Appendix A. IT Workforce Task Group

W. Richards Adrion, Department of Computer Science
Kevin Aiken, Division of Continuing Education
Leslie Ball, Isenberg School of Management
David Mix Barrington, Department of Computer Science
Marc Cohen, Office of Information Technologies
Wendy Cooper, Department of Computer Science
Stephen Demski, University Outreach
Sesu Desu, Department of Electrical and Computer Engineering
Joseph Goldstein, College of Engineering
James Kurose, Department of Computer Science
Stephen Levey, Video Instructional Program
Rachel Llewellyn, DuBois Library
Marla Michael, Department of Computer Science
Charles Schweik, Center for Public Policy and Administration
Joseph Sardinas, Department of Accounting and Information Systems
Alice Szlosek, Division of Continuing Education
Joan Stoia, Campus Career Network
Harlan Sturm, College of Humanities and Fine Arts
Appendix B. Conference Program

Formulating a Response to the IT Workforce Shortage: A Workshop

Agenda

Monday, September 13, 1999

8:00 AM—8:45 AM – Breakfast Buffet, Welcome and Introduction
Location: Top of the Campus Center, 11th Floor

Dr. Cora Marrett, Provost, Univ. of Massachusetts Amherst
Dr. Joseph Goldstein, Dean, College of Engineering, Univ. of Massachusetts, Amherst

8:45 AM—9:30 AM - Breakfast Speaker
Top of the Campus Center, 11th Floor

Session I – Understanding the Demand for Information Technology Professionals

Much has been written about the need for Information Technology Professionals. What is the truth? How large is the demand? What type of demand do we see? In this presentation, a national perspective of the demand will be presented followed by a panel discussion of the type of professionals that are required.

Keynote: Dr. Paul Harrington, Associate Director, Center for Labor Market Studies, Northeastern University

9:30 AM—10:30 AM
Top of the Campus Center, 11th Floor

Session II – Panel: Discussion of the Demand for Information Technology Professionals to set the Stage for Working Group Sessions

Joseph Infinger, Vice President and CIO, Raytheon
Don Haile, President, Fidelity Investments Systems Company
Paul Harrington, Economist, Center for Labor Market Studies, Northeastern Univ.

Moderator: Joseph Goldstein, UMASS College of Engineering

10:30 AM—10:45 AM - Break
10:45 AM—11:45 AM  
Campus Center, 9th Floor

Session III – Working Groups – Four Groups to Focus on the Issues Raised by the Panelists

The results of these sessions will be reported back to the general audience at the end of the luncheon keynote address.

Moderators: Leslie Ball/Kevin Aiken, Rick Adrion/Steve Demski, Joe Goldstein/Steve Levey, and Harlan Sturm/Charlie Schweik/Ethan Katsh)

12:00 PM – 12:30 PM – Luncheon  
Amherst Room, 10th Floor

12:30 PM – 1:15 PM – Luncheon Keynote Address

Session IV – How One University is Responding to the IT Workforce Challenge

Speaker: Gregory Hughes, Vice Provost & Dean, IT, RPI

1:45 PM—3:00 PM  
Campus Center, 1st Floor Room 101

Session V – How Other Universities are Responding to the Need for Information Technology Professionals

We will learn from several other universities about the approach they are taking and why they choose that approach.

J. Michael Dunn, Dir. Informatics Initiative, Indiana U.  
Ronald Larsen, Director, MAITI (Maryland)  
Joseph Lambert, Assoc. Dean, IST, Penn State

Moderator: Rick Adrion, UMASS Computer Science

3:00 PM—3:15 PM – Break, Room 101
3:15 PM—5:30 PM
Campus Center, 9th Floor

**Session VI – Workshop: Building the Future**

We have seen what other universities are doing. We have heard what employers need. What must UMASS do to compete? In this workshop, we will break up into groups to define the programs that are appropriate for UMASS.

