Time on Their Hands?

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Il parents decide in one way or another whether to supplement their child's education at home, and if so by how much and in what way. As a minority group it is a particular dilemma for the parents of gifted children who sometimes feel that theirs are the least catered for of any group at school.

Bright preschool children are often taught to read, for example, at the age of three¹. And, if the parents have sufficient leisure, this may pose few problems for the child. However, once the child begins school the situation is radically altered. For those who choose to teach their children at home, time is no problem but for those who follow the conventional path, time can be a major restriction.

School education is about more than just the three R's; it is about socialisation, it is about learning to cooperate, to compete, to work on their own, and much, much more. And when it comes to basic learning, a good teacher and a good school can do a great deal for a gifted child with differentiated work. But, with the best will in the world, large classes set a limit to the challenges a teacher can provide for such small minorities with their special requirements. With this in mind, many parents feel the need to supplement their children's education at home. After all, when you analyse it you find that a remarkably small part of the school day is, anyway, set aside for "basic" learning. But do the children have sufficient time at home?

Generally speaking, schools have a very conservative attitude to homework. Up to the age of seven, apart from regular reading, the amounts set by them are very small.

Not all gifted children will come home from school thirsting for more knowledge, eager to hole up in their bedroom with a pile of books to read and Classic FM on their radio! Not all bright children are perseverant, diligent with excellent powers of concentration.

Many will say they've done their 6-

¹ Please forgive me for failing to explain why the opinions of those who believe that such things should be left to professionals or that nothing is lost if such learning is delayed until the age of seven are misguided.



-hour stint at school and now is time to chill out and enjoy their childhood. Who can blame them? But when relaxation includes watching a couple of hours of crap cartoons like Dexter's Laboratory, South Park, or Cow & Chicken (as opposed to classics like Bugs Bunny, Tom & Jerry, Yogi Bear, the Flintstones... name your own) or when the edutainment CD-ROMs gather dust and the home PC is constantly in use with Grand Theft Auto, Touring Car Championship, FIFA Football and Mig 29 (rather than standards like SimCity or Creative Artist), it is tempting to argue that with all this indulgence with all this time "wasted" - just a "little bit" of educational enhancement at home would not be out of place?

With care there should still be time for more socialising, a little rubbish TV, quality cuddles with mum & dad, and plenty of good healthy exercise - kicking their sister round the garden and rolling on the sofa with a football. What does today's psychology have to say about this

Genius Explained by Michael Howe

Professor Howe is a British psychologist, who has written numerous articles and books on exceptional abilities. He is an environmentalist. It might be thought that the study of genius would tell us very little about the development of mundane high ability which is the focus of NAGC parents' attention.

But Howe attempts to take the mystique and mystery out of genius and tries to show how upbringing and nurture alone have lead to this status. It is his view that these people were not born geniuses. He comes close to dismissing innate talents, arguing for example that innate musical ability, as an explanation of differences, has little predictive potential.

This is a common didactic tactic, to simplify or exaggerate claims, to be controversial. It gets you attention galvanises opposing viewpoints, and is a game that academics love! A common view in

the nature-nurture debate is that in recent history roughly two-thirds or three-quarters of the variability in IQ can be ascribed to heredity with the rest due to environment. With many other human characteristics, such as personality, the division is closer to 50:50. The problem is that much of the evidence (based as it is on twin studies) is rather flawed. Howe therefore tends to be very dismissive of it, while others agreeing on its imperfections tend to be rather more pragmatic in their judgements

However, Howe does emphasise one less controversial and important point here. Although IQ is a powerful predictor of some things like achievement at passing exams and so on, when one selects on the basis of a high IQ, prediction is considerably weakened. In other words it appears impossible to tell which of those with a high IQ will do best in later life

Taking a less radical position than Howe, one might argue that some modest innate musical (eg) ability might be an essential pre-requisite for genius to develop but that the crucial element remained the nurturing. Howe is in some ways unsurprised by Mozart's prowess at the age of six. He argues that if he had been practising for three hours per day since the age of three he would already have racked up 3,500 hours. This he argues is all you need to reach the standard of a good amateur player.

