TSM Technology for Secondary/College Mathematics



# TSM 2008 RESIDENTIAL WORKSHOP

# Tuesday 8<sup>th</sup> - Thursday 10<sup>th</sup> July at Oundle School, Peterborough

Presented by The iCT Training Centre (Oundle)



CHARTWELL YORKE is proud to be associated with the 2008 Residential TSM Conference as its principal sponsor.

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### **TSM ACCOMMODATION**

**Accommodation** (single rooms) is in five of the Oundle School boarding houses. *Monday arrivals:* New House (Female), Grafton (Male) and St Anthony (Male). *Tuesday arrivals:* New House (Female) and Laundimer 1st Floor (Female), Bramston (Male) and Laundimer Ground Floor (Male). Towels and 'vanity packs' are provided.

**Monday arrivals** should report to Yorke House (33 West Street) by 7pm for the Tutors' Reception, and will be shown to their accommodation after that. Breakfast on Tuesday will be in the 6th Form Club at **9am**.

**Tuesday arrivals** may drop off luggage at the Houses **between 10:00 and 11:00 before the** Welcome Reception and Registration in the GREAT HALL (from 10:30am)

All meals will be taken in the 6th Form Club.

**Evening programme:** it is hoped that all **non-resident delegates** will be able to stay on for dinner and the evening programme.



TSM: Technology for Secondary/College Mathematics

# 7th RESIDENTIAL TSM WORKSHOP

Tuesday 8th – Thursday 10th July 2008 Oundle School, Peterborough

WELCOME to the 2008 International Residential TSM!

The first TSM day conference at Oundle School was in 1994, and there have been regular TSM events since then, with the first 3-day residential course in 2002. As well as locations throughout the UK, there have been recent TSM training events in Madrid, Johannesburg and Brussels and various schools in Australia and the Far East. The next TSM day for ECIS (European Council of International Schools) takes place in Nice on Thursday 20th November 2008.

TSM is now associated with

- the Phillips-Exeter conference on Technology and Mathematics (USA)
- the Technology, Teaching & Learning Mathematics Institute at Knox Grammar School, Sydney (Australia)

These events share the common aim to give mathematics teachers plenty of time to practise skills in the successful use of technology in the classroom.

DOUGLAS BUTLER, Director, iCT Training Centre (Oundle)



# TUESDAY 8th July

- **10:30** WELCOME RECEPTION in the Great Hall Gardens by kind permission Oundle School [inside the Great Hall if wet]
- 10:30 Registration, Great Hall (Margaret Butler and Charlotte Butlin)
- **11:30** Introductory Plenary (Great Hall) Welcome from Douglas Butler (Director, iCT Training Centre) Brief Outlines from the TSM Tutors
- **12:45** Drinks and Lunch (6th Form Club)
- 14:00 WORKSHOPS: Strand A Office Tools in Mathematics
- **16:00** Tea (served in the workshop rooms: IT-Labs, and Great Hall)
- 16:30 WORKSHOPS: Strand B Dynamic Software
- 18:45 Drinks and Supper (6th Form Club)
- 20:15 Using Magic in the Maths Classroom! INFORMAL GATHERING in the Common Room (Milton Road) by ANDREW JEFFREY

Andrew has been a mathematics teacher for 20 years, and a professional magician for 10.

Images from TSM-2007:





# WEDNESDAY 9th July

- 07:00 Swimming Pool open (with lifeguards).
- 08:00 Breakfast (6th Form Club)
- 09:00 WORKSHOPS: Strand A Office Tools in Mathematics
- **11:00** Coffee (Great Hall)
- 11:30 DELEGATES' FORUM (Great Hall) 1st plenary session to exchange ideas, led by MARK McCOURT, Asst. Director (Secondary), NCETM
- 12:30 What's coming up in Autograph? Simon Woodhead
- 12:45 Drinks and Lunch (6th Form Club)

#### 14:00 FREE TIME to look around Oundle ... OR ... **OPEN WORKSHOPS** (First hour with tuition) Advanced Autograph Mike W **IT-1** (2-3pm) IT-3 (2-3pm) Autograph Martin Sidney + Karl IT-2 • Excel (2-3pm) Excel Mike H + David Mod Lang (2-3pm) Geometry Kate + JJ Maths S5 (2-3pm) • CAS (TI-Nspire) Great Hall (2-3pm) Marlene in the Arthur Marshall Room (Great Hall) 2 - 4pm: also:

