EARLY INTERVENTION:

A SELECTIVE REVIEW OF THE LITERATURE

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1. 1981

The literature which is relevant to the subject matter of this article is vast. Every strand of research in child development, adult development and social functioning bears upon it. It would be a mammoth undertaking to review even the relevant intervention literature: The High/Scope - Abt Associates Homestart Evaluation alone runs to 3,000 pages; the SRI - Abt Associates Follow-Through Evaluation runs to over 20,000 pages. Over 3,000 evaluations of Headstart activities have been published.

In this article an attempt will be made to give a useful impression of the range of intervention models. Over 80 of these, each replicated at sites throughout the United States, were identified by Stallings and Kaskowitz (1974) in their report on the Classroom Observation Component of the Follow-Through Evaluation (see below for an account of the major components of the US Intervention Programmes for the Disadvantaged).

The range of models is breathtaking, ranging from primary emphasis on encouraging the adult members of the communities concerned to develop the civic perceptions, expectations, and abilities required to gain control over the wider political and administrative process, through giving parents the right to hire and fire teachers, assess pupils' progress in school and determine school curricula (in order to ensure their relevance to the needs of their own culture), having parents come into classrooms to model effective human behaviour for the pupils, project-based education designed to enhance motivation, and conventional but individualised programmes based on one-to-one instruction, to highly structured programmes designed to teach children particular skills, words or phrases.

The models vary along a number of different dimensions. In the first place they vary in the way in which "the problem" which is to be tackled is defined. Thus, they may construe the problem as being that children have not developed the attitudes and abilities which are thought to be essential for school success. Or they may see "the problem" as being that parents do /...

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* The views expressed in this paper should not be attributed to the Scottish Council for Research in Education.

do not understand how to foster these attitudes and abilities. Or they may locate the problem in the wider society: the problem may be that the role of the school in society is such that it must necessarily define some children as 'failures' and others as 'successes'. If this is accepted the problem does not stem from deficits in pupils, parents, teachers or schools, but from deficits in the way in which society is organised.

To some degree independently of where "the problem" is located, programmes vary in their definition of the target for intervention. Thus, even if "the problem" is felt to lie with the children, remedial action may be directed toward the children themselves, their parents, their teachers, their schools, their communities, or politicians.

Finally, they vary in the delivery systems they favour. Thus, they may seek to deliver their "benefits" to children through programmes based in schools, homes, institutes of adult education, or the political systems of society. Those who attribute "the problem" to children's ability deficits may simply set about trying to tackle the symptom, by, for example, teaching the children concerned things they need to know - such as the names of things or relationships; they may attribute "the problem" to such things as the mothers not "knowing that it is important to play with their children", and therefore set about trying to get the mother to treat her children in new ways; they may attribute it to the mother not having time to spend with her children and therefore set about trying to correct her environment or at least encourage her to do so; or they may attribute it to the child not having had the opportunity to observe his parents engaging in effective problem-solving activity and they may therefore set about encouraging the parent to endeavour to tackle her own problems in her children's presence - and this may involve helping her to join with others in bringing effective pressure to bear on politicians and administrators.

Those who see the problem as inhering in schools may set about trying to get schools to relate to children's values - by, for example, giving the parents the power to hire and fire teachers; they may encourage schools to drill the pupils in the knowledge and skills they "need" if they are to "take advantage of what the school system has to offer"; they may set about encouraging schools to treat different children in different ways either to "enhance their motivation" or in order to enable them to develop different competencies. Some advocate more "child-centred" educational programmes and others more "teacher-centred". (None, to my knowledge, however, advocate a more /...

more individualised competency-centred approach, although, as I argue in Parents, Teachers and Children (1980), this appears to be the crucial variable differentiating between the home and the school as educational institutions).

Those who focus on politicians and administrators may demand the creation of more humane and satisfying living environments for "disadvantaged" people; they may seek to get these politicians and administrators to treat the parents concerned in a more developing and growth-enhancing fashion; or they may strive to get them to do something about social structural variables on the grounds that the educational system is primarily about the allocation of privilege - with the result that enhancing the success of one group of children will simply mean inflicting the "disadvantage" on another group of children. They argue that the politicians' and administrators' task is to change our social structure in such a way that everyone can be helped to develop and utilise his skills and talents and be adequately rewarded for so doing.

The U.S. Programme

It is appropriate to begin this review with an account of the U.S. Federally-Initiated activity in the area. This has three main components: Headstart, Follow-Through and Homestart.

The scale of the operation may be indicated by the fact that, since 1965, between 10 and 200 billion dollars has been invested each year in such programmes. Over six million children have been involved at a cost, at current prices, of something of the order of three thousand dollars each. Some two hundred million dollars have been invested in the evaluation of these programmes.

The particular variant of the scheme which is initiated at any site is chosen, administered and evaluated on a local basis. What typically happens is that several groups of academics and practitioners proffer a number of alternative programmes from which one or two are chosen by local groups for implementation.

Headstart was initiated, not by the Office of Child Development, but by the Office of Economic Opportunity. In those early days community development objectives loomed large - and remarkably successful the programmes were in achieving them, (Marris & Rein, 1972). However, in the wake /...

wake of the movement, best signalled by the names of Bloom (1964) and Coleman (1966), toward a belief in the central importance of early environment, Headstart was increasingly seen as being primarily concerned with educational activities with a cognitive emphasis. The original focus became secondary. A quote from Zigler, the first Director of the Office of Child Development, which states the educational/cognitive point of view particularly clearly, will be found below. Some argue that the change of emphasis from controversial but attainable goals to non-controversial but hard-to-attain goals was deliberate: The Community Development programmes were too successful in enabling people to bring effective pressure to bear on authorities, and this threatened vested interests. (The same point has been made in relation to the British Community Development programmes).

Zigler's Headstart was based on the belief that what happened to children before they started school was of critical importance to their subsequent educational development. A variety of centre-(institution)-based and home-based programmes were therefore initiated to demonstrate what could be done to boost children's development in the early years. Later, the Federal government initiated Headstart Planned Variation to place more emphasis on assessing the relative merits of alternative programmes rather than "showing what could be done".

It was recognised from the beginning that Headstart alone would be unlikely to have a permanent effect on children's educational development. Provision was therefore made, in Follow-Through, for a variety of further activities to strengthen and build on the gains the children were expected to make. The Follow-Through evaluation cost 50 million dollars.

The term "Homestart" referred to a specific type of Headstart programme. This involved home-based intervention designed to encourage the mothers to play a more active role in promoting the educational development of their children. Whereas there are several thousand Headstart centres there were only 16 Homestart centres each employing only seven Educational Home Visitors. "Outcome" /evaluation was undertaken in only six of these sites. Nevertheless the programme cost 1.6 million dollars annually from Central Funds, supplemented by a lot more from local bodies and the 3-year evaluation cost in excess of 2 million dollars.

Reflecting /...

Reflecting their origins in the Office of Economic Opportunity, and despite Zigler's somewhat narrower orientation, all Headstart programmes were multi-pronged, involving educational activities for parent and child, health care, and improvement of the economic, social and physical environment. Despite the variety of models, all Headstart programmes were supposed to follow guidelines laid down by the Office of Child Development, which included the following educational objectives:

.... Provide children with a learning environment and living environment which will help them to develop socially, intellectually, physically and emotionally ....

.... Involve parents in educational activities to enhance their role as principal influence on the children's education and development ....

.... Assist parents to increase their knowledge, understanding, skills, in child growth and development ....

.... Build ethnic pride, develop a positive self concept, enhance individual strengths ....

.... Encourage children to solve problems, initiate action, explore, experiment, question ....

.... Provide adequate indoor and outdoor space, materials, equipment and time for children to use large and small muscles ....

.... Provide for on-going observation, recording and evaluation of each child's growth and development for the purpose of planning action suited to individual needs ....

.... Provide for parent participation in planning the educational programme .... and classroom .... and home activities ....

.... Provide parent training in the observation of growth and development ....

The health component includes:

.... Provide a comprehensive health scheme .... medical, dental, mental health, and nutrition ....

.... Provide the child's family with the necessary skills and understandings ....

.... Provide for a thorough health screening .... vision testing .... hearing .... immunisation ....

.... Provide extensive community mental health care.

The nutrition component includes:

.... Provide food to meet nutritional needs ....

.... Educate parents in the selection and preparation of food, money management, consumer education.

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The social service component includes:

.... Furnishing information about available community schemes and how to use them ....

.... Follow up to assure delivery of needed assistance ....

.... Establishing a role of advocacy and spokesman for Headstart families ....

.... Helping .... parent groups work with other neighbourhood and community groups with similar concerns ....

.... Help to ensure better co-ordination between community agencies ....

The parent involvement component includes:

.... Direct involvement in decision making ....

.... Participation in classroom activities ....

.... Providing methods and approaches for involving parents in experiences which will lead to enhancing the development of their skills, self-confidence, and sense of independence ....

This comprehensive approach was retained in Follow-Through. And yet, as already indicated, the Stanford Research Institute were able to identify over eighty different models of intervention - each replicated at sites all over the country.

