PARENTS AND CHILDREN LEARNING TOGETHER - A STUDY OF THE EFFECTIVENESS OF PARENTAL INVOLVEMENT ON CHILDREN'S PROBLEM SOLVING SKILLS

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Introduction

The study stems in part from two earlier studies into parental involvement in pre-school education. Amongst some interesting findings were parents concerns and uncertainties about their roles in facilitating the learning experiences of their children when not in school. Other findings involved teachers' perceptions of the parents' roles and these revealed that parents were not welcome in school and should instead provide a supportive and complementary home environment with appropriate experiences.

This paper describes the preliminary attempts to sensitise parents to current views on appropriate learning environments for young children, in particular, the strategies they use to make sense of their experiences. A home programme comprising activities to stimulate thinking and problem solving is provided and the parents' role as tutors focusses on an interactive process. Here the tutor sets the challenge and together they resolve the mystery, the tutor giving structure and direction to the experience. It is anticipated that if parents understand the basis for this approach to tutoring, their support and encouragement will relieve the potentially damaging pressure to " succeed at all costs ", a current dilemma for parents of children in Singapore.

Preliminary Investigations

Parents concerns about availability and quality of pre-school education continue to be expressed in the meritocratic climate of Singapore. It was revealed in the first study, (Sharpe 1989), that a traditional approach to learning by direct instruction, rote learning, homework and regular assessments, was the preferred norm. This study, was largely concerned with assessing parents needs and expectations of pre-schools and their teachers. A survey of parents needs and expectations, appeared to support Tizard's findings, (Tizard et al, 1981), that parents are ignorant of educational aims, practices, and priorities, largely because teachers are insufficiently sensitive and explicit when communicating information to parents. The Singapore study concluded that improved cooperation between parents and teachers was neccessary, and attention to a process of listening, negotiating, and compromise, through parental involvement in pre-schools seemed desirable, (Little and Smith, 1971).

It was also envisaged, that claims for other benefits from a parental involvement programme would be appealing to parents. Smith's claim for a positive predictive relationship between involvement and academic performance, (Smith 1980), and Radin's claim for maintenance of improvements, (Radin 1972), augerred well for the aspirations of parents in Singapore. Smith's concept of "Partnership" involvement, (op.cit.), was adopted, and an investigation into its precise nature was the concern of the follow up study, (Sharpe 1990).

A group of 60 parents were asked questions about 5 types of "Partnership" involvement, revealed by Epstein (in Brandt 1989). These involved: Obligations of parents as parents; Obligations of schools in communication; Parents as volunteers; Learning at home; Parents involved in school policy making. An analysis of the responses showed a positive desire for volunteering to help in school, but they did not want to attend workshops for this purpose. (Table 1). Responses to questions about assistance in helping their children at home indicated that parents' preferred a type of "Partnership" involvement. When the responses of teachers to questions about the 5 types of involvement were analysed, a higher percentage of teachers than parents, felt that workshops on home based learning would be desirable. Teachers felt also, that there was more tuition, in the form of cramming of school work by hired tutors, than parents claimed. (Table 2). When these findings were analysed in terms of age, joint income, and educational level, although most parents wanted help to help their children, the least well educated, regardless of income, requested workshops to help them help their children. A finding from a related study supported the prescription for workshops for the least well educated parents. Here 50 sets of parents in one Childcare Centre were asked how they spent their time with their children. The higher educated parents spent the most time, and board games, and reading stories were the most popular activities. Thus whilst the preference for home programmes, especially for the least well educated parents, is clear, their content and effectiveness would need to be researched if sufficient of those parents, both needing and requiring such programmes, are to be convinced of their usefulness.

Elsewhere successful home programmes have relied much on the schools' initiation, and have been largely for " at risk" or " disadvantaged" families.(Cameron 1985, Griffith's and Hamilton 1984, Powell 1988, Jowett et al 1991). Much of their content has focussed on reading programmes, and imparting appropriate attitudes, conduct, use and understanding of language, and their relationship to school achievement. Such programmes it is claimed, elicit a protective and secure learning environment rather than improve reading skills per se. (Hannon 1987). Clearly such merits may well be conducive to the needs of parents and their young children in Singapore. Nevertheless, their usefulness especially in terms of their relationship to school achievement would have to be demonstrated. Additionally the content would need to be appropriate and not comprise mere rehearsal of school work, which may well contradict the school's efforts. A major aim of the current research into parental involvement in school is to devise a suitable programme which may satisfy the needs of the

majority of parents and maximise the potential of their children. Small beginnings can lead to ....

