

Free Taster Issue July 2006

RaPAL

Research and Practice in Adult Literacy

Inside this taster issue:

Introducing RaPAL

The RaPAL Journal

This is My Story

ESOL Through Sport

A Practitioner-Researcher Grouping:
Reflections on Process

Forty Ferrero Rocher,
Four Kilograms of Macaroni and
the Tower of Hanoi -
some thoughts on developing
active numeracy teaching activities

Journal

The Research and Practice in Adult Literacy Network

Who we are

RaPAL (established 1985) is a national network of learners, teachers, managers and researchers engaged in adult literacy and basic education. Our support is generated by membership subscription only, and we are therefore completely independent in our views. RaPAL is the only national organisation focusing on the role of literacies in adult life.

What we do

We ...

- **campaign** for the rights of adults to have access to the full range of literacies in their lives.
- **critique** current policy and practice where it is based on simplistic notions of literacy as skill.
- **support** the theories of language and learning, which emphasise the importance of social context in literacy acquisition.
- **encourage** collaborative and reflective research between all participants in literacy work and maintain that research and practice are inextricably linked.
- **believe** in democratic practices in adult literacy which can only be achieved if learning, teaching and research remain connected and stay responsive to changing social contexts and practices in society.
- **recognise** that learners are central to a learning democracy and their participation in the decision- making processes of practice and research is essential.
- **foster** collaborative participation between all educational sectors including FE, HE, AE, workplace education, community education and prison education.

RaPAL Officers 2005-2006

Chair	Fiona Macdonald, Communities Scotland, Paisley
Secretary	Alex Kendall, University of Wolverhampton
Treasurer	Gaye Houghton, University of Birmingham
Journal Co-ordinator	Deirdre Parkinson, Glasgow
Production Editor	Amy Burgess, University of Lancaster
Membership Secretary	Kathryn James, University of Lancaster
Website Manager	Mary Hamilton, University of Lancaster
Publications Manager	David Barton, University of Lancaster

Editorial Information

The Editorial Group for 2005-2006 includes the following researchers, practitioners and practitioner researchers: Yvon Appleby, Greg Brooks, Amy Burgess, Maxine Burton, Jim Crowther, Azumah Dennis, Linda Eastwood, Ellayne Fowler, Alison Gorf, Barbara Hatley-Broad, Mary Hamilton, Gaye Houghton, Alex Kendall, Hugo Kerr, Fiona Macdonald, Jane Mace, Deirdre Parkinson, Sarah Rennie, Irene Schwab, Ralf St. Clair, Alison Tomlin, Karin Tusting, Carol Woods. **Overseas members** of the Editorial Group include: Jean Searle, Rosie Wickert, Stephen Black, Australia; Mary Norton, Bonnie Soroce, Sheila Stewart, Canada; Janet Isserlis, Elsa Auerbach, Steve Reder, USA; and Cathy Kell, New Zealand

Members are involved in the compilation of the journal as reviewers/referees and editors.

We are a friendly group - open to new members and new ideas. Please contact us with any contributions (views, comments, reports and articles) and do not be put off if you are new to the field or if you have not written for a publication before. This Journal is written by and for all learners, tutors and researchers who want to ask questions about this field of work. It does not matter if the questions have been asked before. We want to reflect the many voices within adult literacy and numeracy work and to encourage debate. Why not join in?

Further info can be found at our website: <http://www.literacy.lancs.ac.uk/rapal/>

The RaPAL Journal expresses a variety of views which do not necessarily reflect those of the Editorial Group.


The RaPAL Journal has been printed by Image Printing Co. Ltd, Lumsdale, Matlock, Derbyshire.



Contents

Introducing RaPAL	1
The RaPAL Journal	2
This is My Story <i>Gary Purchase</i> (Vol 55)	4
Response from Kate Tomlinson (Vol 55)	6
ESOL Through Sport <i>Barbara Hately-Broad</i> (Vol 52)	7
A Practitioner-Researcher Grouping: Reflections on Process <i>Valerie Fairclough, Howard Galletly, Elaine Johnson, Ann Llewellyn, Saj Sajid, Lyn Sedgwick and Margaret Herrington</i> (Vol 55)	11
Forty Ferrero Rocher, Four Kilograms of Macaroni and the Tower of Hanoi some thoughts on developing active numeracy teaching activities <i>Alison Gorf</i> (vol 57)	18

Editorial



Introducing RaPAL

Welcome to this free taster issue of the RaPAL Journal. Its purpose is to introduce RaPAL and its activities to a wider range of people and to give a flavour of the kinds of articles we publish in our journal. We hope you will find this small selection enjoyable and stimulating and that you will decide to support our work by becoming a member. As a member you will be entitled to receive a copy of the journal three times per year. For more details of our activities and of other articles we have published recently please visit our website <http://www.rapal.org.uk>

What is RaPAL?

RaPAL is the only British national organisation that focuses on the role of literacy in adult life. We are an independent network of learners, teachers, managers and researchers in adult basic education. RaPAL was established in 1985 and is supported by membership subscription only. Any individual or institution may join who sympathises with our aims. We have strong links with a range of organisations and individuals in other countries, including Australia, Canada, New Zealand and the USA and regularly publish articles from contributors in these countries.

What do we stand for?

RaPAL campaigns for the rights of all adults to have access to the full range of literacies in their lives. We offer a critique of current policy and practice where it is based on simplistic notions of literacy as skill. We argue for broader ideas of literacy starting from theories of language and literacy acquisition that take account of social context. The theories we draw on are broadly known as the new literacy studies.

RaPAL encourages a broad range of collaborative and reflective research involving all participants in literacy work as partners. We support democratic practices in adult literacy work and believe that a learning democracy can only be achieved if teaching, learning and research are kept together. A dynamic relationship between research and practice keeps the meaning of literacy open and responsive to the variety of changing social contexts and practices that exist in our society.

We recognise the role of professional

development in this process and of activities which enable learners to make their views known, in all media. As we see it, students are central to a learning democracy and their participation in the decision-making processes of practice and research is essential.

How do we work?

The main elements of RaPAL's work are the publication of 3 Journals per year, other occasional publications, and the organisation of one conference each year, at which we hold the AGM. Through this work, we encourage communication between those working on literacy issues with adults. We especially look for opportunities to increase student participation in research and publishing activities.

We critically examine the assumptions on which ABE practice is based, through encouraging and publicising a broad range of reflective research. Such research helps us to articulate the theory behind our practice; to keep asking questions about the significance of literacy in people's lives; to challenge the political uses of common myths about literacy (such as: that lack of literacy causes unemployment; that lack of literacy means low intelligence; that parents pass literacy difficulties onto their children; that literacy can be adequately defined and measured as a narrow set of skills).

