# TASK CENTRE PROJECT

# **CONSULTANTS' NEWSLETTER**

NO. 10

**MARCH 1997** 

ello again from the Task Centre Project headquarter. I think that means wherever I can sit at a computer and a telephone. We hope the year has begun well for you and look forward to on-gong communication. I know Sue Davis has already been in contact with some of you about workshops.

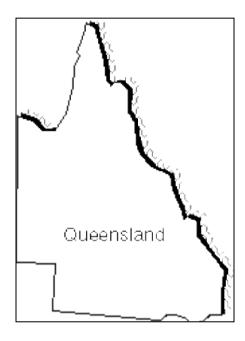
It has certainly been a busy time here with a continuing interest from schools all over Australia and elsewhere. Would you believe that in the last four years teachers have endorsed the educative value of this project to the extent of placing 100,000 tasks in 1000 schools around the world? About 800 of those contacts have been in Australia, but we certainly feel the 200 overseas clients are significant.

For example, in February two cartons of 100 tasks were sent to Scotland. One carton will be shared among two schools and the staff from these have booked our professional development program. We also had a visit from two enthusiastic Swedish teachers who funded their own trip to Australia just to see task centres in action. They have already set up their school with materials and have had some in-service. They just wanted to see explore a few more management ideas at the source.

# **Role Changes**

We are aware that many Queensland government advisers have returned to the classroom this year and are no longer able to play the part they previously have in supporting this initiative in schools. Given this situation, may we first of all wish you the best of luck in your new positions. Secondly, be assured that we still count

you as consultants for the project and Sue may indeed contact you about the possibility of a workshop. We are aware of course that from your new position, you may not be able to find the time to assist in this manner, but my mum always taught me that it can't hurt to ask.



As a result of these changes, I have sent this newsletter to home addresses where I have known them. It would be helpful if you could fax address, telephone and email changes to Sue Davis on 03 9808 2610 as soon as possible.

# **Price Changes**

It has been a year since prices have changed, but in that time the cost of many components and administration costs have risen. So, regrettably, prices had to change on January 1st. New prices are listed in the flyer enclosed with this newsletter and were signalled in the September issue of this newsletter. All other fliers are now inappropriate and should be destroyed.

The new prices have been listed on the home page for some time. Thanks to the wonderful co-operation of Andy Wain, the manager, who has taken on this role on top of a full teaching load, it is easier to change items on this page than to organise a mailing to all consultants. So, as a rule the latest news will be on the home page. Therefore it is a good idea to keep in touch with that source. Newsletters will still arrive from time to time, but they may be a little behind the latest news.

In case you have misplaced it, the URL for the Problem Solving Task Centre home page is:

http://www.srl.rmit.edu.au/mav/PSTC/index.html

If you click on Curriculum Corporation at this address, you receive this screen.

# • Curriculum Corporation: Mathematics Task Centre Project

- 1. Welcome To The Mathematics Task Centre Project
- 2. More About Curriculum Corporation
- 3. More About The Tasks
- 4. One School's Experience (Catholic Regional College, Melton, Victoria, Australia)
- 5. Sample Tasks
  - ♦ Eric The Sheep
  - ♦ Addition Totals
  - ♦ Soma Cube 2
  - ♦ Arithmagons 1
  - ♦ Coloured Cubes
  - ♦ Pyramid Puzzle
- 6. Task Centre Challenges Years 10 to 12 A Selection
- 7. Iceberg Albums
- 8. Who Has A Task Centre Near Us?
- 9. Replacement Units
- 10. Summary Of Task Centre Project Products & Prices
  - ♦ Australia
  - ♦ New Zealand
  - **♦** United States of America
  - **♦ United Kingdom**
  - ♦ Sweden
  - ♦ Other Countries
- 11. The Task Centre Project Catalogue Of Tasks
- 12. Late Breaking Task Centre Project News

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### **New Products**

At long last, the Replacement Units in Computation and Chance & Data are available. The Computation unit appears in two forms - Upper Primary & Lower Secondary - as does the original Pattern & Algebra unit. There is an overlap of 5 tasks out of 20 between these units.

However, for the Chance & Data unit we have used exactly the same 20 tasks at both

levels and prepared two levels of Investigation Sheet for each task.

We are hopeful that these units will prove as useful to schools interested in more significantly integrating the use of tasks as have the Pattern & Algebra units. Enclosed with this newsletter is a summary of all that is now available under the Replacement Unit heading.