- The new Hitachi Duo board in the maths classroom
   Michele Conway (Cambridge HItachi)
- 16:00 Tea (served in the workshop rooms: IT-Labs, and Great Hall)
- 16:30 WORKSHOPS: Strand B Dynamic Software
- 18:45 Drinks and Dinner (6th Form Club)
- 20:15 The Mathematics of Stadium Designs INFORMAL GATHERING in the Common Room (Milton Road) by PAUL SHEPHERD, Dept of Architecture and Civil Engineering, University of Bath



# THURSDAY 10th July

- **07:00** Swimming Pool open (with lifeguards).
- **08:00** Breakfast (6th Form Club) Delegates must check out of their rooms by 09:00, but may leave their luggage in the Hallway in their House for collection later in the day.
- **09:00** WORKSHOPS: Strand B Dynamic Software [Note 'B' and 'A' switched]
- 11:00 Coffee (Great Hall)
- **11:30 DELEGATES' FORUM** (Great Hall) 2nd plenary session to exchange ideas, led by **TIM TARRANT**, Head of ICT Team, Training and Development Agency for Schools (TDA).
- 12:30 Closing remarks (Douglas Butler)
- 12:45 Drinks and Lunch (6th Form Club)
- 14:00 WORKSHOPS: Strand A Office Tools in Mathematics
- **16:00** Tea (served in the workshop rooms: IT-Labs only)
- 16:15 Depart

Images from TSM-2007:





# ► WORKSHOP STRAND A: (6 hrs)

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**A1** - *MS Word 2007 and The Internet* [Douglas, + Mike W] in IT-1 (Max 20) Sorting out symbols (Unicode), equations, diagrams in Word; using hyperlinks; importing text, graphics/data from the Web, *Excel* and *Autograph*.



**A2** - *MS Excel (beginners/intermediate)* [Karl, + Simon] in IT-2 (Max 20) How to get started with Excel, creating sequences, graphs and charts, filling down, formulae and text. Simulations. Karl returns to bring his fresh set of ideas from to add a sparkle to your lessons!



### A3 - MS Excel (for Statistics)

[Sidney, + J-J] in IT-3 (Max 20)

*Excel* is a powerful and dynamic tool for investigating, demonstrating and doing mathematics and basic statistics.



### A4 - MS Excel (advanced)

[Mike H and David B] in Mod Lang Lab (Max 20)

This workshop will look at some of the advanced features of Excel and how they can be used to create interactive and dynamic resources for use in the classroom or for independent learning.

We will look at features such as conditional formatting, slider bars, buttons and option boxes, named and dynamic ranges, data validation and customization of the interface as well as including an introduction to the Macro recorder and Visual Basic for Applications. There will be plentiful examples and a chance to work on an idea of your own.



### A5 - Teaching with CAS (Computer Algebra)

[Marlene and Martin] in S5, Mathematics (Max 20)

Marlene will use the TI-Nspire (calcuator and software) to explore various lesson plans which use CAS to teach junior and senior topics.



### A6 - Autograph 3.2 in the Classroom

[Alan, + Mark + Kate] in Arthur Marshall Room, Great Hall (max 30)

Delegates will work through lesson plans using Autograph, in a classroom environment with different technologies available to try: Interactive Whiteboard, Tablet PC, graphics tablet.







# ACKNOWLEDGEMENTS

This conference could not operate without the enormous help and support of many people, especially those listed here who have given their time to create this event at a particularly busy time of year.

#### **TUTORS:**

DAVID BENJAMIN DOUGLAS BUTLER ALAN CATLEY JEAN-JACQUES DAHAN MIKE HADDEN KARL HAYWARD-BRADLEY

KATE MACKRELL MARLENE TORRES-SKOUMAL SIDNEY TYRRELL MIKE WAKEFORD MARTIN WITHINGTON SIMON WOODHEAD Folkestone Academy, Kent iCT Training Centre, Oundle School, Peterborough TyneMath, Newcastle IREM et IAM, Toulouse, France Freelance mathematical consultant, Hereford Oundle School, Peterborough

Freelance mathematical consultant, Canada Vienna International School, Austria Coventry University (Math & Info Sciences) Skagerak International School, Norway Moreton Hall, Shropshire Autograph Development Team

#### SUPPORT:

IT Support: ANDREW JOLLEY Administration of the Summer Lets: SUSIE RABY Catering: JAYNE BRYERS Portering: SANDY SOUTER IT Technicial Support

Bursar's Office Catering Officer Head Porter



#### CERTIFIED AUTOGRAPH TRAINER

It is a pleasure this year to welcome the first batch of delegates from overseas who are attending TSM to gain the qualification of Autograph Certified Trainer. This will equip them to conduct Autograph workshops in their country, and to train other trainers.

