

# Educational Matters

Hans-Jörg Kreowski

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I strongly believe that educational matters are interesting and important for the readers of the EATCS Bulletin (at least as far as they are involved in teaching) and that the Bulletin is a proper forum to discuss the issues of computer science education. Moreover, such a discussion is quite necessary since teaching in computer science seems to be a troublesome enterprise because of the following open questions (the list not at all being exhaustive):

What is Computer Science – or is it Computing Science? – really about in the wide spectrum from mathematical foundations to information technology and its social impact? What are the aims of teaching? What are the proper principles, methods, languages, tools, etc. to be addressed and used? How should the changes of the field concerning technology, new application areas, and new trendy paradigms be reflected in teaching? What is the role of Theoretical Computer Science? Is it needed in “building the information society” (as the 4th ESPRIT Programme demands) or in racing on “information super highways”? How can Theoretical Computer Science be made more popular with students?

Well, there are many topics to be considered in the Educational Matters Column. But, unfortunately, it does not work as smoothly as I had hoped when I accepted the job as columnist. I am aware of several deficiencies on my side. Although I have been teaching for over 20 years meanwhile and collecting some experience and routine in this time, writing about the matter is another cup of tea. I am not regularly involved in professional activities and events on teaching and education. I never reserve enough time for writing the column. I am not pushing enough with potential contributors, and my campaigns for contributions have failed with only a few exceptions. Nevertheless, I will go on and try to put together something of interest every four months. But I would welcome more contributions.

## Call for Contributions

The columnist of Educational Matters is looking for contributions on subjects related to teaching and education in Computer Science and, in particular, in Theoretical Computer Science. All kinds of papers, notes, reports, comments, stories, anecdotes, etc. are welcome if they enhance the attraction of the column. Topics of interest include, but are not limited to, the following.

- Summaries, reviews, recommendations, critiques, tables of contents of textbooks and classroom notes.
- Aims, scope, concept, and content of courses on particular subjects with interesting aspects.
- Reports and comments on teaching on the departmental level including Computer Science curricula.

- Reports and comments on activities and events in Computer Science Education including announcements of respective workshops and conferences.
- General position statements concerning the curriculum debate in Computer Science.

Please send everything interesting for the discussion of educational matters in Computer Science to

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I am closing this column with three calls for papers and participation. The first and second are for conferences on Information Technology and Computer Science Education. Additionally, you find a fraction of the Call for Papers of the AMAST Conference that starts traditionally with an Education Day (cf. the columns May '93 to January '94 where the Education Day of AMAST '93 is reflected in some detail). I hope to provide you with more information on this event in the next issue.

**International Working Conference on  
 The Impact of Information Technology  
 From Practice to Curriculum  
 Israel, March 18-21, 1996**

IFIP - International Federation for Information Processing, TC-3 Education (WG 3.2) and TC-9 Relationship between Computers and Society (WG 9.5), in collaboration with IACE - Israel Association for Computers in Education, S.I.G. OF IPA - Israel Information Processing Association, and MOFET Institute - Research & Development of Programs in Teachers Training

**Organizing Committee:** Dr. Daniel Millin, Chairman (IL), Ezra Ben Kohav (IL), Shimon Bukshpan (IL), Jaffa Gev (IL), Uzi Israeli (IL), Sam Kaplan (IL), Benny Raab (IL), David Shohat (IL), Chaim Tirosh (IL).

**International Program Committee:** Prof. Bernard Levrat, Chairman (CH), Dr. Daniel Millin, Co-Chairman (IL), Dr. Marius Angelides (UK), Ezra Ben Kocav (IL), Prof. Jacques Berleur (B), Prof. Klaus Brunnstein (FRG), Gunter Cyranek (CH), Dr. Yehuda Huppert (IL), Prof. Anne Jarvinen (SF), Prof. Pertty Jarvinen (SF), Dr. Yaakov Katz (IL), Dr. Joseph Melloul (IL), Dr. Baruch Offir (IL), Benny Raab (IL), Prof. Herbert C. Rudman (US), Dr. Nurit Zehavi (IL), Prof. Joe Turner (US), Dr. Felix Van Rijn (NL), Dr. Tom Van Wert (NL), Dr. Sara Ziv (IL) .

**Purpose:** The rapid technological developments of the last 25 years have brought us to the “era of cyberspace” with a great impact on our globe, and changing the way of life in modern society.

Nevertheless, our educational system has not produced an effective curriculum to enable adults to cope with the challenges of the technological applications and outcome.

While Information Technology has in many ways brought about great progress, it has also raised the question of its impact on issues such as ethics, privacy and morals, which are critical in our daily lives.

These are some of the problems troubling our society. Coping with these challenges cannot be left to “chance” alone, but must be discussed and deliberated by the educational community which hopes to provide educational tools in order to educate towards a free, advanced and democratic 21st century society.

The Conference will deal with the possible ways in which our educational system can, through it’s curriculum, cope with the impact of Information Technology on our life.

