TASK CENTRE PROJECT

CONSULTANTS' NEWSLETTER

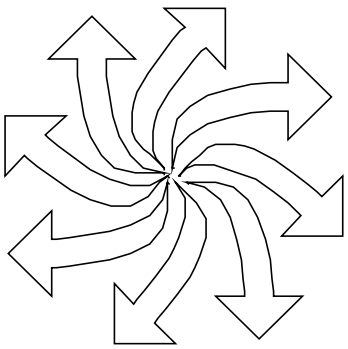
NO. 12 JULY 1999

NEW WEB SITE: http://sunrise.eng.monash.edu.au/mav/PSTC/index.html

Surprise! It has been a long time indeed since the last consultants' newsletter, which was November 1997. I had hoped to produce these six monthly, so now you know that my resolve is just a little rubbery! Hopefully the news this edition brings will be worth the wait. Hopefully too none of you has felt disadvantaged by the delay, or wondered if the project is still running.

Networking

If you are also a member of the Problem Solving Task Centre Network, co-ordinated by Michael Richards, which we encourage, you *would* have received project updates six monthly through that source. Michael is far more disciplined than I. What's more, he sends me email reminding me to write, so it gets done. We use the PSTC Network Newsletter to update clients, which is why we suggest you encourage clients to belong. I have included a Welcome/ Network page which has all the subscription details as an enclosure with this edition.



Networking On The Web

The most up to date and certainly the most extensive information about task centres can be found on the PSTC web site. Andy Wain, the full time teacher who manages this site has recently given it a marvellous face lift. The site has also shifted servers to a new address as shown above.

Moving Right Along

Shifting is also the news in other areas. I have shifted my home/office to:

8 Greenbank Drive, Mooroolbark, 3138

but the telephone and fax remain the same (see the end of this newsletter).

Charles is also shifting, but in his case it is into retirement mode. It is far too large a jump to cease activity altogether and, fortunately for mathematics education, he is not doing that. He will remain a mentor to the project. However, from July 1st, he is taking on less work, therefore any queries from now on would be better directed through Sue Davis or myself.

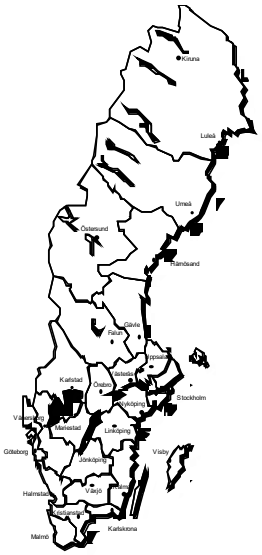
Charles is unquestionably the energy source which has nurtured this project (and so many other mathematics education initiatives) to its current position of respect. It is his unending conversation with teachers to determine how we can best help them improve mathematics learning outcomes which has produced the professional development strategies and materials that so many schools are finding useful.

Charles provided me with the opportunity to grow with this project and has now arranged that I take over his broader Curriculum Corporation work as well.

I know he wouldn't want public ceremony to mark his decision, but on behalf of the uncountable number of teachers he has supported over decades I must record here a simple thanks. The world of mathematics education is infinitely richer because of his finesse, and we are thankful that there will still be some access to his expertise.

You may wish to contact Charles yourself to express your personal thoughts.

Sweden Moves On Too



Swedish teachers are continuing to become more involved in the Task Centre Project. They are building a professional development team headed by Ulla Öberg, creating a web site for themselves, adding to their networking with a newsletter prepared by Per Berggren and resourcing an ever increasing number of schools with Task Centre materials.

This year too instead of inviting me to lead sessions for their annual summer course, the PD team decided to lead the sessions themselves. I am always delighted when I lose a job because teachers decide they can now do it for themselves. (But I did miss the long summer evenings and the new potatoes and strawberries!)

Swedish Tour

Part of the Swedish impetus for deciding to do it for themselves was a visit made by a couple of key teacher members of their mathematics association in October last. We were able to visit a number of schools and at each we picked up a different idea of how the task centre concept was being used. For example:

- At Chandler High School, the tasks are used on a regular basis in a Task Centre room for Years 7 & 8. There is no attempt to integrate the use of the tasks with the curriculum in the remainder of the week because the deliberate decision is that the TC room will be used to keep the interest in mathematics as high as possible in these years.
  However, in Years 9 & 10 the tasks are used as the basis of whole class lessons to introduce, extend and reinforce topics.
- At Mordialloc-Chelsea Secondary College, Michael Richards uses a 'Task Centre in a Box' concept. His approach is to use the tasks at least fortnightly for the specific purpose of focusing on problem solving skills. He has a fixed set of 30 or so tasks for each year level, which he keeps in press seal bags in a box. They are extremely easy to transport to whichever room is timetabled and provide a self-contained task centre resource. Michael has worked this way for over a decade and much of the wisdom he holds is shared in his new book which has been written in response to the questions from his many visitors over the years.
  You can access information about his book on the PSTC web site.
- At Mt. Eliza Secondary college the team is well into writing the tasks into every topic in the curriculum. Year 7 is done and in review. Year 8 is on the way.