5:30 PM—7:00 PM
Top of the Campus Center, 11th Floor

Cocktail Reception and Poster Session

**Session VII -- Information Technology at UMASS Amherst**

Information technology has been taught for several years at UMASS. It exists in many forms and in many departments. This session will explore what is currently being offered in information technology and allow participants to quiz UMASS faculty and staff about their approach to IT education in a relaxed setting.

Poster Presentations:

**Tuesday, September 14, 1999**

8:00 AM—9:00 AM - Breakfast Speaker
Top of the Campus Center, 11th Floor

**Session VIII– Understanding the Pipeline Issues for Information Technology Professionals**

Introduction: Dr. David Scott, Chancellor, University of Massachusetts Amherst

Speaker: Mary Ellen Condon – Director Information Management and Security – U.S. Dept. of Justice, Former Chair of the Information Technology Resource Board
9:15 AM—10:15 AM
Campus Center, 9th Floor

Session IX – Workshop: Building the Future—Part II

Based on what was learned at the Poster Sessions, what came out of the workshop held Monday afternoon, and any dinner discussions, participants will be asked to define a proposed direction for UMASS with the resources required and to define a plan for moving ahead.

10:15 AM—10:30 AM – Break, Room 101

10:30 AM—11:30 AM
Campus Center, 1st Floor, Room 101

Session X – Is Information Technology a Valid Academic Discipline?

As the need for information technology has grown, the question that must be answered at academic institutions is, “Is this a true academic discipline?” The answer to this question is critical to determine if information technology can be exist among other academic disciplines.

Harlan Sturm, Assoc. Dean, College of Humanities and Fine Arts, UMass Amherst
J. Michael Dunn, Dir. Informatics Initiative, Indiana U.
Ronald Larsen, Director, MAITI (Maryland)
Joseph Lambert, Assoc. Dean, IST, Penn State

Moderator: Dr. Cora Marrett, Provost, University of Massachusetts, Amherst

11:30 AM—12:00 PM
Campus Center, 1st Floor – Room 101

Session XI – Workshop: Building the Future Report Outs

The four workshop moderators will report out on the thoughts of their groups. A moderator will record the comments and address any issues that might arise as UMASS attempts to implements the suggested changes.

12:00 PM—12:30 PM
Amherst Room, 10th Floor

Lunch
Appendix C. Workshop Attendees (Off Campus)

Karen Abrahamovich, Campus Relations Manager, Memory and Character Engineering, IBM Burlington
Debbie Bellucci, Executive Vice President’s Office, Springfield Technical Community College
Mary Ellen Condon, Director, Information Management and Security, U.S. Department of Justice and former Chair, U.S. IT Resource Board
Margaret Crane, Director of Recruitment, Bay State Health Systems
J. Michael Dunn, Director of Informatics and Oscar Ewing Professor of Philosophy and Computer Science, Indiana University
Michael Feeney, Lockheed Martin
Paul Harrington, Assoc. Director, Center for Labor Market Studies, Northeastern University
Tom Hubbard, Mass. Technology Collaborative
Gregory Hughes, Vice Provost and Dean Of Faculty of Info Tech, Rensselaer Polytech
James Infinger, Vice President and Chief Information Officer, Raytheon
Joseph Lambert, Associate Dean, School of Information Sciences, Pennsylvania State University
Ronald Larsen, Exec. Director Maryland Applied Information Technology Initiative (MAITI), University of Maryland
Geoff Little, President, Telitcom Development Corporation
Jim Masi, Mass. Center for Telecommunications, Springfield Technical Community College
Tom Mulvehill, Manager, Technical Delivery Team, EDS
Rick Oliveri, Bay State Health Systems
Andrea Picard, Career Services, Holyoke Community College
Peter Polumbo, Director of IT, Friendly Ice Cream Corporation
Peter Pristic, Senior Campus Relations Representative for Eastern Region, EDS
Christine Rudomin, College Relations Manager, Intel
Charles Scharnagle, Director of Sales and Marketing, EMC
Gordon Scott, Vice President, Client Service Operations, Fidelity Investments
Jennifer Shire, Vice President, Technical College Relations, Fidelity Investments
Phil Stathas, Director of MIS, MA-COM
Stewart Stokes, CSC Consulting
Margaret Walkey, Resource Coordinator, Keane, Inc.
Scott Wilson, Regional Manager Campus Relations, EDS
Appendix D. Other Panelist and Audience Comments Related to IT Program Design (From the Session on “Is IT an Academic Discipline?”)