### **Areas of Interest:**

#### **1. Curriculum Organization**

Methodological aspects:

- How should “Computers and Society” be taught at different stages of education?
- Who should teach it – technology experts and/or subject matter teachers?
- Should teachers training institutes expose their students to these issues?

#### **2. Curriculum Topics**

- Ethics in the age of information technology
- Information as power
- Information technology & employment
- Dequalification
- Continuous education
- Multimedia
- Leisure time
- Robotics
- Risks
- Applicability of expert systems & AI
- Information technology capabilities & limitations
- Impact of cyberspace

Any other relevant topic related to the main theme will be considered.

**Deadline for receipt of abstracts: October 20, 1995**

### **Guidelines for the Preparation of Abstracts:**

1. Abstracts are to be submitted ‘camera-ready’, printed with a laser printer, or equivalent high quality printing.
2. The entire abstract (up to 300 words), including title, author(s) name(s), institution and country, must fit in a rectangular frame, measuring 13 × 18 cm. Do not draw a frame.

3. Type as follows: Title in CAPITAL LETTERS. Author(s) name(s) institution, city state and country, in Upper and lower case. Presenting author's name underlined. Type abstract in one paragraph, single space. The entire text should be flush to the left margin.
4. The abstract will be reproduced photographically as submitted, in the volume of abstracts to be distributed at the conference.
5. Please include a covering letter stating full name of presenting author, mailing address, telephone, fax and Email numbers.
6. Kindly indicate any audio-visual requirements.

Abstracts should be sent to:

Dr. Daniel Millin  
 Information Technology Conference  
 c/o International Travel & Congresses Ltd.  
 P.O. Box 29313  
 Tel Aviv 65121  
 Tel: +972 3 5102538 Fax: +972 3 5160604  
 Email: millin@netvision.net.il.

Please mail the original abstract and 3 copies. If sent by fax, the original abstract should follow by mail.

**Important Dates:**

- October 20, 1995 - Deadline for receipt of abstracts.
- December 1, 1995 - Final announcement including preliminary program, registration and accommodation forms.
- January 15, 1996 - Deadline for early registration.

**Conference Venue:** Ma'ale Hachamisha Guest House has an established international reputation as a resort and convention site. It is situated in the Judean Mountains, a 15 minute drive from Jerusalem and 30 minutes from Ben Gurion International Airport.

**Language:** The conference will be conducted in English.

**Accommodation & Registration Package**

<b>Registration fees</b> (per person in double room)	<b>Before Jan. 15</b>	<b>After Jan. 15</b>
Participant	\$610	\$660
Accompanying person	\$455	\$455
Single room supplement *	\$120-140	\$120-140

(\* Only a limited number of rooms at single-room rates are allocated and will be confirmed while available).

The package for participants covers: Conference registration fees, reception, coffee breaks during sessions, 4 nights accommodation at Ma'ale Hachamisha Guest-House, Monday (evening) till Friday (morning), 18-22 March (3 days on full-board basis, 1 day on half-board basis)

The package for accompanying persons covers: 4 nights accommodation at Ma'ale Hachamisha Guest-House Monday (evening) till Friday (morning), 18-22 March (3 days on full-board basis, 1 day on half-board basis), reception and 2 half-day sightseeing tours.

Optional pre/post conference tours will be published in the Final Announcement.

## ACM SIGCSE - SIGCUE Joint Conference on Integrating Technology into Computer Science Education Barcelona, Spain, June 2 - 6, 1996

ACM Special Interest Groups in Computer Science Education (SIGCSE) and Computer Uses in Education (SIGCUE) will join forces in sponsoring a conference and working meeting on the theme of integrating technology into computer science education. Submissions are requested in all areas related to the conference theme. This includes, but is not limited to, the following topics as applied to computer science/informatics education: Closed laboratories/practical experiences; multimedia/interactive learning; distance learning; computer supported collaborative learning; other technology applications, such as e-mail & bulletin board-based class support, effective use of portable computers, tapping the dorm-based computer resource, integrating networks and distributed computing, graphics/visualization, emerging technologies.

**Two distinct, intermingled events:** This event will consist of both a traditional conference and a set of working group meetings. Those who participate in the working groups will meet often and work together to produce a document or other material for publication immediately after the conference. The working groups will meet one day before the conference, during the conference, and one day after the conference ends. They will present interim reports to the conference and obtain responses from conference attendees. Each working group will determine its own meeting schedule, including when to attend conference events.

**Conference:** The conference will consist of invited speakers, interaction with the working groups, and technical sessions featuring papers, panels, demonstrations, and posters.

**Working Groups:** Five working groups will meet, each with a particular aspect of technology in computer science education as its focus. The groups will work in equipped laboratories. The results of the groups' work will be edited and widely distributed.

To participate in a working group, submit a proposal showing your experience relative to technology in computer science education. Provide the cover page described separately. Proposals will be accepted based on the mix of ideas and experience submitted with the goal of forming good working groups.

**Cover page for all submissions:** On a cover page, include your name and contact information (including fax, e-mail, postal mail, and phone), the title of your proposal, the conference theme in which it best fits, and an abstract of not more than 100 words.