Across Different Water

The INISSS project, funded by the Commonwealth government, has been working over almost two years to improve numeracy outcomes for indigenous secondary students. The schools, project administration and project evaluator are delighted with the results to date. We are delighted that their extensive and well structured PD program has been built around task centre materials and principles. They began by exploring the Queensland kit for Aboriginal students and have grown into using Task Centre Computer Lessons and Points Of View, our Mixed Media unit. They are finding a change in outcomes for all students.

The project administration has also received separate funding for a project titled Changing Places to support primary schools with Aboriginal students. The thrust of this is an experiment to improve outcomes in literacy and numeracy by involving the community. I was fortunate to be asked to provide leadership for one of their recent two day sessions. The participants were teachers and parents in about equal proportions. The resource they chose as the focus of the sessions was the Library Kit for Home Lending. Teachers and parents (and yours truly) had a marvellous time getting to know the resource and planning how they would use it to encourage more family involvement in maths 'around the kitchen table'. Vicky Nicholson, the project leader, was also wise enough to provide each school with a set of 30 tasks from the collection so that the way of working which would develop at home would be consistent with that at school.

At afternoon tea on the second day, one parent commented to me after about three hours investigating Doctor Dart:

> *I didn't want to stop. For the first time in my life I could see why algebra was useful and I wanted to keep doing it.*

Across Different Water - New Zealand

The NZ government has employed a team led by Derek Holton to mount a problem solving web site. Derek's earlier years were spent in Australia and he is very much in tune with the task centre approach. In fact, it is he who helped us refine the components of the Working Mathematically principle. The site is K - 12 and can be accessed at:

http://www.psmaths.co.nz

MATHS300

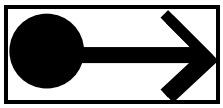
Curriculum Corporation and The Task Centre Collective are working on a new web site which will eventually mount the best 300 maths lessons (K - 12) that we can find. About one third of these will be supported by software. All will be in the supportive MCTP style with full lesson notes. Worksheets and game boards will be provided if necessary.

Schools will be able to access these lessons by subscribing and being issued with a membership number. The first fifty lessons will be available in December.

If you, or any of your schools, would like to be kept informed of developments please send an email to:

doug@blackdouglas.com.au
with the message:

Please include me on the MATHS300 database.



New Products

New Prices

In the last newsletter I introduced you to the flexipack and provided you with extensive workshop notes. The balance of materials in that product wasn't quite right, so it has been modified to become Maxi Pack. This newsletter includes a flyer for Maxi Pack, *which is only sold with professional development*, and an agenda for the workshop day. You will be able to adapt your flexipack notes to run a Maxi Pack workshop.

Maxi Pack came about because we asked ourselves *"If we were starting again now, and had access to all that has developed in this project, how would we package it to best resource schools."* It is extremely sound value both educationally and economically and there is a growing interest in it.

One of the things that appeals is the structure which comes with it. Tasks can be written into the curriculum in units because it includes the three Replacement Units and the Mixed Media unit. Many schools are now excited by the idea of structuring the use of tasks into the maths curriculum as an expectation.

You may not be familiar with the technology components of this unit, so Sue Davis is circulating copies among our Australian consultants. You will eventually be contacted, but if you have an urgent need to see these, please contact Sue.

Estimating Fractions:
Estimating Fractions: Computer Challenges is not based on particular tasks, but it is based on the Working Mathematically principle. A detailed flyer is included.

Fractions In Action
This will be the second Mixed Media unit. It is in trial in schools at the moment and it is expected to be published by December. As with the Points Of View unit, it will contain 10 tasks (including 5 new ones), software (Estimating Fractions), class lesson notes, worksheets and additional notes. Keep an eye on the web site for its release.

Task Centre Computer Lessons Disk 2
This software will use the power of the computer to extend six number tasks, including the popular Game of 31 and Number Tiles. It is almost ready for publication. Again, keep an eye on the web site.