Also included are some update comments and lessons which allow you to run a workshop on the concept using any of the strands as the focus. If you check back to previous notes on running Replacement Unit workshop, which you received around June last, you will see that on page 2, point 5, you are asked to run a class lesson from the ones provided. One each of Computation and Chance & Data are included and there is a place to store those within the original notes. Also point 7 on this page refers to particular tasks which are used in the children's reports in the manual. Please write in your notes that for Chance and Data this task could be Highest Number 1 or 2, and for Computation it could be Truth Tiles. However, these are guidelines for you and we encourage you to decide your own way of exploring the assessment aspect of this workshop.

# **Sharing Experiences**

This entire project is built on sharing experiences. All the tasks have grown out of classroom experience and all the PD components are a synthesis of experiences of many people. I would be happy to receive long and short contributions to this section of our newsletter. Some I have come across are listed below:

#### *Questions - Marj Horne*

One of the things Marj likes to suggest during her workshop is that students be encouraged to write questions about the task for others to answer. Once checked by the teacher, these are kept in the box. It will also be necessary for the teacher to explore with the children what makes a good question. This will include identifying those elements of a problem which can be varied.

Another suggestion relates to the Hearts & Loops puzzle. Once someone has solved it, it becomes their task to teach someone else by keeping their hands behind their back and *only asking questions*.

An Introductory Workshop Structure - Adèle Fielding

9:00 Tasks into boxes and labelled

9:30 Issues

- Evolution of the task centre
- The Working Mathematically Challenge
- Relationship to curriculum strands
- 9:40 Selection of tasks from the Number Strand to highlight the issues:
  - three lives of a task
  - tip of an iceberg
  - extending tasks
- 10:10 A selection from the Logic Strand to highlight the issues:
  - social skills such as 'check for understanding' and 'help without giving the answer'
  - adding to the collection by students making their own
- 10:30 A selection from the Space Strand to highlight the issues:
  - why visualisation
  - student/teacher records
  - teacher notes
- 11:00 Break
- 11:30 A selection from the Measurement Strand to highlight the issues:
  - grouping within the class so that not all are using tasks simultaneously
  - sourcing rich tasks in other references
  - characteristics of a rich task
- 12:00 A selection from the Measurement Strand to highlight the issues:
  - Chance & Data kit as a back up resource
  - Assessment: Report writing and student work samples: How, what style, how often?
  - Joint construction of a report.
- 12:30 Replacement Unit Structure Groups of 3 select an activity and after exploring it are asked to report
  - explanation of the task, strategies used, observations, generalisations, where to next
  - creating teachers' notes
- 1:00 Break

- 1:45 Discussion
  - Making it work in your school, implementation plan
  - Unit of work?
  - Investigating more tasks and making teachers' notes. Groups share their 'next steps'

3:00 Close.

Adèle has also sent a variation of Who Owns The Monkey which you might like to make up for yourself as follows:

There are five houses in a row, each inhabited by people with different occupations, pets and cars. Use the following information to find out WHO DRINKS WATER and WHO OWNS THE SHEEP

- The nurse lives in the red house
- The Indian owns the goat
- Coffee is drunk in the green house
- The astronaut drinks tea
- The driver of the yellow van owns the cow
- The red bus is kept at the yellow house
- Milk is drunk in the middle house
- The hunter lives in the yellow house
- The green tractor belongs next door to the duck owner
- The red bus belongs to the owner of the house next door to the donkey
- The orange truck is owned by the person who drinks juice
- The knight drives the blue car

An Introductory Workshop Structure - Charles Lovitt & Doug Williams
While working in Arkansas where there is no background experience of the task centre concept among teachers, we modified the Introductory Workshop as follows:

• Spread out all (or part depending on space) of the tasks around the tables

- After the introduction in the notes (which includes using a class task), hand out a pre-selected task to each pair and invite them to work on it. This means to do it as on the card and then to explore its iceberg and three lives.
- Use the slides after the break and follow up with a discussion about coding.
- Introduce the concept of teachers' notes about each task and ask them to fill in a pro-forma version for the task they explored before the break.
- Take an extra half hour after the lunch break to encourage a quick look at a range of tasks.
- Mix up groups to share the task they worked on in depth earlier and ask a scribe to record 'The qualities of a good task'.
- A selection of 'quick hits' on:
  - networking
  - poster problem clinic
  - integrating with the normal curriculum, including:
    - \* working mathematically as a curriculum focus
    - \* whole class lessons
    - \* graft-on approach
    - \* Replacement Units
    - \* Mixed Media units (still in

# development)

- \* record keeping and assessment
- \* involving parents
- \* infant tasks
- developing an implementation plan

That's about it for now. We hope you continue to be interested in the development of this project.

Keep up the good work and keep in touch.

for Charles Lovitt and Doug Williams