

# Proactive PD

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Volume 1, Issue 1

## Education - Training - Technology

# Winter Quarterly

## Launch of Quarterly Newsletter

This issue mostly focuses on:

### Robotics

due to the high level of activity leading up to ROBOCUP JUNIOR in July/August/Sept

Welcome to the launch of the first ProactivePD quarterly.

Each quarter, a newsletter will be produced by Proactive PD which is designed to inform all of upcoming workshops, latest information, tips and advice.

It is designed to compliment workshops run by Proactive PD and will initially focus on Robotics, PowerPoint and Interactive Whiteboard information.

Term 2 will see fewer workshops as I concentrate on school visits, trips to Launceston and RoboCup at Regional, State and National level. However there will be a number of workshop covering all areas in Term 3.

Enjoy the first issue,

Cheers

## Chris

## Moore Ed - Robotics Update

This year Proactive PD has linked with Moore Educational to ensure support and resourcing for Robotics Education and Professional Development in Tasmania is the equal (if not , the best) of any in Australia.

Access to new NXT robots at all Proactive PD workshops

and ongoing , in-school support are a feature of this partnership.

Moore Ed, along with Proactive PD, is committed to backing the introduction of Robotics programs in Tasmanian schools and ensuring adequate training for existing schools wishing to upgrade Robotics

software, hardware or the skills of teachers in these areas.

Whilst Proactive PD can definitely advise on the setup of Robotics programs and Purchasing options, ordering can be done directly with Moore Ed on 1800 684 068—Ask for Libby or Anita.

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### Special points of interest:

- Next Robotics Workshop - 21st August - Launceston Adult education.
- Term 3 PowerPoint workshops will be held in Hobart and Launceston.
- Chris (Co-ordinator of PPD), along with Rob Torok, will be presenting at the Aust. Maths Teachers Conference in July.





## NXT or RCX?

For the past year at every Robotics workshop I have run this question invariable comes up - and with good reason. LEGO are in the process of phasing out the very successful RCX brick as it introduces the exciting new NXT brick. Support (from LEGO) for the RCX will still occur into 2009 and recent sales for the RCX are still strong, despite no reduction in pricing.

Here is my spin on things. If you are starting a new Robotics program or club at your school, it is best to go with NXT and the accompanying

NXT software. If you already have a few RCX kits at school and wish to build up a class set, I would lean towards more RCX kits (and maybe one NXT kit for the teacher!) - In this case it would be advisable to upgrade your software to Robolab 2.9.

I strongly believe there will be ample resources and support for RCX for a number of years to come, simply based on sheer volume of numbers out there, not to mention some construction and programming benefits that have been lost with the NXT.

NXT is clearly getting a big push from LEGO and has certainly opened new options for Robotics building and control. The real benefits, to teachers and students of this platform, will become clearer over the coming years as more resourcing and literature appear on the scene.

Proactive PD is happy to further advise any school who is wanting help with making the decision - NXT or RCX.



### Robolab Tip

You are probably aware (and make good use of) the SPACE bar in switching between the WIRE TOOL and POINTER.

Try using the TAB key - see what happens!



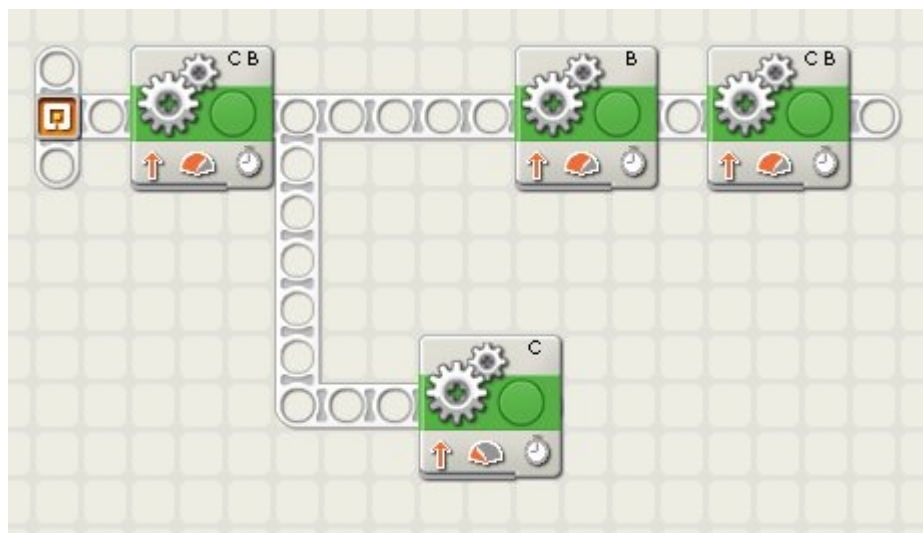
### NXT Software Tip

To make two motors go at different speeds - for example, if you wish to take a wide corner or spin each in opposite directions, try multi tasking

You start a new sequence beam anywhere in your program Do this by holding down the Shift key and moving your mouse pointer straight up or down from a position on the main sequence beam.