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# LIST OF DELEGATES

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Name	TSM	School	Location	Accommodation	A	В
Karen Welander	08-026	Academia Britanica Cuscatleca	El Salvador	New House	3	4
Monsoor Habeeb	08-007	Academic Bridge Program	Doha, Qatar	St Anthony	3	4
Ayman Halime	08-077	Al Ain English Speaking School	UAE	Non-Res	3	4
Mohammad Al-Azah	08-056	Alittihad Model School	Abu Dhabi	St Anthony	6	1
Khaled Hosny		Aly Ibn Aby Taleb Prep. School	Cairo	х	х	х
Julie Dekanski	08-035	Ashville College	Harrogate	New House	3	5
Aaron Pain	08-101	Bexhill 6th Form College	Sussex	Grafton	3	4
Roderick Cannings	08-016	Birmingham LEA	Birmingham	Bramston	6	5
Eszter Szabo	08-071	Budapest Univ of Technology	Hungary	New House	6	6
Christine Dickinson	08-105	Bury College	Bury	New House	4	6
Benoit Bruder	08-085	Calibration (France)	Paris	Grafton	6	1
Don Bosy	08-074	CCS Educational	Canada	B&B	6	1
Sahana Balasingham	08-024	Coombe Boys School	Kingston	New House	3	2
Rochelle Lloyd	08-023	Corfe Hills School	Dorset	New House	6	2
Claudia Beattie	08-068	Court Moor School, (PGCE)	Fleet	Laundimer	3	5
Manish Bamrolia	08-091	Coventry Univ. (PGCE-NCETM)	Leicester	Laundimer	5	3
Elizabeth Tait	08-107	Crawford College La Lucia	South Africa	Laundimer	1	6
Marc Dancer	08-051	Deerfield Academy	MASS, USA	St Anthony	4	4
Farzana Aslam	08-034	Dept of Mathatical Sciences	Coventry University	New House	5	5
Ewan Russell	08-033	Dept of Mathatical Sciences	Coventry University	St Anthony	5	2
Hassan Lakiss	08-038	Dubai College	UAE	Talbot Hotel	2	4
Alexandra Lowe	08-012	East Riding College	Bridlington	New House	5	2
Olof Dahl	08-086	Elof Lindälvs Gymnasium	Sweden	Grafton	6	1
Kathryn Wood	08-001	Epsom Girls Grammar School	New Zealand	New House	6	3
Maria Joao Peres	08-009	Escola Sec. de Aguas Santas	Rio Tinto, Portugal		6	6
Raul Aparício Gonçalves		Escola Secundária de Ermesinde	Portugal	Grafton	6	1
Charlie Kingman	08-088	Exeter University (PGCE)	Exeter	Bramston	3	6
Phil Kerry	08-010	Finham Park School	Coventry	Bramston	4 3	6 1
Bryan Landmann	08-008	Franconian International School	Germany	St Anthony	3	1
Peter Naylor	08-039	Gateshead College	Gateshead	St Anthony	3	6
Magdi Abdelmalk Kelada	08-100	Guhina Experimental for Language	Egypt	Grafton	6	5
Edson Mayo	08-104	Hamond's High School	Norfolk	Laundimer	1	4
Janet Stanley	08-066	Henley College	Coventry	The Ship	3	6
Cara Morgan	08-036	Herschel Grammar School	London	New House	4	6

