

# Maths Counts 2016

For office use ONLY			
Date Received		Registration Number	



## Registration Form

### BLOCK CAPITALS ONLY- ONE APPLICATION PER PERSON

First Name	
Surname	
School	
School Roll No	
Email	

Please tick below where appropriate

Registration	Yes	No	Registration	Yes	No
I will attend on Friday			I will attend on Saturday		

**Saturday, 22nd April 2016:** Please fill in the **5 parallel sessions** you wish to attend by entering the **session number**, (**see table in centre pages**) for **each time slot** below. We will endeavour to meet your 1st choice for each time slot but there will be limited availability per session and therefore priority will be given to those who register early.  
**3 choices must be notified in all cases.** If a 2nd and 3rd choice is not specified below, we will choose on your behalf.

Time	1st choice	2nd choice	3rd choice
11.30 - 12.15			
12.15 - 13.00			
<b>LUNCH</b>			
14.00 - 14.45			
14.45 - 15.30			
15.30 - 16.15			

### CONFERENCE FEE - PAYMENT METHODS

a. A cheque for € 35.00 made payable to Project Maths is enclosed with this form ☐

b. Bank Transfer of € 35.00 transferred to:

Account Name: **Project Maths Current Account**

BIC (Bank Identifier Code):

BOFIE2D

IBAN:

IE09BOFI900738 95078651

Bank Name:

Bank of Ireland

Bank Address:

Collinstown Cross, Dublin 17

### BANK TRANSFER REFERENCE

NAME/COMPANY Reference used in bank transfer

**We CANNOT identify bank transfers without a REFERENCE**

### COMPLETED REGISTRATION FORMS TO BE SUBMITTED BY POST OR EMAIL TO

Email: [grainneh@ecdumcondra.ie](mailto:grainneh@ecdumcondra.ie) ; [racheld@ecdumcondra.ie](mailto:racheld@ecdumcondra.ie)

Post: Administrator, Project Maths Office, Drumcondra Education Centre, Drumcondra, Dublin 9

Sponsored by



**22-23 April 2016**

O'Brien Centre for Science  
UCD, Belfield, Dublin 4



#MC2016



# Maths Counts 2016

**3RD**  
ANNUAL  
CONFERENCE

A national  
Conference  
for all post-primary  
mathematics  
teachers

See three  
problem-solving  
lessons taught by  
an internationally  
acclaimed expert

Meet  
fellow teachers  
involved in the  
*Reflections on  
Practice*  
initiative

Take home  
a digital pack of  
problem-solving  
lessons developed  
by Irish teachers

Listen to  
Irish teachers  
speak of their  
success in teaching  
problem-solving  
lessons

Register by  
23 March



# Reflections on Practice

## Structured Problem Solving in Irish Classrooms

The Project Maths Development Team is pleased to announce that a Mathematics Conference will be held this year in University College Dublin. A wide range of presentations based on problem solving lessons will be offered by teachers. These problem-solving lessons arise from teachers' participation nationally in *Reflections on Practice*. This initiative captures and promotes individual and school group collaborative planning of a research lesson plan, classroom observation of how the lesson plan unfolds and post-lesson discussion on students' problem solving strategies and engagement in the classroom. The Conference aims to disseminate teachers' problem solving strategies and real classroom experiences focusing on students' learning. It will be of particular interest to post-primary mathematics teachers and third level personnel involved in initial teacher education. This is a must-attend conference with Professor Akihiko Takahashi teaching a series of three live problem-solving lessons to a class of post-primary students.