Altogether, well over ten thousand Headstart programmes have been run and evaluated, and the very variety of the programmes and evaluations has helped to ensure that it would be difficult to systematise, analyse and assess them.

Given the variety of the goals pursued by project sponsors, attempts at national evaluations have, not surprisingly, proved difficult. At one point the Stanford Research Institute, which had been awarded the contract for the national evaluation of Follow-Through, started trying to develop evaluation instruments geared to the goals of the sponsors (to, it must be admitted, an impossible time scale) only to find itself confronted, first, by an edict from the Office of Child Development to concentrate on assessing the programme's effect on IQ and academic performance, and, subsequently, with the loss of their contract.

Despite the activities of his colleagues, quoted above, Zigler, the Director of the Office of Child Development, defined the goals of the programmes as being to enhance "the ability to master formal concepts, to perform well at school, to stay out of trouble with the law, and to relate well to adults and other children" (1973).

Over /...

Over three thousand evaluation studies have been carried out. It is clearly impossible for any single researcher, particularly one engaged in substantive research of his own, to get hold of, let alone evaluate these reports. To facilitate the process of evaluating the evaluations, the US Department of Health Education and Welfare commissioned a number of reviews of the literature emerging from this vast enterprise. These reviews are, unfortunately, flatly contradictory. Thus, whereas Mann et al (1977) conclude that, of 62 schemes selected for their quality, 49 showed a beneficial effect and only 13 did not, and Brown (1977) came to the conclusion that the 13 studies which did not appear to show a beneficial effect were unsatisfactory for one reason or another (thereby concluding that there were no studies which did not show a benefit), Hawkridge et al (1968) and McLoughlin (1977) came to exactly the opposite conclusion. Hawkridge et al concluded that, out of over one thousand studies only 21 met a criterion of improved academic or intellectual function while McLaughlin et al, after reviewing 40 "exemplary" studies which had at one time or another reported benefits (including the studies referred to in more detail below) concluded that:

"At the outset (of this exercise) it was expected that a major proportion of the effort would involve reconciliation of different, but apparently valid, studies; however, this turned out not to be substantial problem .... The major problem was to draw any valid substantive conclusions from any of the studies".

Nevertheless, notwithstanding all the argument, a number of conclusions do emerge from this literature:

1. Despite the breathtaking range of programmes, involving manipulation of almost every conceivable set of variables known to the author, no dramatic effects of any of the programmes have been demonstrated except that perhaps, given a little encouragement, "deprived" adults are very good at coming together to bring such effective pressure to bear on the bureaucratic and administrative machinery that steps have to be taken to put a stop to such programmes of adult education.

2. None of the programmes has been able to have a dramatic and lasting effect on IQ. It is not the case that, as was widely believed at the start of the programme, simply doing such things as talking to children would dramatically raise their IQs and school performance. Whatever the variance in school performance is due to it is not principally /...

principally due to any of the obvious variables which were thought to lie behind it when the programmes were implemented. It may be noted in passing that one reason why the designs of the evaluation studies look so poor is that these studies were based on the assumption that the effects of intervention would be dramatic, and therefore demonstrable despite minor defects in experimental design and instrumentation.

3. If they are able to opt into the programmes, high socio-economic status children benefit more from the programmes than do low-socio-economic status children. (Palmer (1976), Jensen, (1974)).

4. The range of outcomes which has been assessed does not do justice to the range of outcomes which one would expect to follow from such programmes. Thus one finds Love (1976) emphasising that thousands of parents have learned important things and come to feel, and to be, more competent and capable of leading their lives in the way they want to lead them than they were before, but that this effect does not show up in the studies which have been made.

5. No one style of intervention has been shown to be superior to others (although Stallings' (1974)evaluation of some of the Follow-Through programmes does show that traditional school programmes depress the ability to perceive and think clearly, while "open" education programmes enhance this ability but depress performance in the three Rs).

6. One of the reasons for the messiness of the area is that programmes have not been sufficiently clear about whether they were service-oriented or research-oriented. The result has been a lack of theoretical basis in the interventions, fluidity in the processes the effects of which the researchers were supposed to be studying, and insufficient funds for the development of appropriate instrumentation (Haney, 1976).

Some Studies of Particular Importance

In what follows, a number of studies will be reviewed. These began before the Headstart bandwagon came on the scene, and, despite enormous odds, managed, largely as a result of the energy and persistence of a small handful of individuals, to retain a recognisable identity throughout that period. Ironically, one of the features which enabled them to survive the massive politico-bureaucratic activity which has been hinted at, and the welter of reviews and reversals of policy, and changes of personnel, programmes and bureaucratic structures, was the fact that they were small studies.

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I will begin by examining the emphasis which the various programmes have placed on three dimensions of the problem; working with the child, working with the mother as the primary educator of the child (who may either not think it is important to do certain things with her child (or not know how to do them) or be unable to do them because of other psychological, social or community problems), or attempting to tackle the institutional structures of the community which may make it impossible for the mother to perform her role as primary caretaker adequately.

Centre-based, Child-oriented, Programmes.

Although, as we have seen, Headstart guidelines called for wide-ranging activity, the main thrust of the majority of Headstart and Follow-Through programmes was in the centre-based, child-oriented, area. These "traditional" Headstart programmes provided the "control" groups for Love's Homestart evaluation and similar, but longer-established, programmes provided bench-mark data for a number of other comparative studies. It is therefore necessary to say a few words about these programmes here.

Even within the general area there is a considerable variety of approach. It would be nice to be able to present the discussion of that variety in terms of an empirically-derived classificatory framework. Unfortunately the SRI factor analysis of different approaches (Emrich, 1973, Stallings, 1974), whilst showing that there were marked differences between them, yielded no such classificatory framework-although later work on seven models selected for evaluation at 22 sites did highlight the importance of the drill-open/exploratory dimension.

As a result of this failure to establish a classificatory framework it is necessary to give some indication of the differing orientations of those who have mounted centre-based programmes/oriented directed toward children by referring to specific programmes. Since the Headstart material is so vast and scattered it is easiest to do this by reference to the work of some of the researchers who have been working in the area for the longest period of time. Reference will be made to the work of Bereieter and Englemann (numerous programmes based on which are to be found in Headstart and Follow-Through), Weikart and Karnes.

Bereiter and Englemann

The Bereiter and Englemann (1966) programmes - which have been widely used as part of Headstart, and in this country, in programmed kit form as DISTAR /...

DISTAR - are based on the assumption that the child has not learned things which he should have been taught and that the task of the centre is to set about teaching him those things. It is based on principles derived from foreign-language teaching and deals with language, reading and arithmetic. Part of each day is set aside for such activities. Teachers work with groups of 5 or 6 children and use behaviour modification methods making extensive use of practice and praise to reinforce desired responses to the material. As well as teaching concepts for thinking about things and relationships the programme teaches skills like instruction-giving and question-asking. In this way it is hoped to teach the children a meta-language for thinking about language itself.

Research quickly established that the "benefits" conferred by this approach "washed-out" in two or three years. Bereiter (19) is unperturbed by this, asking why one should expect anything else, particularly as there seems to be little agreement about what teenagers need to know or how they should be taught it. Such complacency does, however, call into question the basic assumption which contributed to the climate of opinion in which it was claimed that early childhood intervention was of the greatest importance.

Weikart's Cognitively-Oriented Pre-School Curriculum was evolved through a cycle of Curriculum Development and Research, over a period of years, beginning in 1962. He began with the notion that disadvantaged children needed something much more structured than the traditional nursery programme. It may be that they had to discover, but they had to discover within a structure. The Ypsilanti-Perry Pre-School Project therefore provided a carefully structured sequence of "verbal bombardment" (Weikart's term) Smilanski-type socio-dramatic play, and "Piagetian-based" activities.

Unfortunately, Weikart's own research did not support this hypothesis and the programme was changed to take account of the importance of stimulating the teacher's enthusiasm and activity rather than providing a structure for her actions. The following quotations give the flavour of the current programme.

> In too many educational programs, children learn answers that adults provide to questions that adults ask. Furthermore, children are expected to learn the same answers to the same questions in the same way. At best children may be permitted to learn at different rates. At worst, children who don't learn at the average rate fail.

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In contrast, the Cognitively Oriented Curriculum encourages and helps each child to ask his own questions, and to provide his own answers in a way that interests him... Teaching must build upon --not direct or control-- the thoughts and actions of children. Learning in a Cognitively Oriented classroom occurs when children become intensely involved in activities or projects of their own design. Teaching in a Cognitively Oriented classroom means insuring that such activity takes place - work chosen and organized by children - and insuring that this activity becomes a context for thinking.

Each child decides daily what he wants to do. Adults help him develop a plan as completely as he is able. He is helped to break down the task into manageable pieces to define a sequence of steps to identify the necessary materials or equipment. A young child's plan is seen as a commitment to certain activity which the teacher then supports. Over time, the child is helped to increase the complexity and range of his play and to increase his ability to conceptualize, or think about his decisions before he acts.

Long term interests and involvements are supported, encouraged, and valued. Children develop the ability to set goals and carry them out, to work independently and in groups. To design the process by which things get done, children exercise these skills daily. The child's plan provides the format for teaching. It's the spring board for questioning, suggesting, posing problems. An adult helps the child reflect upon what he is doing, make observations, notice relations, define problems or ask questions.