- Some of the broad subject areas to be covered in the program would include:
  - management
  - computer science
  - computer engineering
  - others depending upon students’ primary areas of academic study

- The students/graduates we might we be addressing with this curriculum include:
  - the IT professional
  - the non-IT major who requires competence IT, perhaps via a minor
  - those that need to achieve minimum standards provided by general education requirements/courses (must include analytical skills)
  - non-traditional students for whom distance learning would be an important option

- In the “core course” model at Penn State, first and second year students learn:
  - computer literacy
  - introduction to data analysis
  - architecture and networks
  - geographic information systems
  - other relevant subjects

  This model could accompany any academic area of study.

- Data analysis proficiency should be included, now widely lacking as a skill with students.

- Some additional resources required to expand to an IT program include:
  - increased faculty, or increased class size
  - additional classroom space
  - technology resources that can assist in teaching. Some may be distance education-related that can also benefit on-campus students as well.

- Distance education technologies should be utilized.

- We must define our criteria for success. We must continually evaluate ourselves and the emerging program. The criteria for evaluation will also be continually evolving because the IT field and technology are so rapidly evolving.

- Another challenge in this program is to get students to understand occupation staffing patterns so they can make intelligent career choices in the IT field. They need to know what will be valuable for them to know as a future employee.
Leslie Ball  
Senior Executive Professor and MIS Coordinator  
College of Business Administration  
214 Hayden Hall  
Northeastern University  
360 Huntington Ave.  
Boston, MA 02115  
L.Ball@neu.edu  
1290 Tremont Street; P.O. Box 2435  
Duxbury, MA 02331-2435  
781.934.7717

Bellini, Joseph, '84 (Engineering)  
President & CEO  
C-Bridge Internet Solutions  
219 Vassar Street  
Cambridge, MA 02139  
617-497-1707  
jbellini@c-bridge.com

Bluestein, William (Bill), '78 & '89 PhD (Economics)  
President and COO  
Forrester Research, Inc.  
400 Technology Square  
Cambridge, MA 02139  
617-497-7090  
wbluestein@forrester.com

Bohn, Larry, '74 (English)  
Chairman, President, & CEO  
NetGenesis Corp.  
One Alewife Center  
Cambridge, MA 02140  
lbohn@netgen.com
Colon-Osorio, Fernando, '73 MS & '77 PhD (Engineering)  
President & CEO  
Acunet.net  
185 Maple Street  
Stow, MA 01775  
508-804-1400  
fcco@acunet.net

Elliot, Walter J., Jr., '74 (School of Management)  
Former CEO of Pilot Software  
39 Indian Wind Drive  
Scituate, MA 02066  
781-544-3185  
wjpe58@aol.com

Harris, Cheryl, '92 PhD (Communications)  
Director, Metamorph Lab (e-media consulting)  
2560 Township Road  
Pleasant Valley, PA 18951  
610-346-9234  
cherylharris@visto.com

Knowles, Andrew (Andy)  
Digital Equipment Corp., Retired  
27 Medinah Drive  
Yarmouth Port, MA 02675-1628  
941-593-5228

McDonald, Paul, '66 (Social and Behavioral Sciences)  
Sr. Exec. VP, Retired  
Friendly Ice Cream Corporation  
2205 Boston Road, N-128  
Wilbraham, MA 01095  
413-596-8038  
PGMCD@aol.com
SITAC Membership, continued

Modie, Christine (Chris)
VP and CIO
Mass Mutual
1295 State Street
Springfield, MA 01111-0001
413-744-4466
cmodie@massmutual.com

Stoloff, Robert (Bob), ’71 (Psychology)
Chief Financial Officer
One to One Interactive, LLC
186 South Street—Suite 600
Boston, MA 02111
617-574-5020 ext.744
rstoloff@onetooneinteractive.com
Student Support for an Information Technology Minor at UMass Amherst

As undergraduates at the University of Massachusetts, Amherst, we support the concept and implementation of a minor or certificate program in Information Technology, open to all majors, for 15-18 credits of approved coursework.