Because it is not enough just to ask questions, we work to make other organisations aware of RaPAL. We link with sympathetic organisations working with literacy at all levels of the educational system (including HE and FE) and in community contexts. We particularly value our international links which enable us to compare experiences and learn from other countries.

Our current priorities are to take a more active part in national debates about literacy, to develop and publicise alternative views of literacy and to contribute to the professional development of staff in ABE.

The main organisational structure of RaPAL is the Management Committee and the Journal Committee which meet in different locations around the country. All members of these committees meet together at the AGM.

How can you get involved?

We are a friendly group open to new members and new ideas. In becoming a member of the Management Committee you can influence what RaPAL is and might become in the future; make contact with people around the country who share your interests; and find out how to produce a national publication! For most of the roles, all you need is a contact phone and address and an interest in discussing your ideas with other members. As a first step to becoming more involved in RaPAL, you can become an ordinary member of the Management Committee and come to meetings without taking a specific role.

We also need people to act as local advocates for RaPAL. This involves encouraging people to join; telling them about the RaPAL Journal and our conference; encouraging links between research and practice; and distributing leaflets.

For more information please contact Fiona Macdonald at:

Fiona.Macdonald@communitiesscotland.gsi.gov.uk

We welcome contributions for each of these sections and are happy to discuss your ideas and proposals with you. We want the RaPAL Journal to continue its vibrant tradition of publishing views from all parts of the field. Please contact the journal co-ordinator, Deirdre Parkinson at:

deirdre@dp-associates.org.uk

The RaPAL Journal

Our full journal is published three times per year and includes the following sections:

1. Ideas for teaching

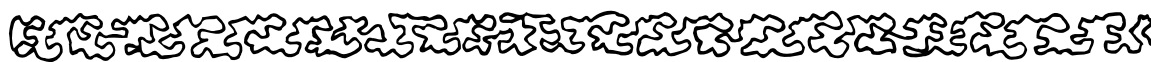
Descriptive and reflective pieces on teaching and learning to meet the needs of current teachers in this field. The contributions must demonstrate democratic practice.

2. Developing Research and Practice

An open-ended category for a varied range of contributions. We want to include articles which show people trying out ideas, pushing back boundaries alongside analysis and critique.

3. Research and Practice: Multi-disciplinary perspectives

A section for more sustained pieces of analysis about research, policy and practice which has refereed journal status.



This is My Story

Garry Purchase

Garry is forty and married with two children, aged 12 and 13. He left school at 16, with no qualifications. He worked as a manual labourer for 22 years, until 2 years ago, when he suffered a back injury. A year ago he became a student at the City of Wolverhampton College.

Introduction

I am a dyslexic student at the City of Wolverhampton College, where I have been learning much more than I have ever known. It takes time, however. I did not know what being dyslexic was about until now. Each person is different, and the way one person learns is not the same as another person. I have learned about the importance for me of using coloured sheets like blue, yellow, pink and red, to help me to keep the words from moving up and down, and keep in a straight line, instead of one big block of black words. My colour is blue, what a life saver it is, the change it has made is like; wow I can read! With this reading ability, I went out and bought a pair of sunglasses with a tint of blue to help me with my reading of black and white.

Spelling is a whole new ball game. The teachers give me words to spell, but they put them in colours for me, like red and blue. For instance the word: weather! They break it down for me like (we is in red) (at is in blue) and (her is in red). So I can see the word better that way.

The course is good. I would recommend it to all people who cannot read or spell too well.

Reading and Spelling at Home and at Work

Before I started college, at home was a nightmare! I would never read the newspaper or a letter which came through the door. If my wife would ask me what was on the T.V I would give her the paper so she could see what was on, so that I did not have to read it to her. I would look as if I was reading the paper; but all the time I was reading the headlines which were in big black letters, the rest of it I would not bother with! Because it would be moving

up and down and I would lose my place. I would get every one else to read things for me, and tell me all about it. I would bluff my way through it, as if I had read it. I got very good at this.

At home with the computer I played games on it. That was all I did, because of the reading that went with it. I tried to use the spell check, but to me all the words would look the same...and with the flat packs, my wife would buy out of Argos, she would read the instructions to see if all the pieces were there. However I would look at the picture and put it together without the instructions.

At work if I got a memo, I would try to read it but not understand it! I would say to my work friends "Have you seen what they are doing now, here you read it for yourself." Any thing to do with reading or spelling, I would get out of it by passing the book to someone else...

The Road to College

One day I was watching the television, when 'Get Rid of Your Gremlins' came on. So I got the number and gave it a call, well at least five or six times. Each time it would ring and I would hang up. This went on for three or four months!

Then one day a woman answered the phone before I could hang up. I was shocked and did not know what to say...Before I knew it she had made me an appointment to see a maths teacher at the City of Wolverhampton College... When the day came around I was in two minds to go or not! I was so nervous. I was sitting outside of the college thinking do I really need to do this? I had got by for the last twenty four years, so why now? I got out of the car and walked in, sweating and shaking. When I got inside there was no turning back! However the teacher was



really nice. Christine was her name; she made me feel at ease. So I sat down and went through some things.

(On the basis of the initial interview, Christine arranged for Garry to have a dyslexia assessment)

I got there...and sat in the café, thinking what was it all about...I was so nervous my hands were sweating and my heart was pounding; however when we was finished I was ok. I was glad I had done it. I had to wait a week to get the results back. Yes I was dyslexic! For the first time in my life I felt that I was not thick. There was something I could do about it! What a relief to know I was dyslexic; daft I know but there you go!

'Dyslexia-friendly' Ways of Working

Catherine got me into one of the classes. The teachers were Val and Deb who made me feel good about the class, but the first time I walked into the classroom it was like starting school for the first time! I did not want to go in; but a little voice said, "Go on, it cannot be that bad." As my hand reached for the door it was like I had got tunnel vision, I could see no one or hear no one. Thank God for two happy smiling faces, it took the first day for my nerves to go.

The next time I sat by Val, she gave me a lot of work to do which I did not like. So the next time I sat by Deb who gave me ten words to learn to spell. Each word was in two colours red and blue, which made it a lot easier for me because I am very visual.

After about one or two months went by, I was ready for Val! I was ready for more work; so I sat by Val. Someone like me can work people out, to see what kind of person they are. Like Val is a good teacher! By making you do a lot, whereas Deb is a good teacher as well but does not push you as hard at first.

Achieving...

I like to read the newspaper now because I can enjoy it. It is nice to be able to join in with conversations and not have to make it

up as I go along. It is nice to read it and see what else is going on in the world. I cannot make out all the words but I can make out what it means with a little effort, which to me is a great improvement.