The curriculum outlines a set of experiences that are essential to intellectual growth for each stage of development. Adults deliberately and systematically help children predict and anticipate, observe, describe and compare, explain, manipulate, test explore, hypothesize, find alternative strategies. The adult's job is to help children incorporate these processes into whatever they are doing.

Daily, children in a Cognitively Oriented program apply the methods of scientific inquiry - observing, organizing, quantifying, - but they are not required to apply these processes to the same data, at the same time, or in the same way. One outcome of this approach is that children develop flexible thinking and problem-solving abilities - not a set of specific behaviors which they cannot generalize.

When children share common goals they share information. When they are involved together in personally meaningful activity, communication flows freely and naturally. Often the best teachers are the children themselves. Children learn to share and cooperate, not by being told to do so, but because their environment makes this possible and important.

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> In evaluating their work, children are helped to talk about, write, or depict not only the activity, but the thinking that took place.
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> Because the springboard for teaching is the child's plan, his thoughts, his actions, his language, the curriculum can accommodate a very wide range of children in a single classroom. It is an ideal setting for multi-age and multi-ability groupings. It is also adaptable to a variety of cultural and ethnic settings. Children can make plans in their native language— plans which stem from their personal experiences and their cultural background. Materials and interest centers can be structured from any environmental setting. And adults can help the child use his plan as a context for thinking and problem-solving.
>
> Through the cycle of planning, working and evaluating, the child begins to see himself as a competent person. He experiences the satisfaction that comes from finishing a product, solving a problem, or expressing himself in a variety of media. He experiences success as a doer, as a builder, as a leader and organizer - experiences that go with him when he leaves the classroom.
>
> The Cognitively Oriented Curriculum is a framework for education in which children are active, both physically and mentally, in which they plan and make decisions, in which they develop abilities to seek out and organize information on their own. It is a framework for the education of creative and independent minds - education that "teaches" the process of active learning.

Whereas the provision of linguistically-based concepts lies at the heart of Bereiter and Engleman's approach this is not true of Weikart's programme. Children have to be taught to compare and arrange things in series <u>before</u> they are given linguistic concepts. Still, the programme seems to me to contain a number of ideas which are of more than doubtful value - such as writing children's language down for them and reading it back to them. Worse still, despite the emphasis on <u>child</u>-initiated activity one finds, for example, that the ability to hold several ideas in mind at once is to be promoted by <u>teacher</u>-initiated activity - "Peter: Find something which is red and made of wood". Likewise, almost immediately after asserting that actions of seriation come <u>before</u> words, one finds the programme enjoining the teachers to ask the children to sort out longer and shorter pieces of wood, heavier and lighter ones etc. The tendency to corrupt "new" teaching strategies back into the familiar could not be more apparent.

My own observations at Ypsilanti suggest that this account is particularly idealised - the "planning" exercises I saw were undertaken rather /...

rather formally and without enthusiasm; they became administrator's plans, not plans as I know them - plans which change continuously as one sees what "gives" and as one learns from the effects of one's actions. Indeed, as one goes beyond the opening paragraphs of the "Cognitively Oriented Curriculum", which were written by Weikert himself, and moves into the other material, one has the distinct impression that many of the theoretical ideas which Weikart put forward have got lost by the wayside. Hence the need for process evaluation to relate the outcomes of intervention programmes to what actually happens on the ground instead of to what the instigators thought should happen.

Karne's Ameliorative Curriculum has the specific aim of encouraging disadvantaged children to be more successful at school. It pays particular attention to teaching children to engage in cognitive processes - to developing the ability to obtain, organise, manipulate, synthesise, integrate and communicate information. Emphasis is placed on the processes involved in observing, relating, hypothesising, manipulating and communicating. It aims to engender 'good' work habits and a positive attitude to school. Less emphasis is placed on teaching particular facts, information and concepts - although it is acknowledged that it is important to introduce some of these as a focus for other activities.

The programme for 3-5 year olds has eight components Science; Maths; Social Studies; Language; Art; Directed Play; Music and Movement; and Creative and Productive Thinking (Guildford). In each area the objective is to teach essential skills and vocabulary. The Social Studies area covers 14 units ranging from self concept through functions of bodily parts and clothing to transportation, buildings and the city.

The play component is felt to be "an integral part of the curriculum.... it provides a developmental base for the total child.... the young child is helped to develop desirable attitudes, motivation and skills". (Hardly a convincing picture of the value of play).

Once again, despite the nominal attachment to process the programme in practice seems heavily committed to teaching subject matter and content in a highly structured manner.

Gray and Klaus's programme was organised around both attitudes and aptitudes relating to achievement. The authors claim to have been particularly interested in Achievement Motivation. But, since they describe this as involving the ability to delay gratification and an interest in school materials /...

materials such as books, crayons and puzzles, it is clear that they, like so many researchers who claim to have worked on "n. Ach", have made no direct contact with the relevant research tradition. The programme involved both Educational Home Visits and centre-based activities.

This brief outline of the types of school-based approach which have been tried would be incomplete without reference to the fact that the majority of the programmes in the area have not been structured in these ways but have been of the "traditional" nursery school approach. In Bernstein's terms these have pursued multiple implicit goals, which, in the author's experience (Raven 1977), teachers find it extremely hard to make explicit, and, if they do make them explicit, find it still harder to specify how they are going to achieve them. Still less are they made explicit to the child and parent. It is this which led Bernstein (1966) to suggest that, while such programmes may be fine for middle class children who have developed more basic knowledge and skills they may be entirely inappropriate for "working class" children who, they (erroneously) claimed, had ample social contact.

The review would also be incomplete without reference to Kellaghan's Irish programme, which was the most carefully thought out of all those I have reviewed. It will be discussed below.

It is also worth noting that what is missing from all these approaches is modelling the components of competence - a la McClelland - either in person or in stories. An account of ways in which this could be done will be found in Raven (1977).

Studies of the Relative Merits of Alternative Child-Oriented Centre-based Approaches

It is when one turns to evaluative studies, especially controlled, comparative, evaluative studies, that one begins to become aware of how deeply shocking is the nature of the field into which one has blundered. Despite the scale of the proviously documented investment in social policy in this area, one finds that the research on which this vast programme of activity has been based would be frankly laughable were it not for the fact that, if one reads between the lines, it amounts to an accutely distressing commentary on our society.

If one refers to Bronfenbrenner's (1974) extremely influential review, what does one find? One finds a handful of poorly controlled studies each based /...

based on very small numbers - typically, though not exclusively, with experimental and control groups of 15 or less. On the basis of such work vast sums of money have been poured into intervention programmes. One is tempted to argue that this was justifiable - because those same programmes made evaluation mandatory. Unfortunately, as I have already indicated by quoting McLaughlin's conclusions, a glance at those evaluations hardly supports this view. One simply encounters a proliferation of small, badly-designed, studies. Then, as if this whole business were not sufficiently nauseating, one finds the negative conclusions drawn in the Westinghouse evaluation, and by such workers as Bronfenbrenner and McLaughlin, being challenged by more recent data collected from the very same small, poorly controlled, programmes which formed the basis Bronfenbrenner's critique (Lazar, 1979). It will therefore not surprise the reader to learn that I do not share the views of those of my colleagues who argue that there is a need to stimulate more application of the results of social research. Rather, it is my view that there is altogether far too little policy-relevant social research and that the first task is to obtain the funds which are needed to greatly increase the amount of knowledge which is available in the social sciences.

But to details, Miller & Dyer (1975), Karnes (1969), Di Lorenzo (1969), Weikart (1972) and others have attempted to compare the relative merits of alternative approaches.

Weikart, having developed a classification of types of programme, compared the relative merits of three of them across a wide range of outcomes. The approaches consisted of a Bereiter and Englemann "Instrumental" programme, a Cognitively-Oriented, Piaget-based, programme in which the teacher was supposed to respond to the child's interests, and a "traditional" nursery programme focussing on social activity and child welfare. Much to his surprise he found no differences between the three programmes as long as the teachers concerned were kept on their toes and maintained their drive and enthusiasm. (One may, however, comment that it is hard to credit this conclusion since there are no good measures of the goals toward which some of the programmes were directed - because these include such things as creativity, the ability to make one's own observations and think for oneself, and the ability to work with others. If one has not measured progress toward or away from a potentially important outcome, how can one conclude that the programme has had no effect on it?)

Di Lorenzo /...

Di Lorenzo (1969) compared highly structured, moderate, and unstructured programmes. Most of the significant differences between experimental and control groups were found in the more academic, cognitively oriented programmes. This contrast was even more pronounced when he analysed the carry-over effects of the programme into the early years of schooling. So long as significant differences could be detected they were "attributable to the cognitive rather than the traditional nursery programmes".