**Register now to join us in UCD on 22nd and 23rd April**

### Keynote Speaker

Mathematics educator **Dr. Akihiko Takahashi** is an Associate Professor of mathematics education at DePaul University in the United States and a Specially-Appointed Professor at Tokyo Gakugei University in Tokyo, Japan. He has served as Visiting Professor at National Institute of Education in Singapore, National Science University Malaysia, and Khon Kaen University in Thailand. At DePaul University he lectures in mathematics teaching and learning, and mathematics for prospective teachers and practicing teachers. He was a teacher in Japan before becoming an educator of mathematics teachers. During his teaching career, he was nationally active in mathematics lesson study in Japan. He received his Ph.D. from the University of Illinois at Urbana-Champaign; his dissertation research focused on internet use in mathematics education. He has published over 45 journal articles and book chapters and given over 50 presentations and keynotes at conferences and workshops in Canada, Chile, Indonesia, Japan, Korea, Malawi, Malaysia, Mexico, Philippines, Qatar, Singapore, Thailand, Uganda, the United Kingdom, and the United States.



### Sponsored by



### Friday 22nd April

18.00 Registration

18.30 Welcome by Dr. Anne Brosnan and Official Opening by TBC

19.15 Keynote address by Dr. Akihiko Takahashi

Dr. Takahashi will teach a problem-solving lesson to a group of students live in the George Moore Auditorium

21.00 - 22.00 Wine & Canapé Reception

### Saturday 23rd April

09.00 - 09.30 Registration

09.30 Series of live problem-solving lessons to be continued by Dr. Takahashi

11.30 - 16.15 Presentations by teachers who have been engaged in *Reflections on Practice* nationally throughout the year on various topics.

**CLOSING DATE FOR REGISTRATION - Wednesday, March 23rd 2016**

### Questions and Answers

#### 1. Who is the Conference for?

It is for every teacher of Mathematics at post-primary level and personnel engaged in initial teacher education.

#### 2. Who is organising it?

The Conference is being organised by the Project Maths Development Team, [www.projectmaths.ie](http://www.projectmaths.ie)

#### 3. Do I have to attend on Friday AND Saturday?

No, you can attend on Friday only, or Saturday only, or both days.

#### 4. How much does the Conference cost?

The Conference costs €35 per person. This covers every aspect of the Conference, including wine reception on Friday and hot lunch on Saturday but **you must indicate on the registration form if you will be present for lunch.**

#### 5. How can I register?

A Registration Form (back page) must be completed and returned to this office ASAP. Photocopies of the form can be used. Or alternatively, you can download a copy from the website [www.projectmaths.ie](http://www.projectmaths.ie). **You will have an opportunity to attend 5 of 25 parallel sessions.** Every effort will be made to give you your 1st choices, however priority will be given to those who register early.

#### 6. How will I know that I am registered?

An email will be sent to you confirming receipt of your registration form. **Please make sure to provide an email address on the registration form.**

#### 7. Can I register on the day?

No.

#### 8. Will travel & subsistence expenses be paid? No.

#### 9. What about accommodation?

You are responsible for securing and paying for your own accommodation.

#### 10. Any other information?

There will be an exhibition of stands at the Conference from companies/organisations that relate to Mathematics and to education.





**Thank you**  
To the students of Marian College, Ballsbridge, their principal Paul Meaney and teacher Alison Bird for participating in the live problem-solving lessons.

**Don't Miss!**  
A unique opportunity to win a set of post-primary mathematics books worth €350

**Directions to UCD**  
Belfield, Dublin 4  
<http://ucd.hittheroad.ie>  
shows you how to get to and from the UCD Campus



