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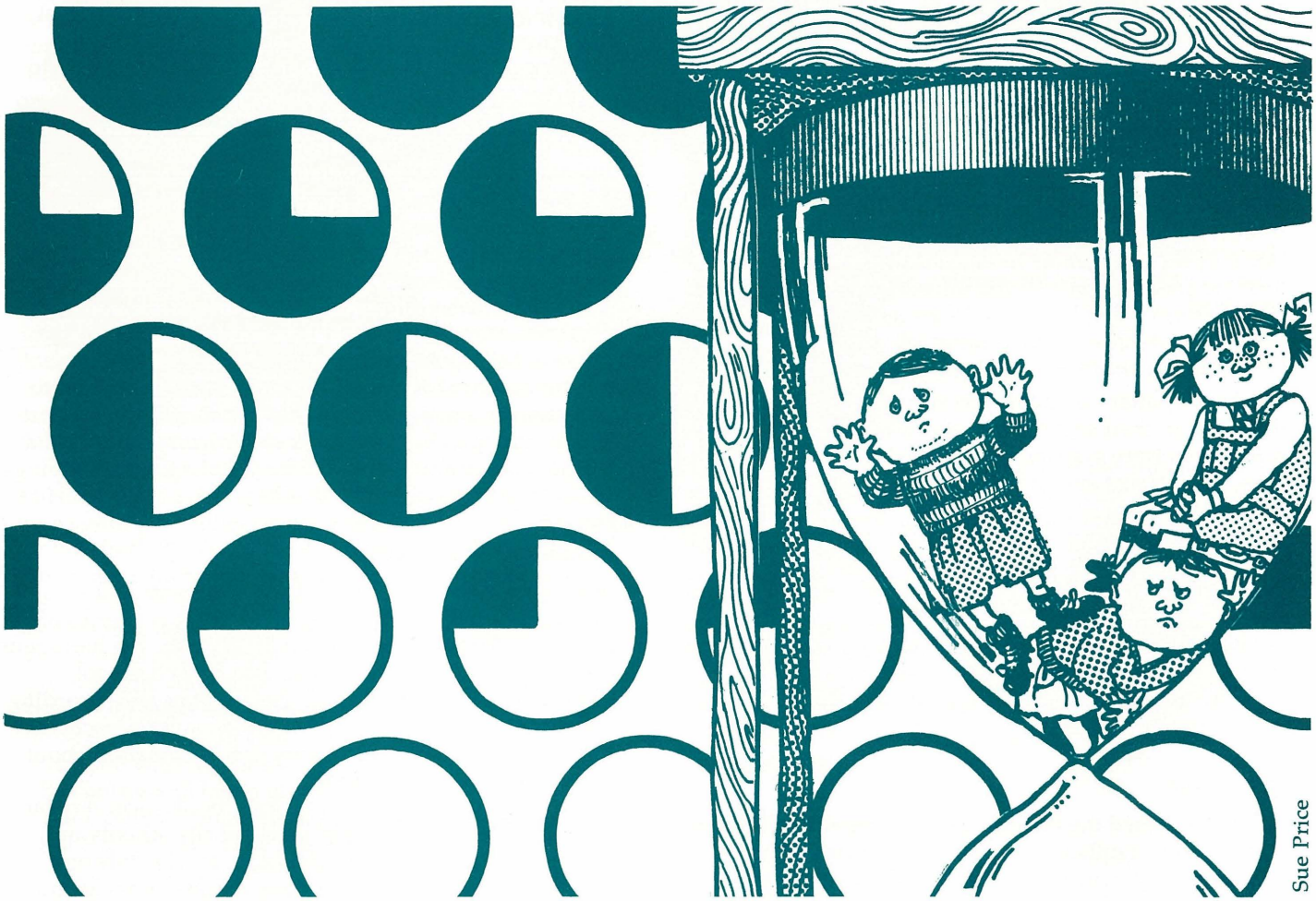

Sue Price

Fifteen thousand hours: findings and implications

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How much of a child's development is influenced by the school he attends? Barbara Maughan and Janet Ouston — two of the research workers involved in the publication of the widely acclaimed *Fifteen Thousand Hours: Secondary Schools and their Effects on Children* — consider the question and assess the implications of their findings for schools.

Schools are complex institutions, required to meet the varied needs of a wide range of pupils. Although special provision will be necessary for some children, for the majority, either by design or necessity, the ordinary school will be the setting for their learning and development over a long period. How can schools best approach the task of ensuring that their setting provides a beneficial environment? The question can be posed at many different levels, from concern with the individual child to a view of the school as a whole. Our recent research in London secondary schools has been focused at this wider level, and has pointed to the importance of the broader patterns of social organization in school life. Not only do schools vary considerably in the sorts of day-to-day experiences they provide for their pupils, but these differences seem to be quite closely associated with differences in the children's progress. Schools can do much to create a positive climate for teaching and learning.