Workshops



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Name	TSM	School	Location	Accommodation	A	В
Carolyn Kisby	08-052	Highfield School	Letchworth	New House	5	1
Irina Konovalova	08-080	Institute of New Technologies	Moscow	New House	6	3
Sonya Traktueva	08-081	Institute of New Technologies	Moscow	New House	6	1
Tim Garry	08-022x	International School of Aberdeen	Scotland	х	х	х
Damien Butters	08-029	International School of Moscow	Russia	B&B	3	2
Dana Ungur	08-059	International School of The Hague	The Netherlands	Laundimer	5	4
Martin McMulkin	08-011	International School of Tianjin	China	Bramston	1	3
Sandy Cooke	08-013	Isebrook School	Kettering	Non-Res	6	1
Nabila Elahi	08-048	Islamic Girls School	London	New House	2	6
Jack Pattinson	08-109	James Allen's Girls' School	London	Laundimer	6	4
Martin Jones	08-098	King Edward V College	Stourbridge	Laundimer	1	6
Harry Smith	08-099	King John School	Essex	Laundimer	1	6
Julie Farnes	08-067	Kip McGrath	Yorkshire	Laundimer	6	3
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Peter Reynolds	08-025	Lambeth College	London	Bramston	3	6
Ralph Steer	08-063	Leeds Trinity and All Saints (PGCE)	Yorkshire	Bramston	4	2
Neil Murray	08-073	Leicester Grammar School	Leicester	Non-Res	4	5
Jan Parry	08-004	Leicester Local Authority	Leicester	New House	2	2
Rubaiat Hamid	08-041	Loxford School of Science & Tech	llford	Bramston	2	2
Marilyn Goudge	08-072x	Luton Sixth Form College	Luton	х	х	х
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Mark Baddeley	08-006	Magdelen College School	Brackley	Bramston	3	2
Julian Wiseman	08-079	Maths Consultancy/Tutoring	Chatham	Bramston	1	3
Bill McAteer	08-046	Mill Hill County High School	London	Bramston	2	6
Sue Hutchin	08-045	Mountfitchet Maths/Comp College	Stansted	New House	6	5
Che Azura Bt Che An	08-076	Mrsm Pdrm Kulim	Malaysia	New House	6	1
Rob Atkins	08-061	Northampton College	Northampton	Bramston	3	1
Katy Wright	08-062	Northampton College	Northampton	Laundimer	1	6
Gill Gardiner	08-027	Old Palace School	Croydon	New House	2	1
Alister Blair	08-027	Otumbetai College	New Zealand	St Anthony	5	6
Robin Banerjee	08-002	Oundle School	Peterborough	B&B	4	6
Maddy Nicholls	08-040	Oxford University (PGCE)	Oxford	Laundimer	4 5	2
Maduy Micholis	00-111	Child Oniversity (FOCE)		Laununner	0	2
Richard Capel	08-093	Parkstone Grammar School	Poole	Laundimer	2	2
Margaret Dungate	08-095	Parkstone Grammar School	Poole	New House	1	6

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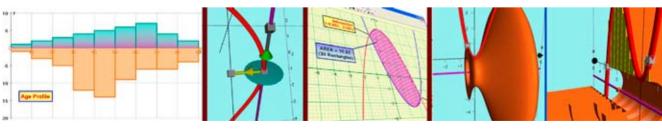
Name	ne TSM School		Location	Wo Accommodation		orkshops A B	
Di Hardwick	08-094	Parkstone Grammar School	Poole	New House	1	2	
Sheila Lacey	08-053	Penglais School	Aberystwyth	New House	2	2	
John Arthur	08-084	Perins School (PGCE)	Winchester	Grafton	5	2	
Simon Dakeyne	08-087	Peter Symonds College	Winchester	Bramston	5	3	
Ashley Pape	08-020	Poole Grammar School	Dorset	St Anthony	4	5	
Pete Rowat	08-021	Poole Grammar School	Dorset	St Anthony	6	3	
Sam Buckle	08-047	Queensmead School	Middlesex	New House	4	1	
James Eaton	08-050	Quintin Kynaston School	London	Bramston	6	5	
Paul Laridon	08-031	Radmaste Centre Wits University	South Africa	Ship Inn	1	6	
Craig Barton	08-032	Range High School	Formby	St Anthony	2	4	
Paul Langley	08-058	Retired/Self Employed Tutor	Hatfield	Grafton	1	2	
Ken Wilshire	08-108	Roehampton University (PGCE)	London	Grafton	1	5	
Anna Tupko	08-069	Rotterdam International School	The Netherlands	New House	4	2	
Mark Hennings	08-028	Rugby School	Rugby	Bramston	5	2	
Jon Hind	08-043	Rugby School	Rugby	Bramston	5 2	6 1	
Pippa Hopkins	08-044	Rugby School	Rugby	New House	2	1	
Arnold Lee	08-089	S.T.F.A.Cheng Yu Tung Sec Sch	Hong Kong	Grafton	6	1	
Rabia Tariq Qureshi	08-030	Scarsdale International School	Pakistan	New House	3	3	
Andrey Pantuev	08-082	School of Distance Education (INT)	Moscow	Grafton	6	4	
Melody James	08-049	Sixth Form College	Farnborough	New House	5	3	
Travis Steele	08-103	South Mountain Community Coll	Phoenix, USA	Grafton	6	4	
Cordelia Myers	08-078	St Bedes Inter Church School	Cambridge	Laundimer	4	5	
Christine Burrell	08-060	St Benedicts Catholic School	Bury St Edmunds	Laundimer	1	2	
Helen Crosbie	08-017	St Catherine's School	Guildford	Non-Res	3	1	
Julie Bolter	08-054	St Christopher School	Letchworth	Laundimer	4	3	
Kirsty Wilson		St Edward's College	Liverpool	X	X	x	
Per Ingebrigt Karbø	08-106	Stryn Vidaregåande School	Norway	Laundimer	3	3	
Alan Daykin	08-019	Taipei European School	Taiwan	Bramston	4	3	
David Cotterell	08-112	Teacher	Evesham	Grafton	4	4	
Betty Temmer	08-075	Teacher	Canada	B&B	6	1	
Oliver Bowles	08-014	The Int School of Toulouse	France	Bramston	4	4	
Pippa Taylor	08-102	The Leys School	Cambridge	Laundimer	1	6	
Esther Grosskopf	08-097	The Royal School	Haselmere	Laundimer	2	3	
Hitoshi Nishizawa	08-037	Toyota National College of Tech	Japan	St Anthony	4	4	
Jozsef Csicsman	08-070	Uj Calculus Bt	Hungary	Grafton	6	1	
Ida Karnasih	08-110	Universitas Negeri Medan	Indonesia	New House	6	4	