As you can see my spelling and writing has got better not 100 per cent yet, however with time I know I can get better. Like my writing, when I started at college I could write no more than two or three lines, without capitals and full stops. Now I can write up to two thousand words with capitals, full stops, semi colons, colons and with a lot more as well.

I can now use a computer for writing my homework on, and can use the grammar and spell check to do my work. I have to look at the dictionary for some of the words, which are on the spell check to find out which word I need, but I am getting there with it.

Before I went to college I would not write a Christmas card or read a letter. I would always get someone else to do it for me! However now I will write my own cards and letters and read them as well. It is so nice to be able to read and write and not feel embarrassed. Although I cannot make out all the words yet.

I was asked by Val to write an end of a story for the BBC3 competition. The piece had to be one thousand, two hundred words long which some months ago, I would have not given a second look. Maybe fifty words and that would have been pushing it for me. I had to use the computer to read it three or four times, to get to understand it. However once I had got into it, it was very good to be able to do something like that. It is a great achievement for me.

Where do I see myself in one or two year's time? Well, maybe to be a teacher's helper. Teaching other people who are dyslexic. And giving some of what has been given to me back to the great teachers that have taught me for them to be able to see that their efforts have not gone to waste.

Garry can be contacted via Valerie Fairclough at sjwells53@breathemail.com

Kate Tomlinson from Stroud College comments in response...

I was particularly interested, as a tutor, in the idea of a student choosing the kind of teaching approach (and people) that he feels suit him at a particular stage of confidence and learning. It's not so much about one tutor being 'better', but about how the pace and methods need to be adapted for each individual at different times in their learning 'journey'.

Garry writes, "I did not know what being dyslexic was about until now." He and his tutors have been learning from each other. Being dyslexic is different for each individual and, as tutors, we need to be continually reassessing our approaches to be sure we have got it right for that person at that stage in their learning. It's too easy to make assumptions based on what we have gleaned from previous learners or what we have read.

There are two dyslexic students, Jo and Ada (pseudonyms) in one of my groups. Jo is very forceful and has definite opinions based on her own experience on "what being dyslexic is about". She often appeals to Ada for confirmation of what she says. I get the impression that Ada's experience, and certainly the way her specific learning difficulty manifests itself in reading and writing, is very different from Jo's, despite assessments that suggest they share certain dyslexic tendencies.

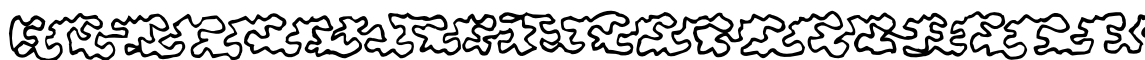
At a time when progression routes are often mapped out in terms of levels and tests, Garry's idea of a student marking out his progress by moving from one tutor to another because of what he is ready to be offered, is a useful idea which puts the learner in charge.

He sees for himself the progress he is making in terms of his spelling and writing, which is "not 100 per cent yet;" his reading, where understanding has improved despite not being able to 'make out all the words'; and the fact that he can now write over a thousand words, whereas in the past fifty was his limit.

It would be interesting to collect together more versions by students and tutors of "what being dyslexic is all about", what helps and hinders their progress and what for them constitutes real progress.

Ed. note:

We would welcome responses from students and tutors on the issues raised by Garry and Kate



ESOL Through Sport

Barbara Hately-Broad

Barbara is a Senior Lecturer in the School of Education & Professional Development at the University of Huddersfield. At the time of this Summer School project, she was employed as Basic Skills Curriculum Co-ordinator with Wakefield Adult & Community Education Service. Her research interests include Post-16 Traveller Education and ABE in the British Armed Services.

Introduction



One of the perennial issues for both English for Speakers of Other Languages (ESOL) and adult literacy providers is how to attract young male learners. This article describes the way in which the Wakefield Adult and Community Education Service devised an approach to this problem through their annual summer school provision for asylum seekers.

For a number of years the Service, in co-operation with the Wakefield Metropolitan District Council Asylum Seekers Team, has provided a week-long Summer School programme including a combination of both English and vocational classes. The curriculum catered primarily for families but an analysis of actual arrivals in 2000 - 2001 showed that many of the asylum seekers arriving in the area were, in fact, young single men. Although this group was catered for in the day-to-day, term-time provision, no provision had been made specifically for them in Summer School.

To address this problem a new Summer School programme was devised predicated on a common theme of 'sport' - a topic which crosses language barriers - and which combined traditional English classes with practical sports activities. By utilising activities within both the cognitive and

psychomotor domains, it was possible to accommodate the greatest variety of learning styles and provide a wide spectrum of learning opportunities.

The implementation of the programme, initially devised by the Basic Skills Curriculum Co-ordinator, was made possible by the availability of a basic skills tutor who was also a qualified football coach. However, we were also fortunate in being able to call on the support of a Community Development Worker based in Castleford High School who was able to negotiate the use of their facilities for these classes. The school provided us with a teaching classroom for the morning classes, use of their outdoor sports facilities and, perhaps most importantly, use of their indoor sports hall. Without this co-operation, the course would have proved much more problematic as the weather during the week of the Summer School proved changeable to say the least!

The Curriculum



The usual pattern of the day was for the learners to be provided with classroom sessions during the morning and then sports sessions in the afternoon. The creative challenge was to embed ESOL learning within the sports sessions in a productive and enjoyable way.

The curriculum helped learners to become competent, quickly, in a range of English skills necessary for their everyday life. Learners were also given the opportunity to undertake accreditation via a West Yorkshire Open College Network (WYOCN) Regional Languages Framework module at Entry Level which included familiarity with a number of everyday situations: the recognition of a number of common signs (e.g. open/closed); ordinal numbers as used in everyday life (e.g. first floor); asking for and following directions; recognition of a variety of shops and simple vocabulary associated with shopping; and ordering of food and drinks. Although the learners targeted had varying levels of competence in spoken English, none had previously undertaken any accreditation and many were hesitant in employing their existing skills. The accreditation was, therefore, seen primarily as a confidence building exercise. Additionally, this particular accreditation was achieved through the production of a portfolio of evidence which ensured that learners could demonstrate competence by providing evidence in a wide variety of ways and allowed learners to work at their own speed. If necessary, the compilation of evidence could be carried forward into the term time group provision.