The Research

The research involved a detailed study of twelve non-selective inner London secondary schools serving a socially disadvantaged area. It had its origins in a longitudinal survey of children in the area, and was influenced by research from both Britain and America which indicated that schools varied quite markedly in their rates of attendance, reading problems and academic attainment and even in factors such as delinquency. What

was not clear was why this should be so and whether the variations reflected a school influence on the pupils or rather a continuation of differences in the original intakes. The earlier studies had been unable satisfactorily to disentangle these two possibilities.

Because we had information on the children's characteristics prior to secondary transfer, our own study allowed us to separate these alternatives. We followed up the survey children from primary school to the end of their compulsory schooling and, at the same time, we made a detailed study of twelve of the secondary schools they had attended. Our particular interest was in the characteristics of the schools as social institutions, and the kinds of environment for learning and teaching they provided.

Findings

The broad pattern of the results suggests that the schools did differ in their social environments, and that these differences were systematically associated with varying rates of problems and progress among their pupils. We took a number of different indicators of the children's progress: attendance rates, behaviour in school, results in public examinations, and levels of officially recorded delinquency. There were quite clear differences between the schools in each of these areas, which could not be accounted for by differences in their original intakes. The findings on behaviour in school and examination attainments provide examples of some of the important points that emerged.

Behaviour

We had assessed the behaviour of children in the schools in a number of different ways to get as rounded a picture as possible. Our final measures included very detailed observations in the classroom of both work-oriented and disruptive behaviour; observations in playgrounds and corridors; and the children's own reports (given in anonymous questionnaires) of incidents such as skipping lessons, writing *graffiti*, or damaging school property. The 'profiles' of different schools in each of these tended to be very similar, so that where 'on task' behaviour in lessons was high, problems in the playground, levels of damage and *graffiti* all tended to be low. The schools with predominantly 'good' behaviour could not be simply identified by characteristics such as their size, sex composition, the age of their building or the space available to them. More importantly, perhaps, they were not schools with especially favoured intakes. The conclusion seemed to be that children's behaviour in secondary school cannot be viewed only as a continuation of previously established patterns, but that it also represented, at least in part, a response to their current environment.

Examination results

Turning to the question of examination attainments, our follow-up of one age group of children from primary school enabled us to take account of their earlier measured ability when looking at their results at sixteen. When adjustments had been made for intake differences, and for variations in examination entry policy among the schools, there were still marked variations between schools in their patterns of results. One point of particular interest was that the more 'successful' schools tended to be successful for the majority of their pupils. Where pupils in the top ability band achieved above the average for children at their level of ability, children from lower ability groups, or from socially disadvantaged backgrounds, also tended to achieve well. The results once again seemed to suggest that some kind of school-wide influence was at work, enabling children at all points in the ability spectrum to fulfil their potential.

Our information about the schools themselves, and the tenor of day-to-day life within them, provided us with important pointers as to what those influences might be. We found that a range of factors in the social organization of the schools, from the nature of interactions in the classroom to much broader questions of school-wide policy and practice, were associated with these variations in the children's progress. For the most part, questions of administrative status, buildings and facilities did not prove to be important determinants, at least for this sample of schools. Instead, the factors which seemed to characterize practice in the more successful schools were very much open to planning and change by schools and teachers themselves. They fell broadly into five groupings, each concerned with a rather different facet of school life.

Classroom interactions

Beginning at the very detailed level of events and interactions in the classroom, we found that a series of features differentiated between the schools. We had spent a whole week with a third-year class in each school, staying with them through all their lessons and recording details of their activities and interactions with teachers. These observations gave us very rich information about day-to-day life in the schools.

The picture we gained, in all the schools, was very far from the 'blackboard jungle' image of city schools and classrooms that is so often advanced: to take only one example, in twelve weeks of observations, we saw only one incident so serious as to stop the course of a lesson completely.

There were, nevertheless, important differences between the schools. In the more successful schools, lessons were more work-oriented, with the teacher spending considerably more time focused on the subject-matter of the lesson than, for example, dealing with children's behaviour or setting up equipment, distributing resources. Lessons started and ended more promptly and, when they were set up to be class-based (as the majority were), teachers more consistently maintained contact with the whole group.