Strategies for Practice.

Jowett et al (1991) have documented some useful parameters worthy of further investigation. Their findings from a study of various kinds of parental involvement activities in a range of schools in Britain, are illuminating in several respects. For the purposes of this research those concerning home programmes are considered in relation to their usefulness for parents, teachers, and children in Singapore.

The parents involved in Jowett's study, (op. cit.), were eager to to be involved in school activities which could be continued at home, however, unlike the Singapore parents (albeit of younger children), these parents were able to attend workshops in school time and become acquainted with the types of school-based activities which involved their children. The parents of children in one primary school commented positively. In particular, comments about their understanding of what their children were capable of and how children learn and the many ways to teach them, were cited. These workshops apparently led to parents' requests to continue certain activities at home, at times convenient to them and not just the usual homework. These suggestions were supported by all but one of the sets of parents reported, this particular group being parents of very young children, who felt that such experiences would only add to the already long school day. Jowett reports that other concerns centred on pressure on parents to complete activities and the fears of failing at tasks in front of other parents.

Thus, some pointers from Jowett's research for the Singapore study would be the usefulness of workshops to sensitise parents to how and what children learn at different ages and stages, and secondly, provision of related activities to be carried out at home. Although such proposals were expressed by parents in the Singapore study reported earlier, alternative arrangements for the provision and content of the workshops and home programmes, would have to be considered. It would be necessary to involve parents in workshops which take place in centres external to schools and school hours, and provide supportive information and education for parents as part of the regular parent programmes.This would be vital in order to avoid exposing parents as " uninformed", and, to avoid pressurising them into believeing that this was the only way for their children to succeed in school. It is just this kind of pressure that this study seeks to avoid, given parents expectations of schools reported earlier.

Another cautionary note expressed by Powell et al, (1988), is timely. He suggests that it would be wiser to match programmes to parents and their differing ideals of parenthood. Furthermore, Goode, (1987), warns of the dangers of teachers and researchers patronising parents. He suggests that their practices rather than their personalities should be considered. He proposes

that the kinds of questions parents pose, how they organize activities for their children, and how they appraise themselves, are practices more worthy of investigation. Applying these suggestions, for example, to an analysis of the Singapore parents responses to questions about what they want from pre-school, (Sharpe 1990), it is clear that parents want to be informed about their children's progress and many felt that they were not well informed currently. Furthermore parents do not want to visit school regularly to discuss progress. (Table 3).
Thus a specific type of home programme has been prepared which attempts to satisfy the needs of parents in Singapore.

Planning the Home Programme

Any teaching programme designed for young children would need to take account of their developmental needs, the resources available, and the comptetence of the teacher/tutor. Additionally, as with school programmes, there needs to be a commitment on the part of the teacher/tutor to the success of the programme, and, a willingness to be flexible about outcomes and an ability to modify provision and expectations. The previous study (Sharpe 1990), reported the need to familiarize parents with knowlege about qualitative differences in the development of children's thinking and problem solving strategies.To convince them that learning and development takes place in a materials rich environment with opportunities for self initiated activity, and, the importance of play in problem solving and creativity. (Bruner 1972). The importance of structured play for intellectual development, revealed by Bruner, and reported in Sylva et al, (1980), proposes the kind of evidence most likely to foster change, and support the type of home programme planned. The goal directed behaviour reported by Sylva et al (op. cit.), implicit in building, drawing, and board games is related to goal directed activity in school attainment, and such a finding might well persuade parents of the benefits of these types of experiences. Furthermore, an adult's role in motivating children to think, express views and explain actions is crucial in play and is most likely to occur when the adult is facilitator. (Sylva et al op. cit.).

Thus an approach to introducing parents to the merits of problem solving and the importance of explaining and describing activities was selected as the basis of the home programme. What then do parents need to know about problem solving ?

Information on Problem Solving

Wood (1988), reviews the research proposing the collaborative role of adults in supporting children's learning. Challenging activities which tap the child's existing repetoire of skills and knowledge, which may be provided are more likely to be effective in new learning, he concludes. To enable effective collaboration, a noteworthy tactic is to provide tutoring in problem solving, (Wood et al, 1976), with the idea of the "expert" passing skills and knowledge to another. This "scaffolding", (Wood, op.cit.),

involves such activities as questioning, correcting errors, showing approval, coaxing, and providing supportive experiences which children grow to interpret, extend, and understand. Other research,(Schweinhart et al, 1986), points to the advantages of programmes for young children which stress relationships with responsive adults who encourage competence and decision making, such as the "High Scope" programme, and the positve long term results over other programmes.For this research it is envisiaged that if collaborative efforts between parent and child are encouraged, this will form a sound basis for a home programme.