In each of the morning classes, the fifteen learners enrolled were divided roughly into three groups - beginners who had no existing knowledge of English, improvers who a small knowledge of English and intermediates who had a working knowledge of English. Working under the overall direction of the Basic Skills Co-ordinator, and facilitated by a tutor or volunteer, each group worked on the same topic each morning at their own speed. For example, in the session dealing with asking for and following directions, although all learners were provided with a map of the Castleford locality in which they were all living, the different groups were provided with maps of differing complexity. Similarly, towards the end of the week when learners were undertaking

tasks to demonstrate their competence, they were all asked to complete the same type of task but at different levels of competence. For example, when undertaking a simple 'shopping' role play activity, learners with basic levels of English were only asked to greet the shopkeeper, ask for specific items and then close the conversation, whilst the tutor acted as the shopkeeper. Those learners with a greater knowledge of English worked in pairs and were required to be able to take the part of both the customer and shopkeeper, thus demonstrating their ability to employ a wider range of vocabulary.

The afternoon session fell into two parts. First, the learners undertook general warm-up activities to reinforce the learning from the morning session. For example, in one exercise laminated cards were made showing 'ground floor', 'first floor', 'basement' etc. and learners were asked to run to specified 'floors' whilst in another, cards were produced showing a bus with a large, clearly visible number and learners were asked to 'catch' certain buses. Initially these activities were carried out as a group activity to support the less able members of the group and build their confidence in their own knowledge. As the week progressed, learners were divided into teams and the activities completed as relays. These activities not only helped to reinforce learning through experiential activity but also proved to be extremely popular with the students who sometimes became highly competitive.

During these sessions two supervisory staff were always present - in this case the tutor who also acted as the coach and the Basic Skills Co-ordinator. This was necessary, not only for health and safety reasons but also to check learning. During the warm-up session the Co-ordinator completed check sheets for learners providing evidence that they were able to understand and use the necessary vocabulary and, during the 'game' part of the session, made a note of the relevant

vocabulary introduced which was reviewed at the end of the session.

After the warm-up, the learners then actually played a sport - five-a-side football was the most popular, though badminton and basketball were also tried. During this part of the session little attempt was made to provide formal learning. Instead learners were provided with the necessary vocabulary as and when the need arose. This also proved successful. The learners were already familiar with the rules and vocabulary of the game in their own language and initially tended to choose to be in teams which had a common first language. However, as the week progressed, we began to insist that instructions such as 'pass' and 'offside' were only to be given in English and, as learners became more familiar with the English vocabulary, more mixed nationality teams began to form - based often on perceptions of each other's skills rather than nationality. General comments, often about the skill or parentage of the referee, were also only accepted in English.

For the last afternoon, a visit had been arranged to Castleford Tigers - the local Rugby League team. The team's ground is only a short walk from Castleford High School, through Castleford centre itself and this provided an ideal opportunity to check the week's learning in a practical activity. Learners were provided with a checklist covering all the sight vocabulary they had learnt during the week, such as entrance, exit, Ladies, Gents, open, closed, which they had to find during their walk or at the ground. This experiential consolidation activity demonstrated clearly to the learners the relevance of their week's learning and its application in everyday life.

Once at the ground, the learners were given a complete tour including a general introduction to the game, a demonstration of the training equipment (which some tried out) and an explanation of a training session. At the end of the tour, learners

were delighted to be given tickets to the next match. This was a very generous donation on the part of the club - although some of the learners had previously expressed interest in the game, it would have been almost impossible for them to have been able to afford the £10 entrance fee.

Evaluation



In overall terms, this pilot Summer School proved a very successful venture in a number of ways. First, we succeeded in attracting a number of young male learners who often prove elusive. Of the fifteen men who enrolled on the programme, twelve were between the ages of twenty and thirty-two. This had the additional long-term benefit of introducing these men, who were often placed in single bed-sit accommodation, to others from their own communities and so reinforced the work of both the Asylum Seekers Team and their own religious communities in helping them to forge social contacts. Second, we were able to further these 'social' outcomes by providing them not only with an insight into local culture in the form of Rugby League, but also with an appropriate vocabulary which would enable them to participate in informal sporting situations. Third, through this intensive provision we were able to ensure that all the learners quickly became familiar with the English vocabulary and structures necessary to enable them to cope with basic day to day situations. Eight of the learners completed

the accreditation during the week and, for a number, the confidence this gave them encouraged them to undertake further accreditation including the Pitman's English tests. Finally, all of the students continued to improve their knowledge of English by regularly attending ESOL classes in the following autumn term, effectively demonstrating that this initial, specifically targeted provision had successfully provided them with an initial positive learning experience, which encouraged them to undertake further learning.

In conclusion, we feel that this programme serves as a potential model of good practice, not only for young male ESOL learners, but also as a means of encouraging young male learners to join more general literacy and numeracy classes.

***Barbara can be contacted at
b.hately@hud.ac.uk***





A Practitioner-Researcher *¹ Grouping: Reflections on Process

Valerie Fairclough, Howard Galletly, Margaret Herrington,
Elaine Johnson, Ann Llewellyn, Saj Sahid and Lyn Sedgwick *²

The practitioner-researchers are based in various colleges in the West Midlands: Sandwell, Sutton Coldfield, Wolverhampton and Halesowen. Margaret Herrington is an educational consultant and a visiting professor at the University of Wolverhampton

Introduction

The University of Wolverhampton has been heavily involved in developing a range of new courses in Adult Literacy, Numeracy and ESOL during 2003-4. Teacher training staff are also committed to creating *long term* professional development opportunities, including those of encouraging practitioners to generate new knowledge through research and practice. In this short article we shall discuss our experience to date on a practitioner-researcher project, based at the university and funded by the regional Learning Skills Council. We start with a brief outline of the project and then focus on processes rather than outcomes at this stage.

Implementing the Core Curriculum: the LSC funded Project

In 2003, the West Midlands LSC provided some seedbed funding for 15 small practitioner-researcher projects over a two year period. Invitations were extended to AE/FE colleges within the region and the first five projects got underway. They have focused on a common theme- *Experience of Implementing the Curriculum*-and are currently considering the following questions:

1. Are students with disabilities including dyslexia now effectively excluded from accreditation processes?
2. How does the context shape the implementation of the curriculum: A comparison of work in three different contexts: Further, Prison and Community Education.
3. What happens to the quality of curriculum implementation within the

tight timescales allowed in employment programmes? Why do some adults keep returning to programmes?

4. Do new and experienced teachers respond differently to implementing the new curriculum? A comparative exploration with college staff.
5. How do dyslexic learners and their tutor describe the learning outcomes within a dyslexia group? How closely do they fit with assessment criteria?

New members of the grouping have raised further questions about whether a centrally prescribed curriculum can be implemented in ways which reflect real life issues of creativity, criticality and linguistic diversity: what role can story telling have in developing the curriculum; how can material about *critical literacies* be incorporated in curriculum practice; and how can developing language forms in social sub-groups be adequately included in the literacy curriculum?