<table>
<thead>
<tr>
<th>Name (printed)</th>
<th>Signature</th>
<th>Major</th>
<th>Student ID #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Miranda Hughes</td>
<td>Miranda Hughes</td>
<td>Journ</td>
<td>046823230</td>
</tr>
<tr>
<td>2. Karen Quenneville</td>
<td>Karen Quenneville</td>
<td>Journ</td>
<td>0094643097</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Student Support for an Information Technology Minor at UMass Amherst

As undergraduates at the University of Massachusetts, Amherst, we support the concept and implementation of a minor or certificate program in Information Technology, open to all majors, for 15-18 credits of approved coursework.

<table>
<thead>
<tr>
<th>Name (printed)</th>
<th>Signature Major</th>
<th>Student ID #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bernadette Bennett</td>
<td>Bernadette Bennett</td>
<td>585-41-4767</td>
</tr>
<tr>
<td>2. Elizabeth A. Carey</td>
<td>Elizabeth A. Carey</td>
<td>028-68-8895</td>
</tr>
<tr>
<td>3. Seth P. Nelson</td>
<td>Seth P. Nelson</td>
<td>022-72-7434</td>
</tr>
<tr>
<td>4. Rosemary Denney</td>
<td>Rosemary Denney</td>
<td>076-82-4108</td>
</tr>
<tr>
<td>5. Robert Bramley, Linguistics</td>
<td>Robert Bramley, Linguistics</td>
<td>076-82-4108</td>
</tr>
<tr>
<td>6. Wong Myung Chen, Psychology</td>
<td>Wong Myung Chen, Psychology</td>
<td>600-75-9040</td>
</tr>
</tbody>
</table>

8/27/2001
From: GREG NG <gregng98@hotmail.com>
Subject: Re: Journalism Dept. News

Barbara,

I am interested in being on the list; however, don't think I'd have enough time to complete this "on-time."

Don't know if that really helps you or not, but I think this is a great idea...

.....Actually, I almost wish this was available before I committed to the Criminal Justice certificate. "IT" really caught my attention...especially since I switched into Journalism from Computer Engineering.

GREG
Hi,
I would be interested in learning more about the IT program as a minor. Please add me to your mailing list. Thank you!
-Karen Quenneville
Dear Barbara,

The Information Technologies Curriculum is an outstanding idea for use by those in the Journalism department. Students taking Journalism as a course of study can benefit greatly from learning about different kinds of technologies and medias, as the profession is becoming more and more technological. Thanks for letting me know.

Kevin Doherty
From: Weiss-Tisman <weisstis@sover.net>
Subject: Re: Journalism Dept. News

Barbara,

Thank you for including me on the e-mail list, and for that very interesting note from Bill Israel. I don't know if it is you or he who need to know of student interest in the IT program, please forward if he is the one. I am very interested and have some questions. Is this a proposal a go, i.e. if I start working towards a minor am I assured that it will exist in two years. The link that was in the e-mail did not work for me. Does this program include programming language? Please let me know where I can find more information, I am interested.

Howard Weiss-Tisman
Hello. I'm definitely interested in this new IT program. It sounds great. Now, you said that only one course towards the certificate will be offered in the fall, correct? So this means that seniors like myself have no shot at completing the certificate before we graduate?
From: Tom12481@aol.com
Subject: Re: Journalism Dept. News

Hi,

I'm interested in using the IT thing to satisfy the minor requirement. I would appreciate it if you could keep emailing me, and I plan on attempting to get into Bill's class.

Thanks,
Tom Ollila