In the program on the right, Motor C and B are on for 1 second at the same speed, then Motor C runs at 25% power for 1 second as Motor B runs at 75% for 1 second, before both motors run for a further second at the same speed.

Of course this type of multitasking can be used to run many different procedures at the one time.





## RoboCup Junior Australia News New Rescue Mat Available

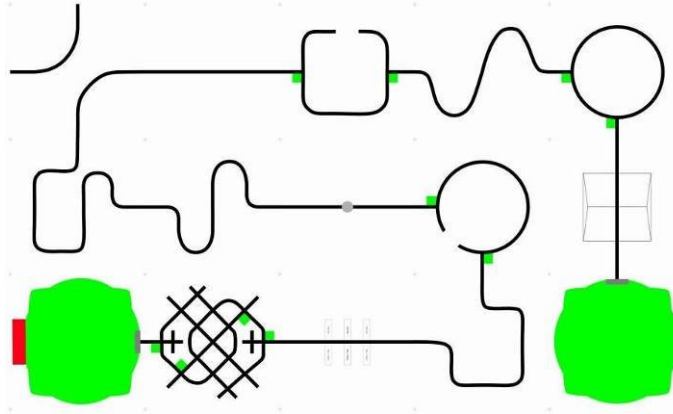
The new **RoboCup Rescue Mat** is available from MTA.

Ring MTA on 1800 251 497

Quote code : ROB009 price is \$99.90 + GST + freight.

They are only making a run of 200.

I highly recommend that you purchase one of these even if you are not going in RoboCup Jnr RESCUE this year as they will run out and they are also an excellent teaching resources.



Soccer Balls and other RoboCup Soccer accessories are available from Wiltronics - [www.wiltronics.com.au](http://www.wiltronics.com.au)

**Physics by Design** (by Barbara Bratzel) and **Engineering with Lego Bricks** (by Eric Wang).

Both excellent books if you are using Robolab, are now available at Moore Ed - 1800 648 068

\*\*\* NXT base kits - \$425 - from Moore Ed - includes a free battery charger \*\*\*

## Lab Tech Conference photos

The following photos were taken during Robotics workshops from the recent Tasmanian Laboratory Technicians conference held during the June school holidays in Launceston.



## RoboCup Junior Australia 2007 Dates:

A RoboCup Junior **Launceston Regional** will be held at the University of Tasmania, Newnham, 14 July 2007.

The RoboCup Junior **Tasmania 2007 State Finals** will be held at the University of Tasmania, Sandy Bay, 3-4 August 2007.

The **Australian Open** will be on the Gold Coast, 1-2 September 2007.



New Robotics Tasmania web (which will shortly have registration

details to the above events) is [www.roboticstasmania.com.au](http://www.roboticstasmania.com.au)

# Backdated Certificates of Completion

I have just started issuing certificates of completion for all Proactive PD courses (starting with the Intro to robotics courses). If you have attended any of the following full day courses:

- Intro to robotics
- NeXT Step Robotics
- PowerPoint for Teachers
- Dynamic and Interactive Lesson Presentation

...and you would like a backdated Certificate of Completion please email Proactive PD ([proactivepd@aapt.net.au](mailto:proactivepd@aapt.net.au)).



## Robotics and PowerPoint Links added to Website

Links for the above courses can be accessed by all (no password required) from the Proactive PD website. (If you would like the password for accessing PowerPoints from the workshop you attended please email)

## Spring Quarterly

The Spring issue will have information from:

- The National Interactive Whiteboard Conference, Gold Coast, August
- Robocup Junior Australia Championships, Gold Coast, September
- ... and also Term 3 workshop dates.

## PROACTIVE PD

Education Training Technology

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**Proactive PD** delivers training for Teachers in Curriculum and Information Technology. Emphasis is placed on integrating technology into presentation delivery and the wider curriculum.

Courses to date include:

- Intro to Robotics
- NeXT Step Robotics
- PowerPoint for Teachers
- Interactive Whiteboards