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Name	TSM	School	Location	Accommodation	A	в
Innocent Tasara	08-064	University of Leeds (PGCE)	Yorkshire	Bramston	2	3
Dipak Chotai	08-096	University of Leicester (PGCE)	Leicester	Grafton	4	1
Anton van Santen	08-065	University of Oxford (PGCE)	Oxon	Bramston	6	5
Chris Graham	08-090	Warwick Univ. (PGCE-NCETM)	Leicester	Laundimer	5	3
Bruce Roth	08-042	Wellington College	Crowthorne	Bramston	6	5
Joy Wemms	08-003	Wemms Matghs Unlimited	Epsom	New House	5	3
Altaf-ur Rehman	08-015	Westminster School & College	Pakistan	St Anthony	2	4
Cathy Grove	08-083	Wollaston School	Wellingborough	Non-Res	4	4
Steve Dobson	08-018	Woodhouse College	London	Bramston	4	4
Shahjahan Kadir	08-055	Woodhouse College	London	Bramston	4	3

### Total: 134 delegates and tutors, 41 from abroad (from 21 countries)

#### Images from Autograph 3:





Accomm

# LIST OF TUTORS and SUPPORT STAFF, VISITORS

#### Tutors

					///////////////////////////////////////
Douglas Butler Karl Hayward-Bradley Sidney Tyrrell Mike Hadden Marlene Torres-Skoumal Simon Woodhead Alan Catley Martin Withington Mike Wakeford Jean-Jacques Dahan Kate Mackrell David Benjamin <b>Evening Tutors</b>	Tutor: <b>A1-B1</b> Tutor: <b>A2-</b> B1 Tutor: <b>A3-</b> B6 Tutor: <b>A4-B2</b> Tutor: <b>A5-B4</b> Tutor: <b>A2-B3</b> Tutor: <b>A6-B2</b> Tutor: <b>A5-B3</b> Tutor: <b>A1-B4</b> Tutor: <b>A3-B5</b> Tutor: <b>A6-B5</b> Tutor: <b>A4-B6</b>	iCT Training Centre Oundle School Coventry University Freelance Consultant Vienna International School Autograph Development Team TyneMath Moreton Hall Skagerak International School Inst. Math. Research Queens University, Kingston Folkestone Academy		Oundle Peterborough Warwickshire Hereford <b>Austria</b> Oundle Tyne and Wear Shropshire <b>Norway</b> <b>France</b> <b>Canada</b> Kent	Non Res Non Res Ship Inn Ship Inn B&B Yorke House Ship Inn Ship Inn Ship Inn Ship Inn Ship Inn Ship Inn
Andrew Jeffrey	Tue Eve 8:15	Math	ematical Magician	England	Ship Inn
Paul Shepherd	Wed Eve 8:15		of Architecture/Civil Eng	University of Bath	Ship Inn
Delegates' Forum leaders		Dopt		eniversity of Baar	omp mit
Mark McCourt	Wed Forum 11:	30	Asst Dir (Secondary) NC		
Tim Tarrant	Thu Forum 11:3		Head ICT Team. TDA		
Support staff					
Michele Conway	Tutor Weds	Camb	vridae Hitachi	Cambridge	Non Res
Stephen Whipp	Tech Support	Cambridge Hitachi		Liverpool	Grafton
Mark Hatsell	Autograph	Autograph Autograph		Sudborough	Non Res
Andrew Jolley	IT Support		le School	Peterborough	Non Res
Visitors		e unu		. etc. etc. eugn	
Sue Forsythe	Visitor Weds	Math	s Education Dept	Leicester University	Non Res
Trevor Starbuck	Visitor Weds		Author	Leicester	Non Res
	VISILUI VVEUS	OUF.	Aution	LEIGESIEI	110111165