Clearly these questions place the project as a whole at important policy interfaces. What started as an exploration of literacy policy implementation has had to focus on the interactions between a range of social policies as they are actually experienced on the ground. For example, the practitioners are showing some of the tensions which emerge between disability and literacy policies. Despite extensive work on Access for ALL within the Skills for Life Initiative, the question of whether general policies on literacy accreditation appear to be more excluding than the systems used before Skills for Life is a live one and is being explored in one college.

*1 The term practitioner-researchers is used here to indicate that all actually work currently as practitioners and are undertaking research within and during their own practice.

*2 The article was drafted by Margaret on the basis of conversations between the authors and also incorporates pieces of writing from several members.

Similarly, though we have long known of the theoretical tensions and the political realities at the interface between literacy and employment policies (see earlier RaPAL articles: Castleton, no. 39, 1999; Peutrell, no. 43, 2000; Frank & Rodrigues, no. 51, 2003), there are present concerns about the impact of current employment programmes which combine a focus on getting people into work with a determination to provide literacy tuition prior to taking up such jobs. One such concern is about the conflicts of interest stemming from the twin goals: between the training organisation's short term goals and funding which are geared to getting people into the first available jobs and the learners' interest in developing literacy skills to enhance their longer term employment opportunities. Curriculum implementation in such circumstances can be highly constrained and hence one member of the group is exploring these conflicts and, in particular, is discussing with students how they perceive this situation.

The work at these interfaces feels like 'the coalface' as literacy staff act:

- to spot inconsistencies within, and the fallout from, policy measures,
- to try to work out what can be achieved in these contexts and how the curriculum is actually re-shaped to fit them,
- to assess what is actually happening to learner power in the process.

Time (and the way it is institutionalised in each context) is emerging as a key parameter governing the ways in which the curriculum can be implemented. The main findings will emerge during 2005 but for now we would like to consider some of the processes involved in this work.

Designing the System for Practitioner-Researchers

This project is developing within a national context of increased recognition of the potential role of practitioner-researchers in this field (and the funding of some of this work by the NRDC). It is particularly important, therefore, to provide the details of how this particular project has organised

the work.

The system for involving practitioners was designed to counter some of the barriers, which had already been identified in this kind of work: lack of time, lack of classroom cover, lack of self belief as knowledge makers etc. To some extent it amounted to an hypothesis in response to the research question: what is the best system for encouraging inexperienced practitioners or inexperienced researcher practitioners in this field to feel that they can engage in these processes?

The system we devised involved a number of financial and professional incentives:

- o the opportunity of obtaining a 30 credit module;
- o the payment of module fees;
- o the provision of a small amount of money to cover research costs-staff cover; transcription costs etc (£1000).
- o individual support in developing the proposals (with the proposals being seen as an unfamiliar form of literacy which may need to be taught); and a formal process of acceptance;
- o individual research training (and access to group training via separate research modules);
- o email access to the research coordinator/advisor with detailed feedback on draft proposals;
- o individual monitoring and development sessions during the projects;
- o clear timetabling;
- o group discussions about the work;
- o assistance with the writing up.

The system for dissemination was clarified at the outset: we would discuss the project throughout its life, updating colleagues about its progress. In particular we wanted to be in professional *conversation* with the LEARN*³ Network of school-based teacher researchers via their annual conference. We also wanted to connect this work with the extensive body of such work in the RaPAL network and with the current NRDC project on Researcher-Practitioners. Once the module dissertations were complete, the



intention was to devise methods of publishing the findings. All participants were required to sign up to helping with this aspect of the research.

Discussing Processes

I Motivation

In the course of our individual and group discussions we wanted to find out whether the system incentives actually played any part in developing motivation. Why had practitioners wanted to get involved in the project?

Although the professional development opportunities offered by this work were attractive, some participants revealed that a desire for change was driving them into this research.

Howard writes...

When I found out about the research project, I initially thought about my own personal development because it would give me the opportunity to gain credits towards a degree.

I then obtained information relating to the project and was interested in the fact that I could choose the topic that I wanted to 'explore.' This gave me the motivation to embrace the opportunity to 'have a voice' as I knew that any information I discovered would be written into an article. As a basic skills practitioner, I had always felt that it was pointless raising issues unless action would be taken and so I saw this project as a vehicle for highlighting what is happening in the hope that people would understand or relate to it and that ultimately, improvements would be made in these policies.

Lyn writes...

I wanted to be involved because new insights into recent theories of literacy led me to question the integrity of my underlying approach to teaching basic skills. It was important for me to find a way to

enable learning, which would make a real difference...rather than continue to perpetuate the power system which had placed students 'in deficit'.

It certainly seemed that all those wanting and able to participate had immediate questions for research arising from their practice and a desire to resolve these. Those who started the process and who had to withdraw during the early stages, cited new pressures at work or family illness/ responsibilities. A more considered evaluation at the end of the project should provide some insight into the relative importance of intrinsic and instrumental motivations and the significance of the support systems.

II Feelings

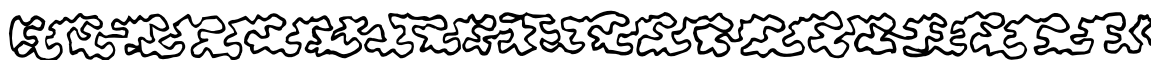
For some members of the grouping, this was the first sustained piece of research activity they had done, with all the attendant insecurities.

Elaine writes, capturing the mix of excitement and apprehension...

When I first began my journey as a practitioner-researcher, I felt the feelings of "excitement" and "terror." The best way to describe it when I first began was as if I was boarding a "ghost train"; on a journey into the unknown. My other feelings have been those of "fear" and "panic." It's the not knowing where the next station is and if the train will stop but it is a "thrilling" journey, which occasionally halts, giving me time to reflect on my childhood years, schooling and working memories. The journey has enabled me to travel back and forward in time comparing the facts and findings of others with those of my own. It's been an ideal opportunity to personally put old "ghosts" to rest and a chance to further explore and "unearth" my own individuality and have my voice heard.

Throughout, the stance has been one of acknowledging **feelings** about research and about being researchers.

*3. The LEARN project, funded by NCSL, is coordinated by Dr Linda Devlin at the University of Wolverhampton. Contact Linda at L.Devlin@wlv.ac.uk, for further details.



III Support

The presence of such feelings suggests that the support arrangements would be important for retention.

Howard writes...

On starting the project, I was apprehensive; as I had not undertaken a task like this before, and having read published materials, I was concerned about my abilities to produce work to the standard required and also about the support that would be made available.