But you can't just stick a child in front of a piano and expect to get a musician. You need time, guile, enthusiasm, you need to be able to energise, motivate... You need quality practice time etc etc... . Mozart's father may well have been a slave driver, but he was probably a quality slave driver. This is where Howe's book scores, providing fascinating insights into the upbringing of numerous geniuses including Darwin, George Eliot, George Stephenson, the Brontë sisters, Faraday and Einstein. We all know how professions can run in families. This may apply to the famous, those at the top of their professions, to musicians, scientists, actors, footballers... . But we cannot know in each case the relative contribution of nature and

nurture. What Howe does is to show the potential power of nurture or environment in the exceptional circumstance of genius.

Returning to highly able children, it should be clear that the investment of extra, quality learning (in maths, writing, music etc) should bring its rewards, possibly proportionate to the time invested. If musicianship is a good model for other skills then perhaps one should consider its implications. Assuming that the quality of all practice is equal (which it obviously isn't), at the rate of 15 minutes per day it might take a child more than 100 years to reach the standard achieved by the best violin students at age 21! This doesn't prove that a little practice is a waste of time but simply that any payoff will be depend upon the extent of any investment.

Of course, not all home "practice" is formal, not all learning is explicit. Howe points out that three-yearolds differ enormously in their spoken vocabularies. One environmental explanation he offers is that this can be traced to the very differences in their large experiences of language. By that "those children who came from professional families had already heard more than 30 million words directed specifically towards them. In sharp contrast, children from working-class families had heard around twenty million words, and children in families living on welfare have heard only ten million words, on average"

I now know why I am not a musician. The time I practised as a child never amounted to a hill of beans so no wonder! The dilemma for today's parent is given the leisure how much extra to provide at home for the child without impairing that childhood thing. It might be nice if it could all be provided by the school but will this ever be so? Actually, would it really be desirable?

Learning at home in particular should be seductive, a joy, not a drudge, not a burden. Howe goes to lengths to point out how things can go miserably wrong, a warning of the consequences of crude, insensitive excess.

Most of us have far fewer teaching skills than the best teachers but can we afford to ignore our children's needs?

The Nurture Assumption by Judith Rich Harris

Harris is an American psychologist, but a writer of text books - not a university researcher. Despite this background, her views have recently had a major impact on the nature-nurture debate in academic circles. You might even have seen a British TV programme in 1999 which featured her arguments.

Harris also stresses the importance of environment. As mentioned before, heredity may be a major influence on personality character, but there is not a lot you can do about it. Nurture, on the other hand, is there for all to see and change. People are quick to blame the parents when things go wrong. After all they hold the reins of nurture. An earlier environmental viewpoint had been concisely expressed by the aphorism "Give me a child until he is seven and I give you the man. Unsurprisingly, many of us have rushed out to buy books on the correct way to bring up children. Years ago (particularly in the US) they might have been by Benjamin Spock, more recently (particularly *in this country*) by Penelope Leach.

But once more, an author has courted controversy to make her point. No wishy-washy dotting of i's and crossing of t's - "... in the formation of an adult ... parents don't matter. What matters, other than genes, is a child's peer group." Here we have a view which on the face of it contradicts all that we have assumed, asserting major limits to parental influences in the developing child.

With hindsight at their side, maybe a few, feeling powerless and struggling with rebellious teenagers, will argue that this does not come as a surprise or that they knew it all along. "It's that school. It's those friends of his. I knew they were a bad influence." Perhaps here is support for the view that parents should take excessive care when selecting their child's school as this will go some way to determine the child's peer group?

This again is a fascinating book that anyone interested in child development should read before making up their mind on what makes a man or a woman. Just to spoil the story a little, Harris admits that parents can have influence, "they can influence the way children behave at home. They also supply knowledge and training that their children can take with them when they go out the door.... What they don't learn at home is how to behave in public and what sort of people they are."