#### Images from TSM-2007:





## **INTRANET RESOURCES for the TSM Conference**



For all delegates, the user name is: conf1 and the password is: pass1

Click here to reveal a directory that is available to all conference delegates. This is a shared area, so if you are saving files there, please create your own folder.

There is a short-cut link to the "Read-only" section, where there are resources for each of the workshops in folders: TSM A-1 Word/Int TSM B-1 Autograph-a

TSM A-1 Word/Int TSM A-2 Excel-a TSM A-3 Excel-b TSM A-4 Excel-c TSM A-5 CAS TSM A-6 IWB/Tablet TSM B-1 Autograph-a TSM B-2 Autograph-b TSM B-3 Autograph-c TSM B-4 Autograph-d TSM B-5 Geometry TSM B-6 IWB/Tablet



Click here: (you may need to put your username and p/w in again). This takes you to the Oundle School INTRANET home page. You can enter any URL here to surf the web. There is also a link here to the TSM Conference Page.

From the conference page there are links to the TSM Mathematics Web Links page www.tsm-resources.com

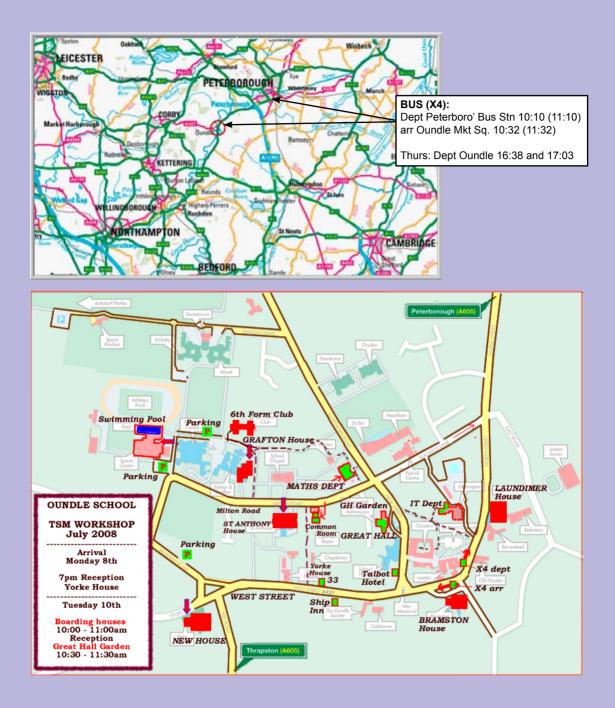
and other URLs associated with the workshops and the evening presentations.

### The 2008 TSM RESOURCES CD

The plan is to expand the TSM Resources CD again with further material that emerges from these workshops, and republish for wide distribution in the Autumn.

The 2007 TSM Resources CD was distributed to ATM and MA members, and to delegates at a number of UK and international conferences throughout the year.

If you are interested in contributing material to the 2008 CD, please make your ideas known to Douglas Butler during the conference.



### Presented by the iCT Training Centre (Oundle) PO Box 46, Oundle, Peterborough PE8 4JX, UK

Email: circleline@argonet.co.uk www.tsm-resources.com