A New PD Model

Edlington Hill School in England has supplied us with a new tutorial based model for delivering the Task Centre professional development. I ran the day there and then tried the same model with another school back home. I have thoroughly enjoyed both occasions and found them to be very intensive for the staff. I urge you to consider it when you are dealing with a school that has up to 16 staff involved.

The principles of this Edlington Hill model are:

- It is based around providing a minimum of one hour's intensive tutorial for each staff member and allowing them to do other things in the day.
  Teachers appreciate this release of time in which they can do other relevant work.
  In both schools in which I have worked the principal has been delighted to hire substitute teachers to release teachers from their classrooms on rotation, rather than call a pupil free day. However, on a pupil free day imagine the support a teacher would feel spending one concentrated hour in session and then being able to work on the myriad of other school details.

- In return for this provision of time, teachers agree to a 20-30 minute before school whole staff session and a 60 - 90 minute after school whole staff session.
- There are four tutorial sessions in the day.
- The before school session is a scene setter:
  -brief history/background to promote the feeling of being part of an extensive world wide educational movement
  -a few slides to arouse images of what others have done with the resource and to begin thought about 'what we could do'.
- The after school session has four parts:
  -a poster problem clinic
  -a task explored together in depth to draw together the key principles of (a) Working Mathematically (b) a task is a tip of an iceberg (c) the three lives of a task which have been involved in the tutorials.
  -a visit to the web site and information about networking. (I usually choose a whole class task for the previous section which I know has extensive notes on the web.)
  -a summarising look at 'Where to from here?' (see below)
- In the tutorial session the staff are paired in Problem Solving teams which are chosen in advance by the school. I find two pairs is sufficient to handle if staff are to receive the intended intensive support. So, with four sessions in the day, a maximum of 16 staff can be supported. Of course parents could be included in some of the teams.
  -I choose a different straight forward task for each tutorial group, but one for which I know something of the depth of the iceberg. In primary school I use language and logic tasks such as Farmyard Race Day and Who Lives Where? In secondary I tend to use tasks based in algebra like Unseen Triangles, Eric The Sheep or Crossing The River.
  -It doesn't take long to work through this first task and then get into a discussion of the iceberg. Once 'eyes are opened' I raise the need for recording some of 'our discussion' so that other staff, who explore different tasks, can benefit.
  -We discuss headings to write to and information which would support colleagues. Then the P/S team write their draft dossier notes. I collect these for later.
  -The team then tackles a second task, as on the card, asks themselves about the iceberg (with the tutor's help if necessary) and writes notes about it. If this task isn't finished before the session is up, it is voluntarily finished for 'homework'. If this second one is finished, a third is offered to take away and work on.

You might like to think through the advantages of this model such as:

- informal and non-threatening
- respects demands on teachers' time
- intensive, personal contact
- establishes staff teams with an expectation that they continue
- structures personal commitment as a necessity for school success
- promotes recording and collecting of classroom wisdom

Where To From Here

Whichever model is used to deliver the workshop, this plenary session is very important. We have learned that it is especially valuable if the outside consultant can obtain some commitment for specific jobs to be carried out by someone other than the maths person. It is a far stronger position in which to leave a school if several people have 'put up their hands' to take on a role.

It illustrates that the Task Centre Project is a co-operative learning adventure for the staff too.

To achieve this I:

- Encourage the problem solving teams to continue to meet, try and record.
- Encourage all staff to explore tasks with kids according to whatever structure is appropriate for a trial period in that school.
- Suggest that a Curriculum Review Committee may have to be established later to seek a vision for structured inclusion of what is learned through exploration. This includes a responsibility to look at assessment information which can derive from task use. I also suggest that this group has responsibility for initiating new staff.
- Ask for volunteers to take on these roles:
  -Dossier co-ordinator: to collect the draft notes, arrange word processing and publish in an appropriate form. Some schools are now publishing such notes on their server.
  -Materials co-ordinator who is responsible for knowing the whereabouts of any task at any time and for keeping the equipment complete.
  -Network Co-ordinator who regularly delves into the web site(s) to gather support information and deliver it to staff in the appropriate supportive manner. This person also joins the school to the PSTC Network and makes sure information from that source is also publicised.

Over To You

I don't know when I will write the next edition of this newsletter. But it will be sooner rather than later if you provide information to share. If you have a story to tell from any of your task centre work, please send me an electronic version.

In the meantime, I hope you continue to enjoy your association with this project.

Best wishes,

Doug Williams

Enclosures:
- Welcome/Network pages (2 pages)
- New flyer and price list (2 pages)
- New Maxi Pack flyer (2 pages)
- Maxi Pack w/shop agenda (1 page)
- Estimating Fractions flyer (2 pages)

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