Karnes compared the effectiveness of three pre-school curricula. The first was a traditional nursery programme emphasisising informal learning. The second a Bereiter and Englemann programme. And the third was Karnes' own verbal curriculum. For the first two years of the study, two other programmes were also included - a Montessori programme which focused on sensory-motor development, and a community nursery school. At the end of the first year the results showed clear superiority for Karnes' Direct Verbal programme and the Bereiter and Englemann curriculum, with the three others trailing behind. Karnes explains the relative inferiority of the two nursery groups on the grounds of insufficient cognitive structure. The poor performance of the Montessori group is accounted for as follows:

> The failure of the Montessori children to demonstrate appreciable progress seems to invalidate the notion that the level of structure relates to the progress made by the disadvantaged child. The Montessori programme provided a high degree of structure in terms of careful planning for the kinds of motor-sensory activity appropriate to development... The Montessori teacher provided a "prepared environment" but did not systematically engage the child in verbalizations or require such verbalization as part of the definition of productive involvement. This failure of the Montessori programme resulted, at least during the intervention period, in somewhat regressive language behaviour. Structured emphasis on motor-sensory development without similar concern for verbal development programmatically moves in the wrong direction for the disadvantaged child (Karnes 1969).

In the second year of the programme all five groups attended normal pre-schools in the morning. In the afternoon the children in the Karnes and Bereiter-Englemann treatments continued to receive special training whereas the other group did not. This difference was reflected in continuing IQ gains for the former groups and by decline for the other three. When the children entered the first year of school, the follow-up was continued for the Karnes, Bereiter and Englemann, and traditional nursery /...

nursery groups. By the end of the year, the descending IQ curves for all three groups converged with no differences between them.

From these studies one can, perhaps, draw the none too surprising conclusion that cognitively-oriented, language-based, programmes are slightly better than other programmes at generating modest and temporary gains on tests of IQ and language! However, since, as Bronfenbrenner (1974) and I have been at pains to emphasise, there are no good measures of the extent to which the 'open' programmes achieved their goals it would be premature to conclude that it is the language-based programmes which should be followed up. Unless, that is, it is one's sole objective to remedy the language 'deficiencies' which psychologists have documented and which led to the establishment of this vast programme of social activity.

Home Based, Parent-and-Child-Oriented Programmes.

Parent-and-child oriented schemes must first be distinguished from both the, much more common, parent-oriented, centre-based schemes (which often consist of lectures to parents) and home-based, child-oriented, schemes. The aim of the schemes to be reviewed here is to influence the mutually-dependent pattern of parent-child interaction by modelling the desired behaviour. It is not simply to influence the child by having the teacher carry out a lesson in his home rather than at a centre.

In Levenstein's (1970) case the desired behaviour included "exploiting the stimulus properties of common objects for verbal interaction" and the use of positive reinforcement.

As Levenstein (1970) puts it

> Treat the mother as a colleague in a joint endeavour on behalf of the child. Share your verbal stimulation techniques with her by demonstrating them in play with her child; then draw her into the play, and take a secondary role as soon as you can while she repeats and elaborates what she has seen you do. Encourage her to play and read with the child between Home Sessions. Keep constantly in mind that the child's primary and continuing educational relationship is with his mother; do all you can to enhance that relationship.

Bronfenbrenner (1974) emphasises that the strategy involves a particular kind of experience that is focused in its purpose, sustained, sequential, and highly structured in cognitive, social, and motivational terms. He then examines each of these aspects in turn.

On /...

TABLE 1

IQ, Academic and Socio-Emotional Scores for Program and Control Children in Third Grade involved in US Mother-Child Home Program (Levenstein)

ıbject Group ıd year	Variable	Entry IQ		Post-program IQ	Third Grade (age 8) Scores					
		Cattell	Stanford Binet	Stanford Binet	WISC	Reading	Arithmetic	Socio-Emotional	Severe Acad. Problems	Special classes
ne year 972-73	Number	0	12	12	12	12	12	12	No data	No data
	Mean		90.4	106.3	94.6	92.0	91.3	61.5		
	S.D.		11.9	17.2	10.6	5.6	12.1	18.0		
	Age		3	4	8	8	8	8		
hort two ears 973-74	Number	14	0	12	14	14	14	14	No data	No data
	Mean	82.4		102.8	97.4	98.4	97.9	61.4		
	S.D.	6.8		11.4	10.5	14.4	8.8	21.6		
	Age	2		4	8	8	8	8		
wo year 974-75	Number	13	11	19	24	24	24	24	23	24
	Mean	88.4	91.3	109.0	103.9	101.7	99.8	72.0	21.7%	12.5%
	S.D.	12.2	3.7	8.6	10.9	14.9	13.7	18.3		
	Age	2	2	4	8	8	8	8		
Two year 1975-76	Number	25	0	21	25	25	25	23	23	23
	Mean	85.5		103.7	98.3	97.8	99.9	60.4	39.1%	13.0%
	S.D.	9.8		11.3	8.0	12.4	10.2	13.1		
	Age	2		4	8	8	8	8		
Two year 1976-77	Number	29	0	23	29	29	29	28	28	28
	Mean	88.6		107.2	100.8	101.7	104.8	61.9	28.6%	7.1%
	S.D.	8.6		12.3	10.7	11.6	8.3	21.9		
	Age	2		4	8	8	8	8		
CONTROL GROUPS										
1973-74	Number	9	5	14	14	14	14	14	No data	14
	Mean	93.4	88.0	96.3	96.1	87.4	90.1	58.4		35.7%
	S.D.	8.0	10.3	11.8	15.0	17.3	17.4	13.5		
	Age	2	3	4.5	8.9	8.9	8.9	8.9		
1974-75	Number	27	27	No data	27	27	27	27	27	27
	Mean	93.9	90.7		93.9	90.5	93.7	62.8	44.4%	7.4%
	S.D.	8.7	11.3		8.7	15.7	9.9	22.4		
	Age		6		8	8	8	8	8	8

Third Grade Effects of the Mother-Child Home Program. Developmental

On the cognitive side, Levenstein's strategy incorporates many of the elements that were present in structured, centre-based, child-oriented programmes, such as those of Weikart, Gray, Karnes, and others. The situation is not one of free play but guided involvement in activities adapted to the development of language and thought.

Bronfenbrenner, however, argues that it is not this which is the most important feature of the programme but the previously mentioned fact that it is the pattern of mutual influence and interaction which it is hoped to influence. He then goes on to note that the delivery system relies on non-professional Home Visitors and argues that this is important because - he asserts - without evidence - professionals tend to make the mothers feel inadequate by showing them that someone else can do the job better than they can and giving them the impression that they are simply assistant to the expert.

In actual fact Levenstein's programme makes me feel most uneasy. Although the objective is to model verbal interaction for the mother it is specifically designed to promote school success. The basic instructions include things like "praise success, ignore errors". But what kind of success is to be praised? Does the child need praise or an opportunity to succeed? Does the child not wish to learn from his errors? "Toy Demonstrators" are urged to stimulate imagination, independence and creativity, but the examples which are given of how to promote these things include the following "look to see what's in the box John; tell mummy what colour the (pretend) sweets on the plates are".

The affective curriculum is defined as "activities which promote learning". Among the qualities which are said to be required for this are some of the components of the competence I have identified elsewhere(Raven, 1977), but they are not conceptualized as such. Furthermore, many of them are defined in such a way that they eventually describe rather nice conforming behaviour, rather than the somewhat abrasive behaviour of the innovator who learns for himself.

There is some recognition of the social problems which dog home visitors, but this is negative recognition enjoining the Home Visitors not to work with families who are plagued by such problems. We will shortly see that this instruction is likely to have invalidated Levenstein's claim to have had any success whatsoever, and thereby the weight which has been placed on it by both Bronfenbrenner, and more recently, by Lazar.

Levenstein /...

Levenstein (1978) has continued to report follow-up data and data on further waves of children (see Table 1). Short term gains continue to be reported. However, as Bronfenbrenner noted six years ago, her 'control' groups continue to "gain" as much as her experimental groups. She herself tends to explain this as an effect of the experimental group being told that they were part of an experiment. This is a damaging enough explanation - for why should one invest in a programme of Home Visiting if a single visit has the same effect? However, a more damaging explanation has been put forward by Bronfenbrenner. As has already been noted, her toy demonstrators are instructed to avoid families in which there are severe social and emotional problems. Both experimental and control groups are also asked to commit themselves to working with their children for a considerable period of time between visits. Mothers under severe stress would be unlikely to do this. It follows that both her experimental and control groups are very atypical of disadvantaged children. It would therefore not be surprising to find that,on norm-referenced tests, both experimental and control groups would accelerate away from the means typical for children from their backgrounds - simply because their environments will be less likely to preclude success. Such a reflection would appear to cast considerable doubt on the importance attached to her work by Bronfenbrenner, Lazar and others.

The Ypsilanti project (Lambie, Bond & Weikart, 1974) is important because it had among its major objectives a number which are not heavily emphasised in other projects. These include (1) giving the mothers the constructs they need to think about child development and thereby to clarify the goals they wish to achieve and the aspirations which they hold for their children and their ability to pursue them. (2) Encouraging the mother to be sensitively responsive to child-initiated activities in such a way as to facilitate growth and (3) encouraging the mother to adopt child-rearing strategies which would help the child develop the competencies and motivation required to <u>evolve</u> constructs - and specifically <u>not</u> to teach the child constructs and knowledge. Particular emphasis is placed on the hypothesis that learning occurs primarily as a result of intrinsically-motivated, not extrinsically-motivated, activity. The problem is not how to motivate the child but "how to provide him with challenging opportunities for self-initiated explorations".