A Place to begin.

To date, the planning and preparation of the programme has centred on teaching a group of adults to observe and record the behaviour and problem solving strategies of young children as objectively as possible. The purpose is to investigate whether, given the opportunity, the group are able to develop realistic developmental expectations, observe individual differences, and note temperaments, interests, and attention spans. In this regard, Saljo and Wyndhamn's study (1990), on the problem solving competencies of 12/13 year olds, suggests that success appears to depend on the amount of interest and enthusiasm students bring to the tasks and the relevance to real life situations. It is anticipated then, that before parents are exposed to the programme, an analysis of the effects of tutoring by adults other than parents, will reveal the kinds of problems and issues to note.This is in order to pre-empt any difficulties which may confront parents, and which may diffuse any enthusiasm, interest and commitment, or pressurize or expose. Such effects, which Jowett, (ibid), noted might be detrimental to any home programme.

A group of 20 post graduate diploma in education students, with little or no experience of young children, or knowledge of child development, have been undergoing a course, designed to develop their understanding of children's problem solving strategies. After some training in observing children, using running records of happenings in "event sampling" and "time sampling" and the use of anecdotal records and case history information, students were introduced to aspects of developmental explanations for problem solving. They were encouraged to try out baseline activities to test conservation, understanding of relational, comparative, and differentiated words and phrases, understanding of position and direction, time and cause and effect, through questioning, discussion, posing further obstacles and rephrasing questions. Next, students were encouraged to provide problem solving activities and experiences, which comprised board games and puzzles, construction activities, collage, listening to stories involving challenging situations, treasure hunts/trails, and every day activites where challenges are identified.

Students were asked to chose two children for their study, and identify their similarities and differences at the beginning, and

to monitor these during the observations and interactions. In addition to recording observations they were asked to collect information for the purpose of completing a checklist, or progress chart, and record information from baseline tests and observations. Records of problem solving and related activites were kept as were detailed accounts of the childrens' responses to these. To date the observations are in progress and students have already begun to indicate how behaviour has changed and are beginning to note what they feel the reasons are. Where possible students were asked to compare the two children using both common and differentiating variables, so that any changes which occur in the children can be explained, accounted for, or investigated further. Additionally, students have completed a questionaire designed to evaluate their views on their understanding of children, the appropriateness of their observations, the appropriateness of their activites, and whether they feel competent in interacting with children. A summary of these is shown in Fig. 1. Hopefully, when their studies are analysed, if the promising results have been maintained, the next step will be to select a group of parents and investigate their effectiveness as tutors.

Essentially, it is anticipated that such naturalistic modes of enquiry will reveal a number of paramaters for further investigation. In particular, the kinds of questions most effective in revealing problem solving situations when posed to children of different ages; the kinds of challenging and problem solving experiences most likely to sustain interest and enthusiasm with children of different ages; the kinds of experiences which appear to elicit new understanding in different children; the characteristics of tutors and children who appear to interact with positive results. Hopefully, if such information becomes available, it will serve as a useful basis for planning and piloting the home programme.

FIGURE 1

Summary of students' responses to questions about course on tutoring problem solving.

- Chose course

    * to learn how to observe
    * to relate better to children - so long since childhood
    * to know how to choose relevant activities
    * to understand how children think

- Improved understanding

    * now know what to look for
    * theory becomes meaningful
    * need much more time yet

- Of observing

    * concrete materials needed - easily distracted
    * ask appropriate questions in natural situations
    * must be objective- avoid personal perceptions of childhood

- Of differences

    * think differently at different age
    * one or two months in age difference and they are so
        different in their thinking
    * different backgrounds make a difference

- Of activities provided

    * not yet - too frightened to interact
    * need to continually think up and rephrase questions
    * to capture attention - these must be meaningful
    * you can do lots with simple things if you think about it

- What else do you need?