## Schools involved in Reflections on Practice

1. St. Michael's Secondary School, Finglas
2. Chanel College, Coolock Village, Malahide Road
3. St. Fintan's High School, Sutton
4. Fingal Adult & Further Education Ctr, Balbriggan
5. Deansrath Community College, Clondalkin
6. Coláiste Chú Chulainn, Dundalk
7. St. Fintina's Post Primary School, Enfield
8. St. Oliver's Community College, Drogheda
9. Drogheda Grammar School, Drogheda
10. Coláiste Bríde, Enniscorthy
11. Presentation College, Currylea, Tuam
12. Coláiste Cholmáin, Claremorris
13. Seamount College, Kinvara
14. Coláiste Iognáid S.J., Galway
15. Gairmscoil Einne, Inis Mór - Oileann Arann
16. St. Michael's College, Listowel
17. Coláiste Dún Iascaigh , Cashel Road, Cahir
18. Scoil Aireagail, Ballyhale, Kilkenny
19. Ramsgrange Community School, New Ross
20. Ardscoil Na Mara, Tramore
21. Rockwell College, Cashel
22. Christian Brothers School, Carrick On Suir
23. St. Mark's Community School, Tallaght
24. Coláiste Bhríde, Clondalkin
25. John Scottus Secondary School, Donnybrook
26. Killinarden Community School, Tallaght
27. Holy Family Secondary School, Newbridge
28. Lucan Community College
29. Midleton College, Cork
30. St. Aloysius School, Cork
31. Our Lady's Secondary School, Castleblayney
32. Largy College, Clones
33. St. Tiernan's College, Crossmolina
34. Coláiste Mhuire, Tuar Mhic Éadaigh
35. St. Louis Secondary School, Kiltimagh
36. St. Leo's College, Carlow
37. St. Mary's Academy C.B.S., Carlow
38. Carndonagh Community School, Lifford
39. Errigal College, Letterkenny
40. Deelee College, Raphoe
41. Loreto Community School, Milford
42. Pipers Hill College, Naas
43. Rathdown School, Glenageary, Dun Laoghaire
44. Dunshaughlin Community School
45. St. Flannan's College, Ennis
46. Glenstal Abbey School, Limerick
47. St. John Bosco Community College, Clare
48. Kilrush Community School, Clare
49. Children's Ark School, U.L. Hospital

- Maths Counts 2016 offers you a unique and engaging opportunity to see Professor Takahashi teach problem solving lessons live**
- At Maths Counts you will receive problem-solving lesson plans you won't want to miss**
- A prime location to meet up with colleagues**
- Discover how you can get involved in Reflections on Practice next year**
- Visit the exhibition area and learn about Classroom Resources**
- Receive a complete pack of digital resources for presentations you attend**

# Saturday Programme

Please see Presentations below and indicate your preference on the registration form (SEE BACK PAGE)  
Every effort will be made to give you your 1st choices, however priority will be given to those who register early.  
You must indicate 3 choices for each time slot

9.00 - 9.30: Registration					
9.30 - 11.00: A Continuation of the Live Series Conducted by Professor Takahashi					
11.00 - 11.30: Tea/Coffee					
PRESENTATIONS BELOW					
TIME					
11.30 - 12.15	Introducing algebra with Snooker 1	The relationship between the volume of the cylinder and its radius 2	Representing Simultaneous Equations Graphically 3	Exploration of Properties of Basic Geometric Shapes 4	Problem Solving leading to Proof 5
12.15 - 13.00	Deepening the Understanding of the Properties of Parallelograms 6	A Quick Way to Add Numbers 7	To Be or not To Be: Congruent Triangles 8	Discovery of the equation of circle with centre (o,o) 9	Patterns as a Tool to Develop Algebraic Reasoning 10
13.00 - 14.00 - Lunch					
14.00 - 14.45	Introducing Theorem 19 11	A fixed perimeter does not imply a fixed area 12	An investigation to maximise the capacity of a triangular irrigation channel by varying the channel depth 13	Polly's Sum Selfie 14	Many Paths from Word Problems to Linear equations 15
14.45 - 15.30	Understanding & Appreciating Axiom 4 and its Value when Solving Geometrical Problems 16	Using corresponding sides in similar triangles to find missing lengths 17	Re-Thinking Teaching Patterns 18	How Many People will be Seated at 10 Tables? A Linear Patterns Problem 19	Using Algebraic Reasoning to Develop the Distance Formula 20
15.30 - 16.15	Introduction to Solving Linear Equations 21	Geometry: Types of triangles 22	Finding the minimum combined area possible by sizing two Rectangles 23	Problem Solving in Geometry 24	The Doghouse Problem 25