Although /...

Although no formal evaluation instruments designed to assess mothers' attitudes and behaviour were developed, the evaluation showed that:

1. Mothers who participated in the programme spent more time observing their children's activity and thinking up strategies which would support the growth and development of the child.

2. The programme appeared to have a dramatic effect in consciousness-raising. The mothers' tendency to report observing their children, thinking about what they were doing, and how to support it rose conspicuously.

3. The mothers made more efforts to turn their homes into environments which were suitable for exploratory, growth-enhancing, activity on the part of the child.

4. Mothers became more involved in the formal education of their older children.

In the US Homestart programme parents were viewed as "the first and most important educators of their own children" and the programme was aimed at "the well-being of the total family". In the context of the multi-pronged nature of the scheme, Love elaborated on this theme:

> "The educational component of Home Start was designed primarily to help parents become more effective in their role as the first and most important educators of their own children. Time was devoted in the home visit to make parents aware of the importance of spending time with the child each day, and to discuss the child's experiences, feelings and thoughts. Developmental stages of the child, also, were addressed both in the home visit and in group meetings when parents got together to discuss a variety of topics relating to the child.... Reminding parents about the teaching potential of all household tasks and familiarising them with the many objects in the home that could be used as instructional materials were two ways Home Visitors tried to get parents involved with their child and to provide them with a stimulating environment ....."

Each Home Visitor worked, on average, with between 10 or 11 families. The Visitors themselves, though they were paid, were given very little (slightly over $5,000 a year) for work that often involved them in 50-60 hours of work a week. They were called "para-professionals" in that 90% of them had little or no formal training, and did not generally have much experience of working with families or of providing the varied child development, nutrition and health services that the programme called for. "In /...

"In fact" said the Final Report on the project, "not being 'professional' was viewed by many project staff as an asset, making it easier to establish a close and trusting relationship with parents."

Homestart set out, through its Home Visiting programme, its group meetings and its back-up service of professional workers, to change the attitudes and child-rearing practices of parents, and, at the same time, to make families more self-reliant in their use of community facilities. As compared to a control group, Homestart families, after only a year in the programme, certainly showed changes of behaviour. They were more inclined to let their children help around the home, spent time reading to their children and helping them with drawing, provided more books and toys, talked to their children more often, were more involved in the community, and were generally doing those things which the Homestart Visitors had encouraged them to do. (Although, notably, when asked whether they used specific community services like housing or job training, Homestart mothers reported a greater uptake than "controls" of only one out of 15 possible agencies).

The children, too, were significantly ahead of "controls" in terms of measurements of a Pre-school Inventory, a language scale and a child talk score. There was a statistically significant relationship between the frequency and length of time of Home Visiting and both parent and child outcomes. Where Home Visitors had made fewer than three visits a month, or where the visits fell below 1½-2 hours, there the language development of the children grew more slowly. The case load became excessive if it exceeded 13 families. However, children visited for two years did not do better than those visited for only one year.

When Homestart families and children were compared with children who had gone through Headstart programmes, only small differences could be detected.

> "Although the minor differences that were found suggest that Homestart's advantage is in producing a more positive effect on the mother-child relationship, there were actually very few (such differences)..... it must be concluded that the two programmes had very similar effects on parents."
>
> (Love, 1976)

John Love has, however, drawn my attention to the fact that the Homestart mothers were considerably disadvantaged in relation to the Headstart mothers, so the "no difference" conclusion may be interpretable as a benefit.

Kresh /...

Kresh (1976) provides an impressive review of other US evaluations of Home Visiting programmes. Again one comes away with an impression of a field permeated by bad research. Most of the "samples" are small and the studies badly designed. There are no adequate control groups, and few within-group analyses. There are very few studies of the effects of the programmes on the mothers.

Centre-Based, Parent-Oriented, Programmes.

Many programmes (e.g. Karnes, 1969, Hubbard, 1977) have concentrated on bringing mothers into centres (e.g. on a weekly or monthly basis) to teach them new ways of relating to their children. Space does not permit me to review these studies here except to comment that, as far as one can judge from Lazar's (1979) work (see below) they were as effective as Home-Based, Parent-Oriented, programmes.

Home-Based, Child-Oriented, Programmes.

Just as there have been many centre-based, parent-oriented programmes, so there have been many Home-Based, Child-Oriented, programmes (e.g. Schaefer & Aaronson, 1972).

LONG TERM EFFECTS

We have seen that when, in 1974, Bronfenbrenner reviewed the literature, he was able to conclude that home-based programmes designed to influence patterns of parent-child cognitive interaction and influence were more likely to be effective than others, that the effects were likely to be communicated to other children, and that they would strengthen over time. We have also seen that more recent work does not entirely support his conclusions. However, partly in order to combat the increasingly bleak conclusions which were being drawn by those who reviewed the vast and rapidly growing body of literature, many of the investigators who have been mentioned, and others, came together in 1975 to form the Development Continuity Consortium. Mimeographed reports on their overall work, authored by Lazar, Palmer and Love et al have been circulated world wide since 1976. Some of them have now been formally published (Lazar, 1979) and some of the others published by individuals.

The programmes involved in the consortia are listed on the next page.

These 14 studies comprised three different types of intervention: home-based, usually involving the mother (Gordon, Gray, Levenstein and Weikart); centre-based, usually taking place in a school (Zigler, Beller, Deutsch, Karnes, Miller, Palmer and Woolman) and a combination of the two (Gray, Miller and Weikart). The instruments used to "measure" outcomes were the Weschler Intelligence Scale, a school record form with information about whether the children were picked out as being in need of special education, and whether they were held back in their classes because of poor performance; a Youth Interview, in which children wrote about their own school performance and aspirations, and a Parental Interview, in which parents were asked their views about the pre-school programme.

Five projects provided data on a comparison between programmes and control groups on the special education placement. Of the five, four showed significant differences (two well beyond the 5% significant level, and two beyond the 10% level). Chart 1 indicates the results from the five studies.

The results on whether the children were held back in class showed a similar pattern, thought not quite so robust(see Chart 2). Only one of the seven studies shows a statistically significant difference, but data from that project was considered suspect because the follow-up sample favoured the /...

THE PHILADELPHIA PROJECT: *Dr.Kuno Beller, a centre-based programme for children starting at four years of age, offered through the public school*

INSTITUTE FOR DEVELOPMENTAL STUDIES: *Drs.Martin and Cynthia Deutsch. A centre-based programme for low-income children in New York City, starting in the pre-school years and extending into the elementary school*

THE PARENT EDUCATION PROGRAM: *Dr.Ira Gordon. A home-based, parent-focussed project for children from three months old to three years, with backyard play and activity groups added to the programme when the children became tu*

EARLY TRAINING PROJECT: *Dr.Susan Gray. A centre-based programme, with a home-visiting, winter component.*

FAMILY-ORIENTED HOME VISITOR PROGRAM: *Dr.Susan Gray. A home-based programme, involving the mother, toddler and other members of the family whenever possible.*

CURRICULUM COMPARISON STUDY: *Dr.Merle Karnes. Preschool children attended one of five programme models - Engelmann-Bereiter, traditional, community-integrated, Montessori or Karnes' own concept development programme.*

MOTHER-CHILD HOME PROGRAM: *Dr.Phyllis Levenstein. Weekly visits made by Toy Demonstrators to the homes of infants, to work with their mothers on improving verbal inter-action between mother and child.*

EXPERIMENTAL VARIATION OF HEAD START CURRICULA: *Dr.Louise Miller. Preschool children attedded one of four programmes - Montessori, Beretter-Engelmann, DARCEE or a traditional nursery school.*

HARLEM TRAINING PROJECT: *Dr.Francis Palmer. A one-to-one centre-based programme, stressing either concept training or 'discovery' activities for toddlers meeting twice weekly.*

PERRY PRESCHOOL PROJECT: *Dr.David Weikart. A cognitively-oriented preschool programme during the two years before the children entered kindergarten. Between three and four years of age.*