I was relieved to find that I had excellent support in guiding me through my choice of topic and during the research process. I welcomed the opportunity to meet with other research practitioners and found their chosen topics to be a real 'eye opener.' The relief continued when I heard that they had similar concerns and fears and that I was certainly not alone in this process.

As noted above, we need to interrogate the significance of 'support' more closely as the project proceeds.

IV Research Methods

All members spent considerable time on the research design, with much discussion about the kind of knowledge which could be generated from particular processes. Issues of where the researchers were placing themselves in relation to the researched arose regularly and detailed questions about particular methods were considered.

Ann spoke about group interviewing with dyslexic learners,

I have been wondering about the extent to which I am putting words into student mouths during interviews. Are they mimicking me and if so what does this mean?

This question goes beyond the issue of leading or closed questions and raises issues about the linguistic discourse when word finding delays are part of the student experience and using the words of the

questioner is a survival strategy. Also if giving of words and literacy 'modelling' goes on in literacy classes what are the implications for research processes in classroom situations?

I also wonder about going off at tangents in group discussions...is the data entirely relevant to the questions?

This shows sensitivity to the dynamics involved in general interview situations and especially about how to respond to the fact that some dyslexic learners show strengths in tangential thinking.

V About the experience of the group(ing)

The question at the outset was about the kind of group(ing) this could or would need to be.

The original plan was to work as a group, meeting four times throughout the project. So far we have not met as often as planned because of the traditional barriers of illness, work pressures, lack of cover in the colleges etc. but we have noted some key advantages of working in a grouping:

- finding that we have similar concerns about research: questions about the nature of the knowledge we are generating and questions about ourselves as researchers. *"It is not always a very rosy path but you can unravel the problems"* (Elaine)
- listening to the experience of others brings out more in your own research situation, for example, linking past and present as new tutors, learning about past literacy education experience rather than seeing SKFL as the beginning of everything
- the theoretical ideas implicit in the research can come to the fore easily and references to further literature are stimulated. We have already found ourselves discussing concepts of literacy underpinning policies, concepts of disability, ideas about exclusion, theories about literacies in prison (for example, Anita Wilson's Third Space theory),

learning theories etc. And we have noted that the RaPAL Journal is a key source for practitioner-research work

- all reported on feelings of enthusiasm generated in the group meetings and its affective function in general.

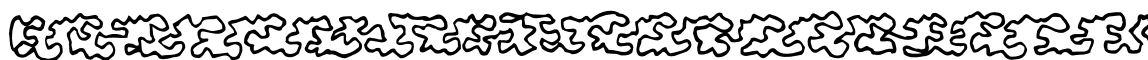
We shall do some of our dissemination in a group and so will have more to report at the end of the project about the significance of working in this way. For now, we can say that the grouping has provided a common theme and a loose framework within which to try out and challenge ideas. It appears to provide an additional layer in the research dynamic.

VI Students as co-researchers

Several of the projects have involved students in some way and some are moving towards the inclusion of students as co-researchers. This has required some discussion about how power can be exercised and 'shared' between the practitioner researcher and the students. Previous experience has been noted (RaPAL Doing Research 1990) and a preliminary matrix of possibilities has been established for working in this context (see below). We anticipate that we should be able to draw up maps of the kinds of power involved and show how power is exercised within the different projects.

Diagram 1 - Exercising Power in Research in Practice

Activity	Practitioner-researcher	Student(s)
Initial planning of the research	Proposal to secure funding	No power at this stage necessarily Some circumstances could be designed to facilitate this.
Ongoing development of the plan	Shared but must take final responsibility	Can contribute and change
Recording of data	Initial decisions about recording methods. Final responsibility for obtaining permissions	Power to change methods of recording, amend, edit raw data. Power over who has access to what raw data and to deny access to some
Analysis	Co-analysis but primary responsibility for the analysis in the project dissertation	Co-analysers. Role acknowledged.
Writing up	Final responsibility for module submission	Responsibility for chosen parts and for any submission for accreditation
Dissemination	Shared National and local	Shared Local and national



VII Research Advisor Role

Margaret writes...

During the project I have found myself asking questions about the nature of my role. It involves negotiations with individuals and therefore differences occur across the group. However, the general stages have involved:

- o clarifying the history of research in/and practice (with national and international references) and the particular significance of the current climate and the current project.
- o discussing practitioners' first ideas, helping them to shape these into proposals and alerting them to possible references in the literature. Acknowledging feelings and insecurities.
- o working as a literacy educator in relation to two particular literacy practices: first, the literacy context of a research proposal and the vocabulary and terminology used. Initial drafts required sharpening and pushing into a very clear design. Detailed modelling of sections of the writing was used to show what these proposals had to include; and, second, the structuring of analysis and data in the writing up
- o working as a research educator, on an individual basis, explaining about different methodologies and epistemological issues: initial and ongoing. This is particularly important when first time researchers lack confidence about debating research methodologies and knowledge creation in general.
- o planning of a schedule for the work across the group: each negotiating when would be best for them to meet, do drafts etc
- o drawing attention to the national and international debates to which their work will contribute

It has seemed something of a hybrid role: project manager, mentor, research advisor, literacy educator, connector with debates, critical reader etc. Though there is clear overlap between this work and that of

general research supervision in universities, it is useful to describe this particular work as thoroughly as possible.

I have also noted some tensions and some strong benefits from working with the group: first, I was conscious of the tension for me between working collaboratively with each member and assessing the final outcome from their investigation. I always made clear that my suggestions were just that and that the responsibility always lay with them for what they finally produced for accreditation. However, I also signalled that accreditation was one step and that beyond this lay their ongoing contribution to knowledge in this field, singly or in joint authorship. Second, I was aware that the fears of practitioners about the type and quality of research and the nature of exposure during dissemination had to be addressed during the process.

"I never thought I would be in a conference, or published"

It appeared to me that the fears often stemmed from prior social and educational experience and from adherence to some of the traditional narratives about research and researchers. I could see that part of my role was convincing practitioner-researchers that this was not some second class type of research but generative qualitative investigations which could become the basis for more broad-based statistical investigation, if appropriate, but which anyway could provide useful feedback to policy makers.

Concluding Comment

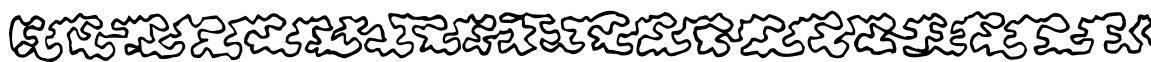
If practitioners are to believe that they can build research into the infrastructure of their practice and create new knowledge in response to their urgent questions, we believe that the opportunities created to assist them must be *practitioner-researcher centred*. Issues of identity as researchers, confidence, expectations, the range of research traditions etc. as well as the practical circumstances within their places of work, must all be acknowledged explicitly.