    * more practice observing
    * more practice talking and asking questions
    * more guidance and structure
    * more opportunities to discuss and check I'm doing
        the right thing
    * how to help the slower ones

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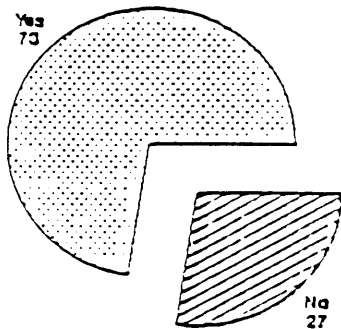   Psychiat., Vol.17, pp.89-'100.

Table 1:

**Results of 60 sets of parents
responses to questions about
parents as volunteers
expressed in percentages.**

Type 3 Parents as volunteers
Need more opportunities ?
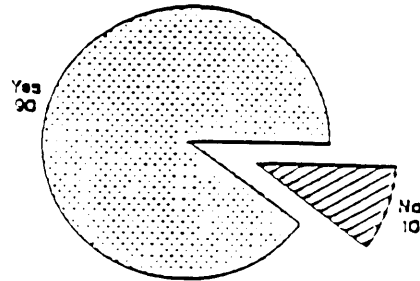
Would you volunteer ?

Workshops for volunteers ?
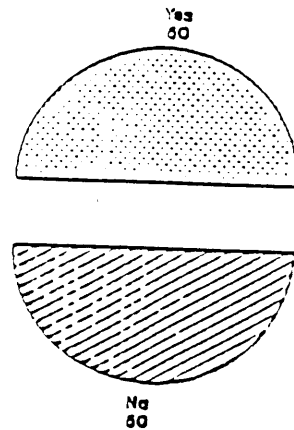
Table 2::

Results of 60 sets of parents responses to questions about helping their children at home expressed in percentages.

Type 4 Learning at home
Help to help learning ?

Yes
93

No
7
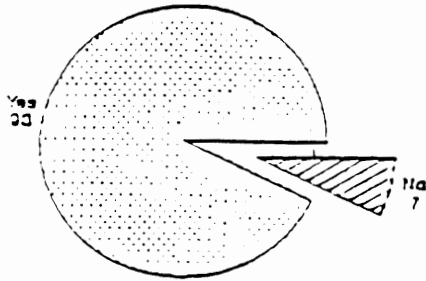
Parent Workshops ?
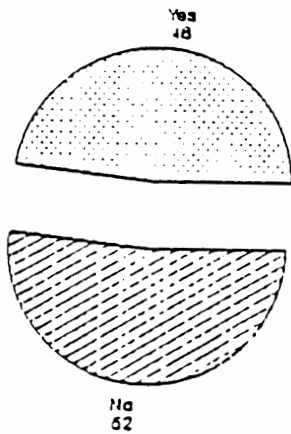To help you help your child ?

Yes
87

No
13
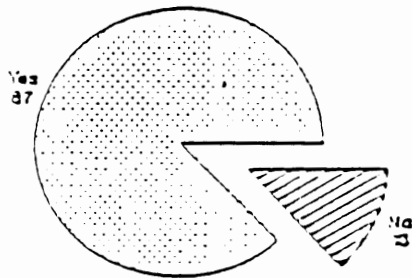
Table 3:

Results of 60 sets of parents responses to questions about the obligation of the school expressed in percentages.

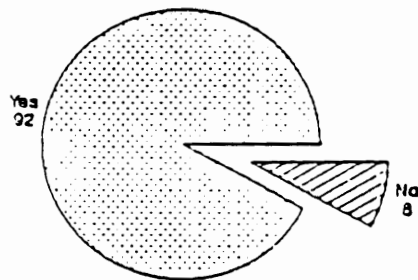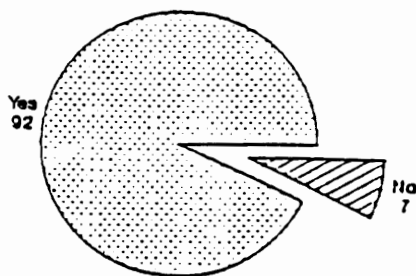### Type 2 Basic obligation of school
Information on progress ?

Yes
96

No
6

Well informed currently ?

Yes
48

No
52
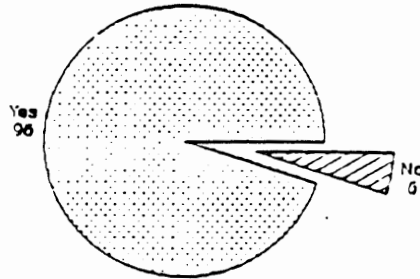
Need to discuss progress ?

Yes
92

No
8

Better means of communication ?

Yes
92

No
7

Leave education to teachers?

Yes
66

No
46