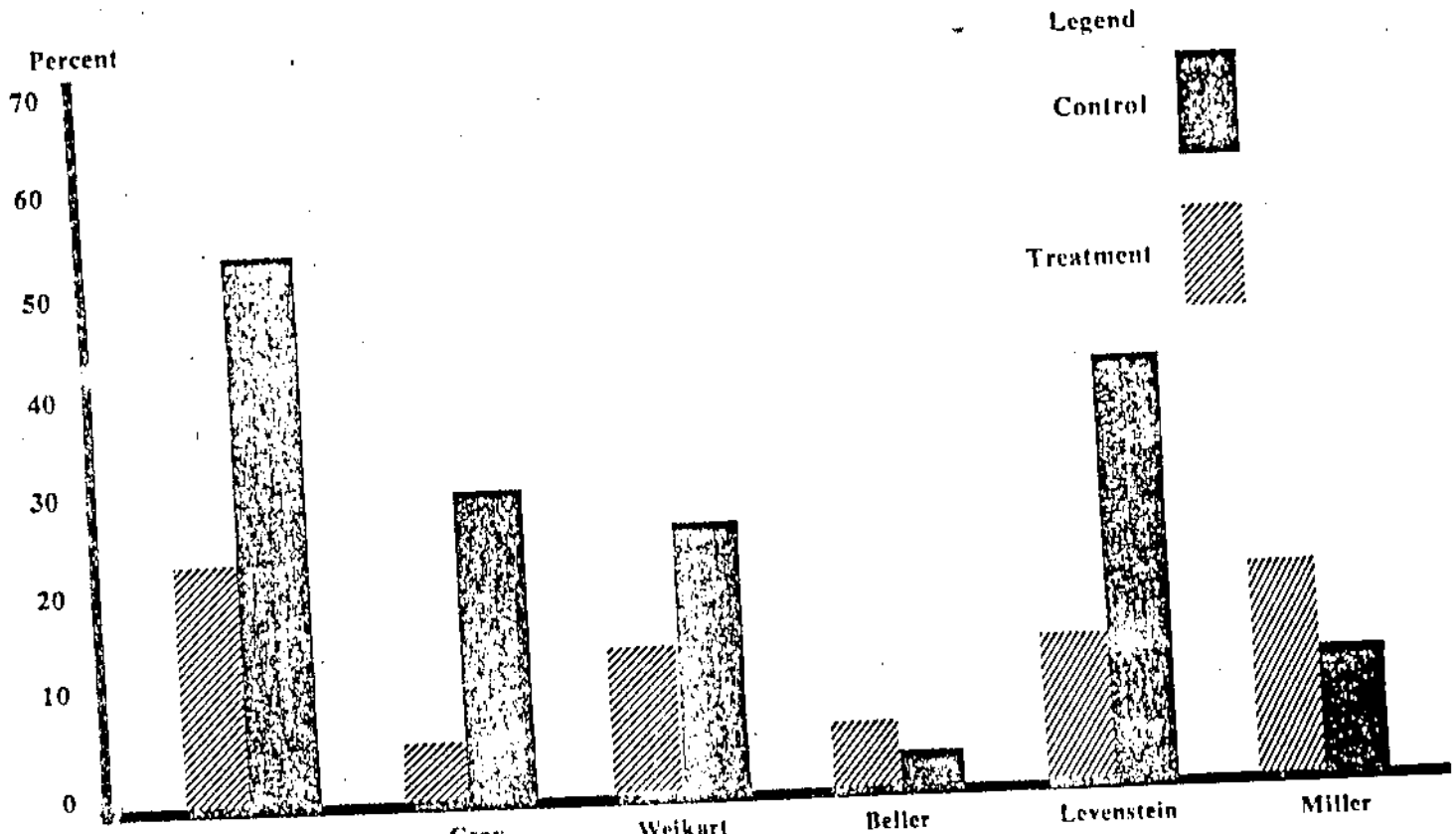
CURRICULUM DEMONSTRATION PROJECT: *Dr.David Weikart. Preschool children attended one of three centre-based projects - Engelmann-Bereiter, a cognitive programme or a unit-based traditional programme. The children were also visited at home by a teacher once a week.*

CARNEGIE INFANT PROGRAM: *Dr.David Weikart. A home-based programme, for infants and their mothers, to enhance the role of mothers as 'teachers'.*

MICRO-SOCIAL LEARNING SYSTEM: *Dr.Myron Woolman. A preschool programme of a number of learning units, as well as a play area in which children applied the skills learnt through the units.*

HEAD START AND FOLLOW-THROUGH NEW HAVEN STUDY: *Dr.Edward Zigler. Five-year-old children attended a local Head Start programme, and were followed through into the eighth grade.*

Chart 1: Percent of Treatment and Control Children in Special Education

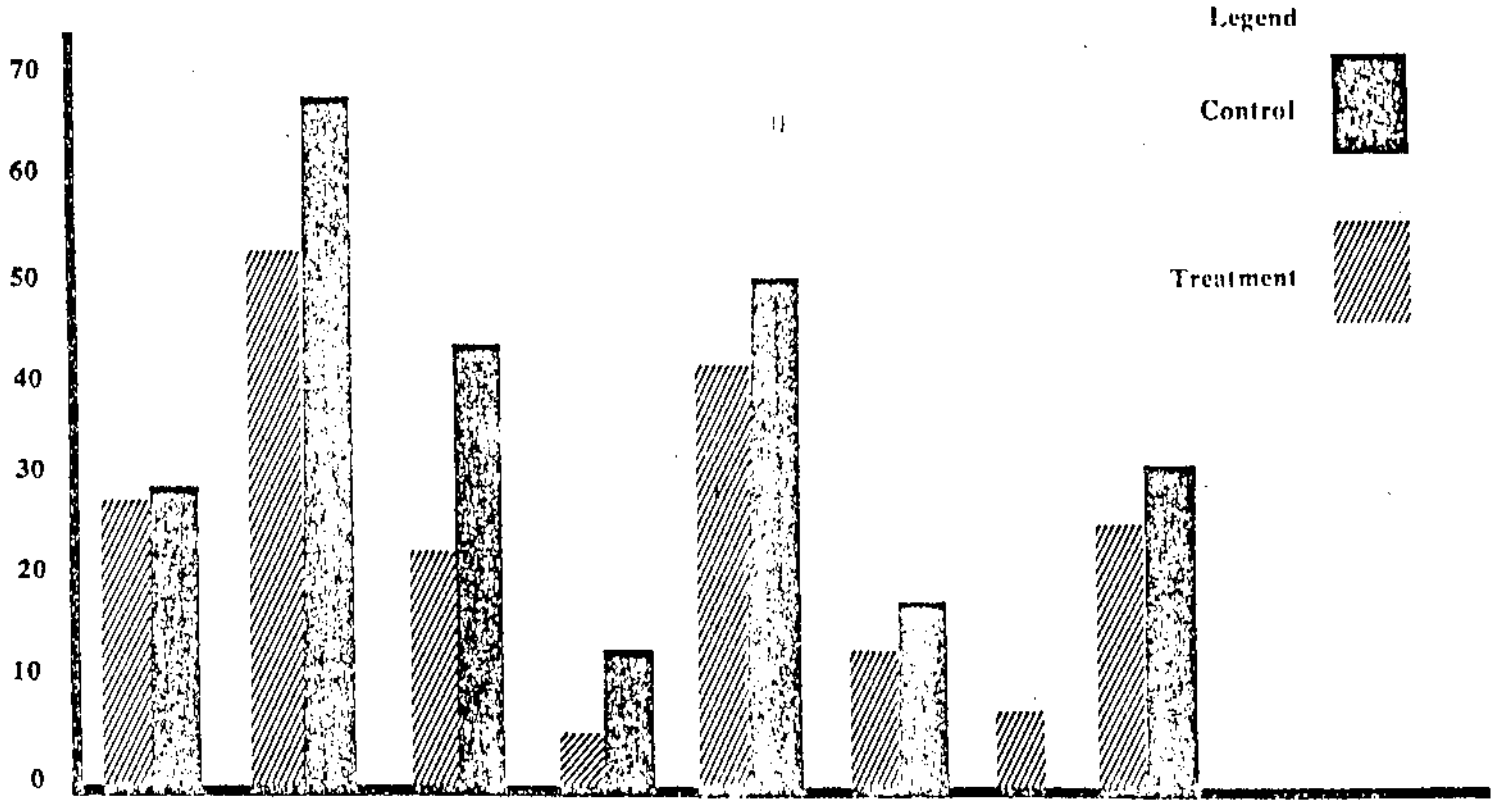


	Gordon	Gray	Weikart	Beller	Levenstein	Miller
Treatment %	23.2	2.8	13.8	5.7	13.7	20.4
Control %	53.8	29.4	27.7	3.2	39.1	12.5
Treatment *n*	69	36	58	35	102	93
Control *n*	13	17	65	31	23	16
Significance	.024	.004	.060	(.632)±	.005	(.465)

Pooled Significance Level p = .0004 (two-tailed)

