New Hampshire Tech College-Berlin

The article "Digital Video, Learning Styles, . . ." was very thorough and interesting.

Valerie Young

Assistant Professor

Ohio University

Overall, I was very impressed with the quality of the journal

Gerald S Jackobowski

Head of Engineering

Loyola Marymount University

Shortcoming is difficulty of applying cases that do not include process flows or process chemistry in CHE courses. Strength is the presentation and evaluation of successful classroom use of technology-based case studies.

Steve R. Duke

Assistant Professor of Chemical Engineering
Auburn University

We have subscribed to the Journal. Obviously the papers that have been printed thus far limit the scope of potential impact in an engineering curriculum. I trust you can identify some examples of use of the materials published and highlight those in some way in future editions.

M. Dayne Aldridge

Dean, Engineering, Mercer University

I responded to your questions below. In addition to the longer articles, I would encourage the publication of shorter papers, such as communications, which would likely result in more submissions and probably wider readership by faculty looking for innovative ideas and materials presented in a larger number/issue of shorter articles.

William A. "Bud" Baeslack III

Dean and Professor
Rensselaer Polytechnic Institute

The one article on "Digital Video, Learning Styles, and Student Understanding" was very good. I also shared the article about Making an Impact at GM with one of our faculty members who also liked the article.

Dr. Linda Krute

Associate Director
Director, Engineering Online Programs
Director, Illinois Satellite Network
University of Illinois

For all four questions on your questionnaire I would rank a H. As Freshman Engineering Design courses take hold in the four year schools, the problem will become what to do with transfer students from two year schools and will they need to meet this requirement for graduation. As far as I know, the two year schools have not addressed Freshman Engineering Design as a requirement for admission into a four year school. Thus, your journal discusses problems that need to be debated in order for them to establish such a course at low cost. This is a big contribution. Best wishes.

Deran Hanesian

Master Teacher and
Professor of Chemical Engineering
New Jersey Institute of Technology
Newark, New Jersey

We appreciate these responses and will use them in improving the journal on a continuing basis. Your feedback is very important for improving the quality of the journal. Please provide us your comments on this issue by responding to our e-mails for feedback.

Editors-in-Chief