These differences in teaching approaches did not seem to be simply a question of teacher experience. In all the schools, newly appointed staff had greater difficulties in classroom management, but the findings also pointed to distinct differences between *schools*, over and above the question of teacher experience. It seemed that the broader organization of school life could perhaps support and help the individual teacher in the classroom and that this was being achieved more effectively in some schools than others.

Staff organization

Interviews with staff suggested a number of factors that might be important here. In the more successful schools, teachers were more likely to work together as a group in both curriculum and discipline matters, courses were more likely to be planned and coordinated within departments, and there was a general consensus on how particular types of problem would be dealt with in the

school. Alongside these factors, it was also more likely that teachers' own work would be looked at by senior staff and that decision-making in the school as a whole would be largely centralized among the senior staff, but with opportunities for all teachers to express their views. Although we had not set out to explore questions of staff organization in detail, all these factors did seem to point to ways in which consensus and continuity were achieved in the more successful schools.

Rewards and punishments

Turning now to factors that affected the pupils more directly, some very interesting findings emerged concerning rewards and sanctions. We had collected details of all kinds of rewards and punishments, from praise or telling-off in lessons, to more formal, school-wide approaches such as detentions and the distribution of prizes. Taking all these pointers together, a rather consistent picture emerged.

First, although levels of punishments varied considerably between the schools, they seemed to have little bearing — either positive or negative — on outcomes for the children. Two exceptions were unofficial physical sanctions, which were clearly associated with poorer behaviour and very frequent tellings-off in lessons. It seemed that very frequent reprimands in lessons might well set off a negative spiral of events that could actually aggravate the very behaviour they were intended to curb. Apart from these two particular examples, however, all the other findings on punishment suggested little connexion with outcome.

By contrast, all kinds of rewards, from praise in lesson to more public commendations or formal reward systems, did seem to be of value. The more immediate forms of feedback, such as encouragement in lessons, showed stronger associations with good outcome, but the overall picture provided a sharp contrast with the results on punishments. This contrast became even more striking when we found that in all schools punishments or reprimands actually tended to be more frequent than praise — in the ratio of perhaps two or three to one. Sanctions are clearly an essential element in school life, and we do not doubt or in any way underestimate the problems of evolving methods of rewarding children that can retain their 'currency', especially for older pupils. The findings do suggest, however, that when this had been done, it was of considerable value.

Pupil conditions

The more successful schools in our sample also provided rather different experiences for their pupils in a number of other respects. By and large, the children were expected to take greater responsibility within the school, both in day-to-day matters such as caring for their books and folders and in more general ways, such as having posts or jobs in their classes. They were more likely to take part in school meetings or assemblies, and the general conditions provided for them within the school — whether in terms of facilities such as a telephone or tuckshop, in the case of school buildings, or in the provision of acceptable and flexible arrangements for pastoral care — seemed to reflect an active concern for their welfare.

Academic emphasis

The final difference between the more and the less successful schools concerns the emphasis placed on the teaching and learning functions of schooling, or the broadly 'academic' aspects of school life. We are not, of course, referring here to a concern with only the more able children, but to a range of indications that teaching and learning were seen as central aspects of schooling for all the pupils. We found this reflected in items as varied as teachers' expectations of children's exam success, and in the checking of the staff's setting of homework or keeping of record books. The setting of homework seemed to be an important indicator here, as did the display of childrens' work about the school. When we had asked the *children* what were the most important goals of schooling from their point of view, the majority had chosen preparation for work or passing examination. The emphasis on these aspects of schooling, which emerged in the more successful schools, did seem to reflect what the children themselves were expecting from their time at school.

Atmosphere and ethos

To sum up, our findings suggest that the atmosphere and ethos within a school, as expressed in the sorts of items we have discussed above, can play an important part in creating a positive environment for learning and development. Where this has been achieved, progress for the majority of the pupils seems to be enhanced and doubtless it is easier to meet the particular needs of individual pupils more appropriately. The school environment can clearly provide an important influence on children's development, and many of the crucial elements in that environment are open to schools and teachers to shape and change.

Implications for schools

Research findings of this kind should encourage schools to feel more confident that they can have a positive influence on their pupils' development and also to consider whether they are as successful in this as they might be. Often teachers feel that little can be achieved 'with children like this'; the daily problems of many inner city schools make longer-term success seem impossible either to plan for or to achieve. Perhaps one of the most important aspects of our work has been to show that it is possible to run a happy, well-ordered and successful school in a disadvantaged inner-city area.

A programme for action?

Do the findings of our research, outlined above, allow us to draw up a blueprint of the way to run a successful school? Certainly our results suggest that an emphasis on these aspects of school life would be likely to have beneficial results, but it seems unlikely that there will ever be just one successful way of running a school. There are, for example, many different ways of encouraging children to take responsibility at school.