±Figures in parentheses are in the reverse direction

Chart 2: Percent of Treatment and Control Children Held Back a Grade

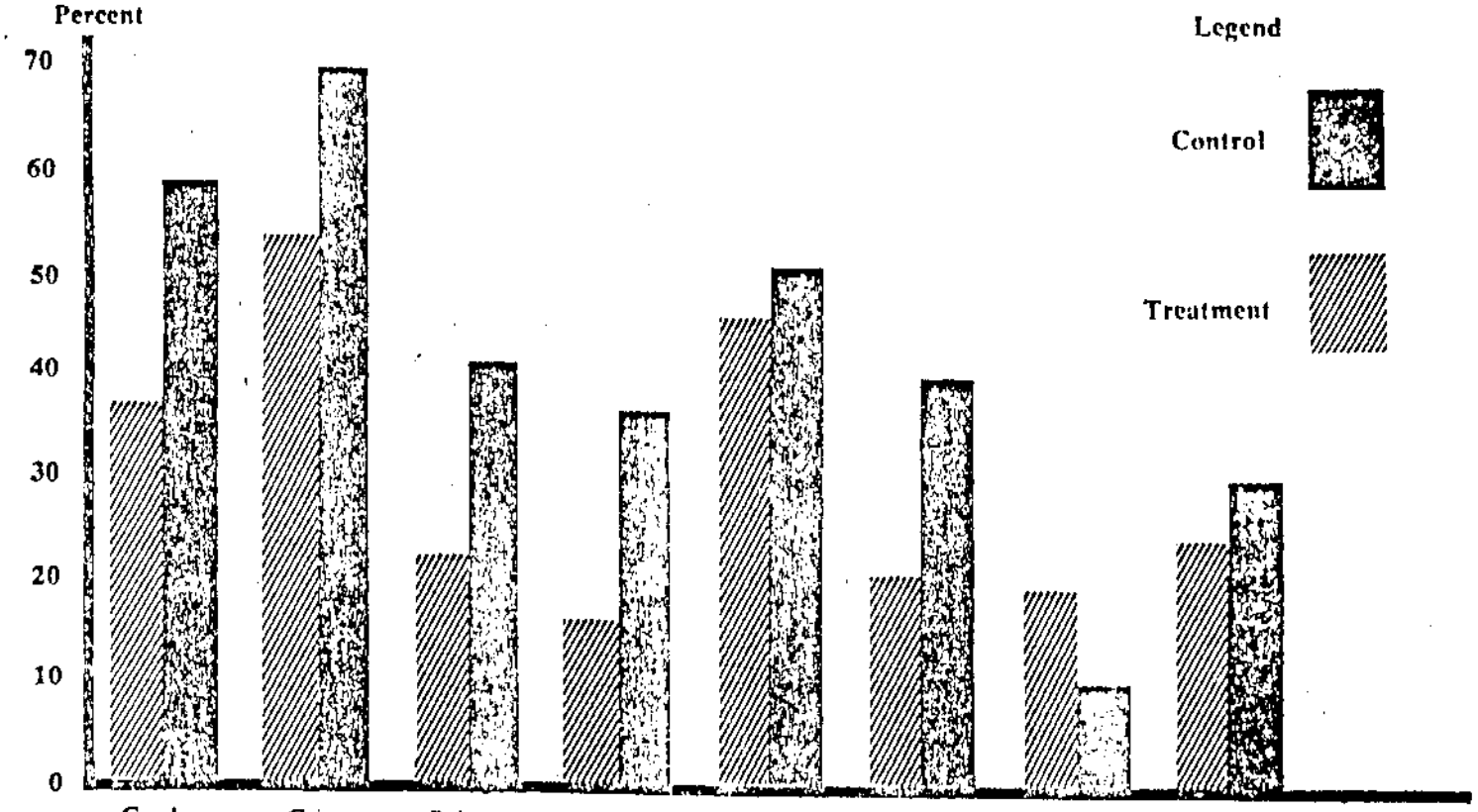


	Gordon	Gray	Palmer	Weikart	Beller	Levenstein	Miller	Zigler
Treatment %	27.6	52.9	24.1	4.0	42.9	12.9	7.8	26.6
Control %	28.6	68.8	44.7	14.9	51.6	18.8	0.0	32.3
Treatment *n*	58	34	174	50	35	93	90	79
Control *n*	7	16	47	47	31	16	16	65
Significance	.956	.291	.006	.065	.475	.531	(.248)±	.452

Pooled Significance Level $p = .0184$

±Figures in parentheses are in the reverse direction

Chart 3: Percent of Treatment and Control Children Who Are Underachieving±



	Gordon	Gray	Palmer	Weikart	Beller	Levenstein	Miller	Zigler
Treatment %	39.1	55.6	24.1	17.2	48.6	22.1	20.6	26.6
Control %	61.5	73.7	44.7	38.5	53.1	43.5	11.1	32.3
Treatment *n*	69	36	174	58	37	104	107	79
Control *n*	13	19	47	65	32	23	18	65
Significance	.134	.188	.006	.009	.711	.035	(.346)±	.450

Pooled Significance Level p = .0002 (two-tailed)

±Underachieving = placed in special education classes, and or retained in grade and or dropped out of school
±±Figures in parentheses are in the reverse direction.

the experimental group. When the data was pooled across projects, the combined programme effects were significant at the 5% level, a finding which at least one critic called "tenuous".

We may now look at one of these studies in more detail (Schweinhart & Weikart, 1977) because some of the children involved in it (the Ypsilanti Perry Pre-School project) have now completed high school. The total number in the experimental group was 58 children. As usual, IQ gains washed out by the time the children were 7 years of age, but it was after the children were aged 11 that school performance differences began to show up. It is also argued that the programme was highly cost-effective since the cost of pre-school, per child ($2384) is said to be exceeded by benefits of $5904. However, since 73% of that projected benefit represents estimated increase in adult earnings it is hard to credit this as a national gain, because, for every disadvantaged pre-school child who now gets a job, it would seem likely that another will lose one!

The most plausible explanation of the later-showing attainment gains is that they are a consequence of the child not being held back a year or assigned to a remedial class. He is therefore likely to have been exposed to the curriculum on which he has later been examined. But given the competitive nature of schools it is hard to believe that other children will not be assigned to remedial classes or held back in their place.

Ecologically Oriented Programmes

Given the far from striking nature of these 'benefits' some people - and, in particular, Bronfenbrenner (1974, 1975, 1978) - have argued that the social constraints on parents simply prevent them spending time with their children in what are conceived to be psychologically-developing ways.

> "Sometimes the conditions of life are such that the family cannot perform its child-rearing functions even though it may wish to do so. Under these circumstances no direct form of intervention aimed at enhancing the child's development or his parents' child-rearing skills are likely to have much impact." (1974)

Although there are a number of difficulties with this hypothesis - why is it, for example, that there is so much variance in the scores of pupils who come from such backgrounds and, even if the environment were 'improved', would the parents wish to perform the same child-rearing activities as High Socio-Economic Status parents - it is, nevertheless, a hypothesis which deserves /...

deserves exploration. There are, in fact, two very different versions of it. One argues that it is necessary to put right the housing, health, income, and degrading treatment at the hands of the welfare services, which is commonly experienced by Low Socio-Economic Status parents. Bronfenbrenner himself seems to have adopted this viewpoint in his 1974 and 1975 papers. The alternative version of the ecological hypothesis argues that it is more important for the parents to be helped to solve their own problems so that their feelings of confidence, improved self-images, and patterns of cognitive activity will become apparent to their children.

I know of no work based on the second theme although it is a theme which can be heavily underlined from the results of my evaluation of the Lothian Region Educational Home Visiting Scheme (Raven, 1980).

It has even been hard to find studies relevant to the first theme. Although both Bronfenbrenner and Sullivan have personally assured me that they exist, it is of interest that in his 1974 paper Bronfenbrenner explicitly stated that they did not and cited work by Heber (1972) and Skeels (1966) in which children - and not parents - were placed in very different environments and appeared to benefit in order to fill the gap. My own re-interpretation of Van der Eyken's evaluation of the Leicester Homestart programme (which is explicitly designed to provide family support of the type favoured by Bronfenbrenner) has been published in Parents, Teachers and Children. It would also seem to follow from data presented in that book that Bronfenbrenner's claim that, if key elements of the environment in which disadvantaged families live were put right, they would do the things he values is seriously open to question. My own conclusion is that if we even had a full-employment policy, many such parents would drop all "intellectual" and school-oriented activity like a hot potato. "Intellectual" and academic activity has to do with competing for jobs, not with doing one's job or leading one's life. (See Raven, 1980). As a result, it seems to me that the question of what the effects of providing the support services Bronfenbrenner recommends on patterns of child-rearing would be deserves to be taken very seriously indeed by researchers.

Although it has not been possible to find many programmes based on these hypotheses, it is important to note that an ecological approach is specifically and explicitly excluded in many educationally oriented programmes. Thus, both Phyllis Levenstein and Ian MacFadyen (the originator of the Lothian Scheme) specifically instructed their EHVs not to work with families where such environmental problems (including the absence of the mother /...

mother because she was at work) would prevent them getting on with the educational activities which were seen as lying at the focus of the visit. Although some of the Lothian Visitors, at least to some extent, disregarded this injunction, others took it seriously and it is clear that it is possible to proceed in this way (although my own impression from interviews in Lothian is that the benefits conferred by following this approach are actually fewer and less significant than those conferred by other approaches). Levenstein not only by-passed the "worst" cases in this way she also, from the start, only accepted families for experimental or control groups if the mothers were prepared to commit themselves in advance to spending a considerable amount of time with their children. As we have seen, this would seem to be the most likely explanation of the "gains" she has reported.

Concluding Comment on US Studies

I cannot conclude my brief review of the American literature without again commenting on the small size and short term nature of many of the studies. While the funds available to some of the US researchers were several million times the funds available to me, the US programme (see Haney 1976), like the Lothian one, has been characterised by wild expectations as to what can be accomplished both by the programme and by the evaluation, by failure to consider whether it was appropriate to define the overall programme as a service or as a comprehensive evaluation of planned variance in input, by utterly unrealistic budgeting of funds and time, and, in particular, complete inability to budget adequately for the development of appropriate instrumentation for the evaluation studies.

