CONFERENCE PROCEEDINGS

3rd Annual Conference on the Teaching of Computing

COMPUTING CURRICULUM DEVELOPMENT AND DELIVERY

29 August–1 September, 1995
Dublin, Ireland

Edited by Sylvia Alexander & Patricia Magee
The OOS Model - an Object Oriented Approach to Systems Development with User Participation - 10 Years of Experiences in Teaching Systems Development
Carita Åbom and Mats Apelkrans, Jönköping International Business School, Sweden

Experience of Multiple Choice Testing
James Anderson, Susan Walmsley & Shirley Williams, University of Reading

A Problem-Oriented Approach to Computer Science Education
Mark Anderson & David Jackson, University of Liverpool

Course Management with the World Wide Web
Reg Arthington, University of Sunderland

The Initial Teaching Language for Universities and Colleges
M D Beer & J M Watt, University of Liverpool

Bringing Professionalism to Computer Science
Roger Boyle, University of Leeds

Introducing Information Systems into Computer Science
Carol Britton & Amanda Derrick, University of Hertfordshire

Using Case Studies for Active Learning in Computer Science
Vicky Bush, Anna Garry, Richard Giordano, Trevor Howkins & Stephen Kay, University of Manchester

A Pilot Study on Novice PASCAL Programmers on Vocational Courses in Further Education in Northern Ireland
Linda Carswell, Upper Bann Institute & Maureen Murphy, University of Ulster, Jordanstown

Using Research-useful Experiments in the Teaching and Assessment of Software Metrics
David Coward & Paul Raynor, University of the West of England

Pragmatic Anti-Plagiarism
Fintan Culwin, South Bank University & Jeff Naylor, London Guildhall University

Assessing File Management by Computer: A Case Study
R D Dowsing & M R Sleep, University of East Anglia
The Initial Development of a CBL Application to Serve as a Remedial Turbo Pascal Tutor
John Elkington, University of Central England 71

An Integrated Exercise for HCI Education
Christine Faulkner & Fintan Culwin, South Bank University 75

Computer Science Discipline Network workshop report
Sally Fincher, University of Kent 80

Supporting the Learning of Recursion
Carlisle George, Goldsmiths College, London 82

Experiences of Using Authoring Packages as a Means for Student Learning
Des Greer & Donal Roantree, University of Ulster, Coleraine 90

The Use of Computer Based Delivery Mechanisms in the Teaching of Computing
D R Hughes, P A Smart & P C V Larsen, University of Plymouth 96

Effective Course Support Using the World Wide Web
Giorgio Ingargiola & Judith Wilson, Temple University, Philadelphia 100

Computer Assisted Student Centred Assessment
David Inman, Graham Davies, & Neil Hepworth, South Bank University 109

Case Study: Integrating Theory and practice Into Management Information Systems Classes
Nancy Johnson, Metropolitan State University, Minneapolis 115

Assessment of Teaching through Portfolios
James D Kiper, Miami University 118

Managing Coursework: Wringing the Stone or Cracking the Nut?
John Latham, University of Manchester 122

Students' Experiences in the Formal Methods Classroom
Ruth Leman & Paul McGrath, Leeds Metropolitan University 132

A Flexible Learning Approach to Minority Topics in Computer Science
Helen Lowe & Tim Mussen, Napier University 139