**Language:** The official language of the meeting is English. Submissions should use clear, ordinary grammar and avoid the use of colloquialisms that might be difficult for those who speak English as a second language.

**Registration:** All conference participants/presenters are expected to register at the regular conference registration fee. No support for travel to the conference is expected.

**Papers:** Extended abstracts on topics consistent with the themes of the conference are invited. Abstracts will be reviewed. A few abstracts will be selected for expansion into full

papers. If you are not able to expand the abstract into a full paper if it is chosen, indicate that on the cover sheet. Other accepted abstracts will be presented at the conference as short paper presentations or as posters. The extended abstract should be two or three pages on A4 or 8" × 11" paper, single-spaced, 12 point type, one-inch margins.

**Demonstrations:** Demonstrations of software, multimedia application resources, simulations, or other resources used in computer science education will be an important part of the conference. Submit a description of the material you wish to demonstrate with a cover sheet. Demonstration submissions must include information on the equipment required to demonstrate the resource. If you would bring your own equipment, state that and describe it. If you require equipment provided by the conference, describe your needs.

**Panels:** Panel sessions to address a topic relevant to the theme of the conference are also invited. The submission of a panel should follow the directions for a paper, but state that it is a panel session. Include the names and affiliations of as many panel participants as possible. If the panel proposal is accepted, all panelists' names must be provided in time to appear in the Advance Program and Conference Proceedings.

**Posters:** Work in progress may be submitted for presentation in poster format at the conference. Submit a cover page and one full page of description of the work.

**Proceedings:** Published proceedings of the conference will include the products of the working groups, the long and short papers, and the abstracts of the panels, posters, and demonstrations. The proceedings of this conference and its working groups will begin a series of publications that will constitute an important body of work in the area of technology in computer science education. The results of this international collaboration will be made accessible to a broad audience for sharing, experimentation, and improvement.

Send all submissions to SIGCSE/SIGCUE Joint Conference on Integrating Technology in Computer Science Education

Dr. Lillian N. Cassel  
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Villanova University  
Villanova, PA 19085 USA  
+1 610-519-7341 (office)  
+1 610-519-7889 (fax) (use only if needed)  
sigcse@vill.edu

All submissions must be original work. Send 4 copies of all printed materials or send electronic mail. Use fax only if necessary.

**Conference organizers:**

Program Chairs: Boots Cassel, Jim Hightower

Program Committee: Dick Austing, Gordon Davies, Harriet Taylor

Organizing Committee Chairs: Bill Fleischman, Emilio Luque

**The host site:** The conference will be held on the campus of the University Autònoma of Barcelona, hosted by the Computer Science Department, Computer Architecture and

Operating Systems Unit. Attendees will stay in a hotel on campus or in nearby Sabadell. Barcelona is easily accessible by commuter trains.

**Important dates**

Deadline for receipt of working group proposals, papers, panels	15 Nov. 95
Notification of acceptance of working groups, papers, panels	20 Jan. 96
Deadline for receipt of posters, demonstrations proposals	27 Feb. 96
Notification of acceptance of posters, demonstrations	15 Mar. 96
Working Groups meet	2-6 June 96
Conference	3-6 June 96

For further information, contact Dr. Lillian N. Cassel at the address above.

**Fifth International Conference on  
Algebraic Methodology and Software Technology  
AMAST '96, July 1-5, 1996, Munich, Germany**

**Goals:** The major goals of the AMAST Conferences are to put software development technology on a firm, mathematical foundation. Particular emphasis is given to algebraic and logical foundations of software technology. An eventual goal is to establish algebraic and logical methodology as a practically viable and attractive alternative to the prevailing ad-hoc approaches to software engineering.

Previous meetings of AMAST were held at the University of Iowa (1989 and 1991), the University of Twente (1993) and Concordia University of Montreal (1995). During these meetings, AMAST has attracted European and American researchers and practitioners interested in software technology, programming methodology and their algebraic and logical foundations. In addition, the first day of each conference has been dedicated to Mathematics Education for Software Engineers.

Following this successful trend, the fifth AMAST International Conference will be held at the Ludwig-Maximilians-Universität, Munich, Germany, from July 1 to July 5, 1996.

General Chair: Maurice Nivat (France).

Program Chair: Martin Wirsing (Germany).

**Important Dates:**

Submission of Papers:	November 15, 1995
Submission of System Demo Proposals:	December 15, 1995
Submission of Student Research Papers:	June 1, 1996
Notification of Acceptance/Rejection:	February 1, 1996
Education Day:	July 1, 1996
Conference Days:	July 2-5, 1996

**Further Information:**

For bulletins on current status of the conference:

<http://www.pst.informatik.uni-muenchen.de/konferenzen>,

[amast96-info@informatik.uni-muenchen.de](mailto:amast96-info@informatik.uni-muenchen.de)

For subscribing to amast mailing list:

[amast96-request@informatik.uni-muenchen.de](mailto:amast96-request@informatik.uni-muenchen.de)