We would expect our findings to be directly relevant to other inner-city, non-selective schools, but we have yet to establish whether comparable aspects of schooling would also emerge as important in a similar study of primary schools or small rural secondary schools. It seems very probable that they would, but there is no evidence to support this suggestion at present.

In addition, our description of the differences between more and less successful schools does not allow us to distinguish between those features of school life which promote success and those which exist as its consequence. An example of this point relates to the findings on pupil

conditions: one of the items in the scale was the provision of a hot drinks machine for the pupils. In this case it seems likely that only a school which was functioning moderately well would be confident enough to acquire equipment so vulnerable to vandalism.

Issues of this kind will be understood only by carefully observing the effects of change in several different schools. Even then, causes and effects will be extremely difficult to identify in an organization as complex as a secondary school. For these reasons, it is impossible to give a detailed prescription for the perfect school. Our data do, however, suggest areas of school practice that might be particularly important in improving a school's performance.

These areas are not the only ones of importance, but a school that performed poorly on most of our measures would be very unlikely to be successful. Thus our findings suggest some of the areas where innovation might have positive benefits for both pupils and teachers.

Influence on behaviour

There are two main conclusions that can be drawn from our research; both have practical implications for schools.

The first is that schools are able to influence the behaviour and attainments of their pupils. Our measure of in-school behaviour, for example, showed no relationship to many of the features of school intakes; schools with generally poor behaviour were not those with particularly difficult or disadvantaged intakes. High standards of behaviour at some schools resulted from their own policy and practices rather than from the characteristics of the pupils. Most schools serving an inner-city area will have some pupils who, owing to family or personal factors, might be difficult to manage in the classroom. Our findings suggest that some schools enable most of their children to achieve well at school regardless of problems of this kind.

Innovation

Second, our research suggests aspects of school life where innovation might be particularly worthwhile. Exactly how our findings are translated into action will depend on the characteristics of the school concerned. But choosing appropriate topics and methods of innovation is only part of the process of change. Successful change needs to be monitored to see how new policies are being implemented, and what effects they are having on both staff and pupils. If this is not done, innovations may be abandoned as unsuccessful without any clear understanding of why they have failed or how they might have been modified and made more successful. Also, before setting up an ambitious programme of change it is always valuable to have a clear description of the existing situation so that the effects of change can be evaluated.

Two different types of evaluation can be made. The first is concerned with the concurrent effects of change on both teachers and pupils and the second with longer-term outcomes. As an example of this process we can consider the case of a school that is concerned about the few opportunities younger, less-able pupils have to participate in the life of the school. The first step would be to examine the situation before any new procedures are introduced; it might become clear at this stage that some of these children participate more than others and that this is dependent upon the enthusiasm of the form tutor. This observation might well suggest ways of increasing the possibilities of participation. The next stage would be to choose two or three different strategies for encouraging pupils to take part in existing activities at school and also, perhaps, to introduce something quite new.

Evaluation

After a short while the evaluation process would start by finding the answers to a range of questions such as: 'Has participation actually increased overall?' 'Have different children become involved, or is it just that the same children have become more active?' 'Does the new scheme make excessive demands on teachers time?' — and so on.

The final set of questions relate to the possible longer-term effects of the new programme: 'Has the attendance of these children improved?' 'Are they more enthusiastic about their work and better behaved in the classroom?' — and so on. Perhaps there are no discernible effects of this kind; if this is the case then it may be possible to suggest how the programme might be modified taking into account what has been learnt during its implementation.

Data

Schools often have a wealth of data available that could be used as background information for self-evaluation of the kind suggested here. Often teachers feel that routine statistics give no information about the important, less tangible aims of schooling, but is this always true? The patterns of subject choice and attendance of older secondary school pupils, for example, might provide very interesting clues about their attitudes to school and these could be followed up in discussion groups. In general, schools have little experience and few resources that can be used to evaluate their own progress, and the traditional independence of the teachers has not encouraged the development of the relevant skills. Recently, however, many educational psychologists have become more interested in working with schools as well as with individual pupils, and they may have a valuable role to play both in implementing change and in evaluating its effects.

Our research has shown that some schools are more successful than others in providing an environment that enables children to develop both socially and intellectually. It suggests that innovation in particular aspects of school life will be most likely to have beneficial effects, and that careful monitoring and evaluation of such innovations will both increase the likelihood of success and also lead to a greater understanding of the relationships between school practice and outcome. The fifteen thousand hours of compulsory schooling might then become more rewarding, productive and enjoyable for many more children and their teachers.

Notes

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