THE BRITISH PROJECTS

Turning now to British Projects, the ground is covered much more thinly, but it is of interest that a very similar range of projects exists. Aside from the now widely reported Educational Priority Area projects, which mostly involved groups as small as those reported in the American studies, the number of evaluated schemes can almost be counted on the fingers of one hand. An evaluation of several of the schemes, but especially the Leicester Homestart scheme, has recently been completed by Willem Van der Eyken who kindly made a copy of his report available to the author and it is appropriate to summarise some of his conclusions. But, first, a word or two about the EPA schemes is in order.

In /...

In the West Riding study (Smith 1975), a nursery programme supplemented by Home Visiting was shown to have a significant impact on IQ and the children were rated by the Educational Home Visitors as more independent and likely to take initiative after the Visiting. The parents were rated as less likely to make use of verbal or physical punishment. In addition, Poulton and James (1975) have reported that the study had a significant impact on the mothers' attitudes and behaviour. Parents became more likely to say that it was important to use words carefully when talking to children, and more willing to play a more active role in school classrooms. Teachers were, however, slow to accept the value of Home Visiting. The Home Visitors found their own experiences as mothers the most relevant "training" for their jobs. They changed their viewpoint on the locus of "the problem" they were trying to deal with and became more committed to the view that schools, rather than parents, needed to change. Like most of the other British projects, the EHVs found themselves drawn into counselling and "therapy" with the mothers in order to help them cope with their unmet social needs.

Another British project - in Deptford - led parents to feel more important as educators of their children, to forge closer links with schools, and to professionals coming to think of themselves as enablers of, rather than providers of, learning. It also led to IQ gains and to the children concerned settling into school more readily (Jayne, E. 1976).

This project, like the US projects which have been described, caters for the sort of confident, service-seeking family which can make use of knowledge and skills when they are preferred. It does not help the problem-ridden and disorganised parent, unable to gain even a precarious hold on life, who, already guilt-ridden, comes to feel still more guilty and incompetent in the presence of a professional who "shows her how to do it".

The same is true of the Norwich feasibility study. The Norwich study began in September, 1972, when a number of experienced teachers came together to plan a programme of home visits to families in the area. The families were chosen by the organiser of the scheme "in consultation with head teachers of First Schools in Norwich. They suggested families from their school populations whose offspring already at school had neither physical, mental nor emotional problems, but were nevertheless struggling to meet the demands of the schools, and who also had a child between one and two years old at home".

"These /...

> "These families were selected not because they were thought to have the greatest need for such a service, but because they were thought to provide the greatest challenge to achieving mutually supportive discussions."
>
> (Seaman, 1977)

These qualifications are, again, important. The Norwich project set out to provide a service, and in doing so, it, like the Lothian project, avoided visiting families with potential "emotional" problems and set out, rather, to pinpoint these where there appeared to exist an identifiable shortage of learning skills. Given such a clientele, the visitors could focus on skills-training of the parents, specifically in the area of language development, seeking to raise the awareness of parents to the opportunities that existed within the home to develop language with their children.

> "Their brief is an open-ended one - to seek opportunities, through discussion, to remind parents that the mind as well as the body of their child needs special care. The counsellors (i.e. Home Visitors) look for opportunities, arising from discussion, to direct attention towards the kinds of learning the child can be seen to be successfully accomplishing in response to the daily routines and setting of the home".
>
> (Nicholls and Seaman, 1974)

In pursuing these aims, the scheme - perhaps intuitively, but certainly effectively - "selected" its customers, and thus "maximised" its "effects".

Donachy's (1979) work in Renfrewshire is in the classical tradition both in terms of inputs (centre-based, observing 'new' styles of parent-child interaction and commitment to 'follow up' for half a day a week) and 'outcome' evaluation. Using standard IQ measures he showed that leaving books in the home had as much effect as Home Visitors playing with the children. The intervention activity had as much effect on HSES parents and, if applied across the board, did not reduce 'disadvantage'.

Centre-based programmes for mothers have also been run by Hubbard. Their objective is to "teach" about child-rearing, to reduce loneliness and isolation, and to enhance the mothers' feelings of self-confidence.

Several school-based programmes with tentacles into the home also exist in order to make contact with all parents who will enrol their children in schools. Examples may be found in Nottingham, Coventry and Waltham Forrest.

More /...

More ecologically - or at least total-community-oriented - projects have been associated with Midwinter and Sue Bell in Liverpool (Home Link) and Wilkinson (The Govan Experiment in Education) in Glasgow. Both of these have provided community centres as meeting places, libraries, and home-link teachers, as well as Home Visiting activities. Both aim as much to promote the growth of the adults' competence as much as that of the children, but both were in fact very school-success oriented. Evaluation of the Govan (Wilkinson and Williamson, 1978) project focuses heavily on cognitive-test and academic scores together with library membership among the parents.

A quite different type of programme has been developed by Margaret Harrison (1978) in Leicester. Termed 'Home Start' it is mainly based on voluntary workers who are carefully matched with the families who require visiting. It is directed at the 'worst' cases of family disorganisation often referred by doctors, social workers and other welfare agencies. However it is important to note that one of its basic tenants is that the visiting must be a mutual growth experience for volunteer and visited alike. For this reason the 'matching' of visitor and visited involves not only temperament but also asking who would enjoy visiting that particular disadvantaged family.

Volunteers are trained to continue the visiting despite rebuffs and are supported by regular meetings with each other and the Co-ordinator.

The objective is not only to help the mother to develop the skills and self-confidence which are required to gain control over her own life (in the expectation that this will in turn communicate itself to her children) but also to establish a network of social contacts which will continue to provide such support when the visiting ceases. To this end not only are social activities involved but there is an active project house providing a very active nursery, playgroup, and playbus. Activities organised by the mothers include discussion groups, toy making activities, and outings.

According to Van der Eyken, and the author's own observations, the scheme is extraordinarily successful with a type of family which would br rejected by many of the other schemes reviewed in this chapter. Nevertheless, no statistically-based, formal, evaluation of the scheme has been undertaken.

Mention /...

Mention must finally be made of the one exception to Tizard's (1974) comment that none of the British schemes has been based on a theoretical review of the relevant literature. I refer to the work on pre-school education carried out in Dublin (Kellaghan, 1977, Kellaghan & Archer, 1973, 1975, Holland, 1979). Two incredibly carefully thought-out schemes were implemented and evaluated. One involved a centre-based programme. This mainly provided means of involving the children concerned in activities which would be likely to promote their cognitive development, although these activities were supported by some home-school link activities. The other programme involved Home Visitors' going into the children's homes over a period of time and encouraging the mothers to engage their children in activities (such as reading) which paralleled those taught in the school programme and which it was thought likely would be to promote the children's cognitive development.

So far, the evaluation of only the first of these sets of activities has been published in detail. Despite the cognitive emphasis of the programmes and the care taken in designing the intervention, the mean IQ of the participating children increased only from 93 at the start to 99 at the end of the programme. It then declined to 91 three years later. The programme had no effect on a number of personality variables. According to Holland the Home-based programme has no effect on IQ or other variables.

Aside from these results of the evaluation, the study is of interest because it shows that, despite the disadvantaged nature of the homes from which the children were drawn, the variance in their IQs is virtually identical to the variance found in the total population. Whatever explanation is advanced for the low mean scores of the children living in the area, it follows that that explanation must also account for the fact that the children's abilities are far from uniform. Whatever is responsible for the variance in IQs, it is unlikely to be the home backgrounds from which the children come.

Conclusion

It would seem from this detailed review of evaluated, mainly home-based, programmes that the substantive conclusions to be drawn are little different from those I drew from the Headstart/Follow Through evaluations summarised earlier. None of the programmes have had the effects which the writings of such authors as Bloom (1964), Davé (1963), Skeels (1949), Coleman (1966), and Peaker (1967) led some of our colleagues to expect. Because /...

Because the "effects" - if any - to be detected are so elusive the methodological "defects" in the studies loom large. Although there can be no doubt that the original (cognitive and academic) grounds on which such vast funds were poured into this area have been thoroughly challenged, a large number of theoretically and practically important questions remain. Do parents have different priorities in child-rearing, or are the well-known differences in practice simply a product of their environment? If the environments are improved do they move on to "higher" things (Maslow) or do they intensify their efforts to achieve other goals? What is the impact of alternative types of provision on parents' feelings of confidence and competence, and what is the effect of these changes on their children? What really are the effects of different patterns of child-rearing on children? If the effects of early intervention wash out without follow-through activity, and if follow-through activity can have as much effect as early intervention, and if, as cross-cultural data reported by Peaker and others (1970, 1975) suggests, entry to school systems at any age up to eight makes no difference by the children or eleven, what grounds can there be for early intervention anyway?

But perhaps one of the most important paradigm shifts indicated by the data is the need to focus our studies on what children learn rather than on how much they learn in a particular area.

Note

I am deeply indebted to Willem Van Der Eyken, who worked with me on an earlier draft of this article.

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