The issue of who has traditionally been excluded from the research agenda, and their own position in relation to this, must also be explored.

Finally, the urgency of the questions raised by the members of this group reveal the value of placing scarce research resources with practitioner researchers. They are all concerned with central policy concerns about the power of adult literacy students in developing their curricula and in securing fair accreditation mechanisms.

References

- Castleton, G. Inspecting the Consequences of Virtual and Virtuous Realities of Workplace Literacy, RaPAL Journal No. 39, 1999
- Frank, R & Rogrigues, E. We are the Governor's Dogs: Student Voices and Policy Making. Developing a New Framework for Literacy Practitioners in Empowering Learners to Engage with Workplace Change, RaPAL Journal No. 51, 2003
- Hamilton, M & Moss, W et al, Doing Research: Bradford Conference for Learners and Practitioners, RaPAL Occasional Paper 1990
- Peutrell, R. Literacy and the Capitalist Workplace, RaPAL Journal No. 43, 2000
- Wilson, A (2000) There is No Escape From Third Space Theory: Borderland Discourse and the 'In-Between' Literacies of Prisons in Barton, D, Hamilton, M. & Ivanic, R, Situated Literacies. Reading and Writing in Context. London: Routledge



Forty Ferrero Rocher, four kilograms of macaroni and the Tower of Hanoi - some thoughts on developing active Numeracy teaching activities.

Alison Gorf

Alison Gorf is a Senior Lecturer in the School of Education and Professional Development at University of Huddersfield. She can be contacted via e-mail a.gorf@hud.ac.uk

The title of this piece stems from being en route to a recent session with some Numeracy teachers on an In-Service course where we were looking at ways of teaching algebra. My teaching resources were all packed into a useful trolley which was rather heavy that evening and I realised that I was carrying the items listed in the title, which was why it weighed so much. The reasons for using these particular resources will be explained a little later.

My personal interest in active forms of numeracy teaching pre-dates my current role as a teacher educator and stems from two influences in the late 1990s. What I have been trying to research and develop over the past few years is in response to difficulties that I faced in my previous role as a Numeracy tutor in the Adult and Community section of Huddersfield Technical College in trying to teach many concepts in Numeracy such as multiplication, fraction operations and the understanding of shape and space problems.

Many of my students were becoming 'stuck' in terms of their progression at the stage where they had to move from four rules of number work to the complex application of those skills to higher order tasks. In terms of Bloom's taxonomy (1956) they had mastered the knowledge about numbers but were not effectively moving on to the comprehension, in that they could not easily transfer that knowledge to a new context and thus could not go on to the applying, analysing and synthesising needed to cope with the higher levels of assessment.

Mathematics teaching and in particular the difficulties that many people have with maths has long been a subject of study by members of the teaching profession and educational psychologists. Maths is a subject that invokes emotions like no other in education as (Ahmed 1987, p.22) succinctly states,

Maths is a subject closely related to failure, and is also socially acceptable to be bad at mathematics. I think as long as educated people are not embarrassed but rather proud

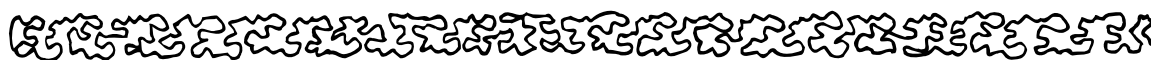
of their poor levels of competence then this will not alter.

As Benn (1997 p.35) notes, 'It seems that despite calls for over 100 years for an approach to mathematics that interests and stimulates children at school, mathematics is still a subject that confuses, alienates and leads to failure.'

In looking at the development of numeracy skills there are many interesting theories of how and why people learn these basic concepts. Perhaps best known is the work of Piaget and Inhelder (Collis 1975) on how children learn which identified four stages of intellectual development, sensori-motor from 0-2 years of age, pre-operational from 2-6 years, concrete operational from 6-11 years and formal operations from 11. These they maintained corresponded to a child's grasp of concepts such as geometric shape and manipulation of fractions. They surmised that children were unable to grasp certain concepts until they had reached the appropriate stage of development.

I was undertaking further professional development at the time and one of my assignments focussed on educational theory so I chose to look more closely at the research of Piaget and Inhelder (Collis 1975). It was then that I started to think that there could be a correlation between their stages and the fact that some of my adult Numeracy students had never made much progress in educational terms beyond Primary level (Key Stage 2.) I found it very interesting to note how the formal key stages of education match closely to these four stages of intellectual development. I was also particularly interested in the fact that many of my adult Numeracy students talked about 'coping' with their own maths studies (or helping with children's homework) up until the start of Key Stage 3 but were unable to make much progress themselves into the Core Curriculum Level 1 and beyond.

I started to wonder if it was possible that they had not yet reached the higher levels of intellectual development that are maintained to



occur from 11 to 14 years of age because of a lack of input of concrete experiences or that these students might need more in the way of the sort of active learning that goes on in primary education rather than the paper-based methods I had been using. At the time I was the Numeracy governor at my children's school and was invited to a briefing about the new National Numeracy Strategy (1999) which laid heavy emphasis on active learning methods. While I felt that many of the methods were not suitable for my adult learners I was interested in things like the use of multiplication and hundred squares and how they were being used to teach number relationships and started using those in my sessions.

Bruner's research (1964) into how people learn suggested three modes of representation: enactive, representing past events through a motor response; iconic, picturing an operation to recreate it mentally; and symbolic, writing maths equations. Bruner says these three stages are related to Piaget's stages of cognitive development and develop sequentially. He argued that you should present maths in this way when teaching, for instance when dealing with shape you should handle the shape, draw the shape and then write about it.

Ernest (1991) gives a different perspective on the failure of maths education arguing that the problem is one of philosophy. He argues that maths is not seen as relevant to people but as an abstract, absolute discipline which is not shaped by and cannot relate to everyday life and ordinary people. He argues for a change in philosophy for maths education away from the view that maths is an absolute truth not subject to change - which he calls an 'absolutist' view. In this view he argues (Ernest 2000,p.1),

"The outcome is therefore a philosophically sanctioned image of mathematics as rigid, fixed, logical, absolute, inhuman, cold, objective, pure, abstract, remote and ultra-rational. Is it a coincidence that this image coincides with the widespread public image of mathematics as difficult, cold, abstract, theoretical, ultra-rational, but important and largely masculine. Mathematics also has the image of being remote and inaccessible to all but a few super-intelligent beings with mathematical minds."