Controlling Plagiarism in Student Programs
G R Lund, University of Abertay Dundee 144
<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Performance Computing for All</td>
<td>Gordon Makinson &amp; Andrew Peel, University of Kent</td>
<td>149</td>
</tr>
<tr>
<td>An Assessment of Hypertext-based Courseware</td>
<td>A D Marshall &amp; S Hurley, University of Wales, Cardiff</td>
<td>154</td>
</tr>
<tr>
<td>Hypertext-based Courseware Delivery Methods for the World Wide Web</td>
<td>A D Marshall &amp; S Hurley, University of Wales, Cardiff</td>
<td>161</td>
</tr>
<tr>
<td>The Effect of Learning, Memory and Motivation in Student Novice Programmers’ Academic Success</td>
<td>Joe McDonagh &amp; Larry McNutt, Tallaght RTC</td>
<td>170</td>
</tr>
<tr>
<td>An Interactive Electronic Tutor for Teaching Arrays: its Development and Delivery</td>
<td>Peter McKenna, Liverpool Institute of Higher Education</td>
<td>175</td>
</tr>
<tr>
<td>Developments in Computer Aided Learning, Artificial Intelligence and Intelligent Tutoring Systems, Implications and Expectations</td>
<td>Larry McNutt, Tallaght RTC</td>
<td>178</td>
</tr>
<tr>
<td>Software Tools to Support the Assessment of Computer Science Projects</td>
<td>David McSherry &amp; Karl Stringer, University of Ulster, Coleraine</td>
<td>185</td>
</tr>
<tr>
<td>WebTest: A World Wide Web Tool for Distributed Assessment</td>
<td>Adrian Moore, University of Ulster, Coleraine</td>
<td>194</td>
</tr>
<tr>
<td>Teaching Computing in a Computer Based Collaborative Learning Environment</td>
<td>Steve Morris &amp; Bob Steele, Sheffield Hallam University</td>
<td>198</td>
</tr>
<tr>
<td>Using the Web as an Educational Support Tool</td>
<td>Conway Mothobi &amp; Jim Strom, Manchester Metropolitan University</td>
<td>205</td>
</tr>
<tr>
<td>SOCSESS - School of Computing SQL Environment for Study Support</td>
<td>Michael Mumford, University of North London</td>
<td>211</td>
</tr>
<tr>
<td>In Pursuit of Excellence: Quality in Computing curricula</td>
<td>David Mundy &amp; Geoff Lund, University of Aberay Dundee</td>
<td>218</td>
</tr>
</tbody>
</table>
The Theoretical Underpinning of Computing
Les Neal, Brunel University

Teaching Transferable Programming Skills for Varied Subject Areas
R Newman, L Payne & K Monk, Coventry University

An Object-Oriented Learning System Framework for Domain Oriented Reuse
E H Ng, M Sarshar & D Pountney, Liverpool John Moores University

A Systematic Approach to Writing Simple Z Specifications
Allan Norcliffe & Simon Andrews, Sheffield Hallam University

Gender Issues in Computing
Kate O'Dubhcchair & Nicholas Hunte, University of Ulster

Teaching and Learning in Undergraduate Courses in Computing
John O’Kane, University of Ulster, Magee College

Strategies for the Organisation and Assessment of Group Work in the Teaching of Computer Science
Christine Perry, University of the West of England & Neil Davey, University of Hertfordshire

A Pragmatic Pedagogy for Mathematical and Formal Methods in Software Engineering
Michael R Poppleton, Coventry University

A Strategy for the Development and Delivery of Computer Simulations to Aid Learning
Heather Powell, Dominic Palmer-Brown, K A James & V Gross, Nottingham Trent University

Innovation in Software Engineering: Activity Weekends
Mark Ratcliffe, Graham Parker & Clive King, University of Wales, Aberystwyth

Introducing Computer Skills to non-Specialists
Ita Richardson, University of Limerick

Interactive Program Assessment Using SPROUT
Angela Rimmer, John Pardoe & Paul Vickers, Liverpool John Moores University

Software to Assist in the Teaching and Simulation of Database Concurrency Control
Amanda Robins & Tony Stockman, Staffordshire University

Teaching Computer Science on the World Wide Web
Glenn Rowe, University of Dundee
Object-Orientation: Seeing is Believing  
Dermot Shinners-Kennedy, University of Limerick  

Group Work and Computer Supported Collaborative Learning in the Teaching of Systems Analysis and Design  
Douglas Siviter & Peter Linecar, South Bank University  

The Praxis of Teaching Non-specialist Computing Students in a Large Contemporary Business School: An Exploration of Problems and a Proposed Solution  
Jim Snaith, South Bank University  

Visualisation as a Teaching Tool in Computer Architecture  
Jon Spenser & Alastair Railton, Coventry University  

Lithuania: Computer Networking Education  
Jim Strom, Manchester Metropolitan University & Vytautas Reklaitis, Kaunas University of Technology, Lithuania
Growing Pains
Eric Tatham & Carol Vella, Coventry University 336

Cheating in Pascal Programming Assessments with Large Classes
John Traxler, Wolverhampton University 340

Giving Credit for Extramural Courses
D A Walmsley & G Pennicott, University of Reading 346

An Information Systems Case Scenario Delivered Over the World Wide Web
Robert Ward, University of Huddersfield 353

A Comparison of University Entry Qualifications in Computing
Lorraine Warren, Hull College, Peter Adman, University of Hull & Patrick Reedy, Hull College 358

Coping with Plagiarism in Computer Science Teaching Laboratories
Adrian West, University of Manchester 362