Benn (1997) reinforces this view. In her studies of the maths that people experienced in their everyday lives in craft activities like knitting she states, (Benn 1997 p.36),

'Many of these pleasurable processes are not thought of as mathematical. Indeed it sometimes seems that if people can do it, it is called common sense, if they can't, it is called mathematics.'

The alternative point of view is 'fallibilism', the view that emphasises the human side of mathematics. In this view mathematics is experienced as (Ernest 2000,p.1),

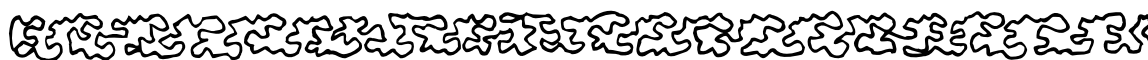
'warm, human, personal, intuitive, active collaborative, creative, investigational, cultural, historical, living, related to human situations, enjoyable, full of joy, wonder and beauty.'

This relates to the growing trend in maths education to teach children about the history of maths eg. the Egyptian number system, the work of early Greek mathematicians and to look at examples of 'mathematical art', to encourage them to see that maths has been created by humans and can be altered by humans.

I believe that adopting a multi-sensory, active learning approach to numeracy teaching can benefit all learners not just those with particular learning difficulties or disabilities. In particular the use of engagement through activities which involve concrete experiences. Much of maths has traditionally been taught in a didactic way involving explanations of concepts through board work then individual 'exercises' done by the students to demonstrate their understanding of the concept explained.

As a result of these thoughts I started to introduce further active and 'discovery learning' into my sessions using strategies such as these below.

- Handling of models of solid shapes when discussing properties of a shape
- The use of number lines for counting, multiplication tables and negative numbers
- Investigating the relationship between the circumference of circular objects and their diameter by using string and rulers to measure the dimensions
- Using multi-link cubes to investigate volume of different solid shapes
- Investigating the largest possible volume of cuboid that could be made from one sheet of paper.



Since coming to work at the University I have been privileged to work with many fantastically creative and inspiring teachers and trainee teachers and have gained many more ideas about activities for the classroom. As I no longer (sadly) teach adult Numeracy my role now is to pass on these ideas to future students and to continue to research and develop my own.

This has involved an ongoing search for ways to involve chocolate in my teaching not just for eating, it has to have a learning objective attached! So far I have found a use for Quality Street with Carroll and Venn diagrams for categorising shapes, Terry's chocolate orange for volume, radius and diameter work, bars of chocolate for fractions and the ever useful Smarties or Skittles for ratio, proportion, fractions and data handling work. I have also found many excellent activities through the Association of Teachers of Maths (details in references) I can highly recommend their Algebra jigsaws you will hear people getting excited about algebraic simplification!

As for the items mentioned in the title they are used as follows.

- The forty Ferrero Rocher are used in an activity I developed to look at the application of the formulae for the volume of sphere and cuboid to working out how much wasted space there is in two different sized boxes of the chocolates.
- The four kilograms of macaroni are for a brilliant activity that I found on the internet called 'The Cylinder Problem', (see references for details) which explores the relationship between basal area and height in the volume of cylinders. You can use rice for this one but pasta is easier to pick up off the floor!
- The Tower of Hanoi is one of a new set of wooden puzzles I have recently bought through a magazine subscription to *Classic Puzzles and Brainteasers* and is used to illustrate how algebraic solutions can be used for problem solving.

My quest for more ideas for active learning has renewed my enthusiasm for the subject engaging me in further professional study, this time in looking at metacognition in maths teaching and the history of the development of mathematical ideas. I and my students have also had far more fun in the last few years than anyone is probably supposed to in a maths classroom!

Ahmed A. 1987, *Better Mathematics A Curriculum Development Study*, HMSO, London

Association of Teachers of Maths
Available from
<http://www.atm.org.uk>

Benn R. 1997, *Adults Count too - Mathematics for Empowerment*, NIACE, Leicester

Bloom, B.S. (Ed.) (1956) Taxonomy of educational objectives: The classification of educational goals: Handbook I, cognitive domain. New York ; Toronto: Longmans, Green

Bruner J.S. 1964 'Some theorems on instruction illustrated with reference to mathematics', *The Sixtythird Yearbook of the National Society for the Study of Education part 1 Vol 63* referred to by Rosnick L. and Ford B. 1981 *The Psychology of Mathematics for Instruction*, Lawrence Erlbaum Associates Inc., New Jersey

Classic Puzzles and Brainteasers 2004, London, Hachette Partworks Ltd

Collis K.F. 1975, *A Study of Concrete and Formal Operations in School Mathematics : A Piagetian Viewpoint*, Australian Council for Education, Melbourne

Ernest P. 1991, *The Philosophy of Mathematics Education*, Falmer Press, Hampshire

Ernest P. 2000, The nature of Mathematics and Teaching, *Philosophy of Mathematics Education Newsletter*, No 9 (online)
Available
<http://www.ex.ac.uk/~Pernest/pome/pompart7.htm>
Accessed 17.8.00

National Numeracy Strategy 1999 Framework for teaching mathematics, Sudbury, DfEE
Available online
http://www.standards.dfee.gov.uk/numeracy/teaching_resources/?sec=0

The Cylinder Problem
Available online
<http://mathforum.org/brap/wrap/elemllesson.html>

RaPAL Membership form

RaPAL Membership Fees for 2006

	UK & Eire	Other EU	Outside EU
Individual Membership*			
Full-time	£35	£50	£50
Low-waged, unwaged, student	£20	£30	£30
* includes 1 copy of the RaPAL Journal			
Institutional Membership			
2 copies of Journal	£70	£75	£75
3-5 copies of Journal	£90	£100	£100
6-10 copies of Journal	£135	N/A	N/A

Help us to DOUBLE RaPAL's Membership in 2005-2006!

We are always keen to attract new individual and institutional members. Please copy or pass this page to friends, colleagues and your workplace library and encourage them to join RaPAL now!

Name _____

Address for correspondence _____

Postcode _____

Tel No: _____

Work: _____

Email: _____

If you **DON'T** want us to add your email address to the RaPAL circulation list (RAPALLIST) please tick here

Special interests:

I wish to join RaPAL. (Please see table of membership fees for 2006)

Please pay by one of the methods below (tick box):

- I enclose a cheque (made payable to RaPAL) for £
- I wish to pay by Standing Order/Direct Debit - please send me further information
- Please invoice me (institutions only)

Please send your completed application form and cheque (if appropriate) to:

Kathryn James
 RaPAL Membership Secretary
 Department of Educational Research
 County South
 Lancaster University

RaPAL

Research and Practice in Adult Literacy

<http://www.rapal.org.uk>