On our musical theme, Harris quotes the example of "... identical twins separated in infancy; they grew up in different adoptive homes. One became a concert pianist, talented enough to have performed as a soloist... The other cannot play a note. Since these women have the same genes, the disparity must be due to a difference in their environments. Sure, enough one of the adoptive mothers was a music teacher who gave piano lessons in her home.

The parents who adopted the other twin were not musical at all. *Only it was the nonmusical parents who produced the concert pianist.*"

Harris points out that parents do have some power in choosing their children's peers, "at least in the early years", by choosing neighbourhoods and schools. She also warns about the "final drastic solution" of home schooling. "Although you are protecting your children from the malign influence of the kids in the school they would otherwise attend you may end up producing misfits, poorly suited for the world in which they will eventually have to live. And here there is an echo of Howe's observations.

The control of children's development is not easy and parents are not always to blame. We may add to their knowledge, but how far we can form their character or motivate them in the life hereafter is apparently limited.

The Computer Takes a Hand - Jump Ahead Typing

Back in 1993 Rosemary Warner had the bright idea of sending children from this local branch of the NAGC on a conventional touch-typing course. We haven't followed up results formally but casual observation suggests it worked very well with the participants building on their skills at home, school and university. For example, one seven years old is today aged 13 and achieves around 80 wpm with 80% accuracy. (People type at differing speeds and accuracies depending upon the purpose of what they are doing.)

Computer-only typing tutors have been around for some time now and even the most well known adult (*Mavis Beacon*) has a junior version. Our youngest, like many boys, has very poor handwriting - a great shame when he's an excellent reader and speller. After brief unsuccessful attempts to improve his handwriting at home we belatedly decided to try and improve his typing instead. As an avid computer user since an early age he could type quite quickly anyway, but with just a few fingers.

Handwriting and typing are important tools that can facilitate further learning.

The program we chose was Jump Ahead Typing from Knowledge Adventure which is promoted as suitable for ages "7 to 10". He was six at the time.

The program is quite good from the management point of view in that one can "plug in" the child and more or less let them get on with it. First one needs to decide how long a daily lesson should be - either in terms of how many exercises or how much time and stick to it. As with learning a musical instrument, a fixed period of time is probably the most convenient to use, if not the most theoretically correct. Obviously too, if you can spare time to watch your child and offer them advice then this can be very helpful, but not everyone has the leisure and it isn't essential. It is important, however, to keep a weather eye and ear on the proceedings, from time to time checking that the child is not being too careless or too cavalier although this task need not be too onerous. Your ear will tell you whether too many mistakes are being made (listen for the beeps) and your eye will tell you whether or not the child is cheating (occasionally check that he is using the full complement of fingers).

The program itself monitors performance in terms of speed and accuracy with the latter broken down by fingers and keys, as well as rewarding compliance with the obligatory games and medals. After a few months our youngest built up a reasonable speed of 30 wpm at 95%

accuracy.

Many educational writers have suggested the computer as a medium for bright young children with poor handwriting. It has the potential of giving them confidence and pride in their work, their output can easily be read and correct, and a pathway is provided for the early teaching of spelling, grammar and so on. Some children might be more encouraged to write stories, poems and diaries using a word-processing program while their handwriting develops more slowly at school. It is interesting to wonder whether Charles Dickens's learning of shorthand skills as a 15 year old might have contributed a small part in enhancing his literacy skills.

Of course there are other gains - the correct use of the keyboard should immunise against repetitive strain injury, preventing bad typing habits. Speaking as someone who has suffered from this, it seems worthwhile in itself.

Forget about speech recognition by computer, it seems to me that, given the hardware, typing is *the* way ahead for the accelerated development of English skills for *all* children (not just the gifted). Speech recognition continues to slowly improved but it is probably easier to teach touch typing than clear speech!

Conclusions

Two books worth reading and one program worth using.

- 1. If you want to make a real difference to what knowledge and skills your child acquires you can do so at home, but it might take real time and energy on both sides.
- 2. There are major limits to how far you can mould your child's personality. (Many parents with several grown-up children probably know this already.) But if you know what does mould it perhaps you can do something about it.
- 3. If you want to improve your child's writing skills, then persuade him or her to practise using an effective touch typing computer program, before coaxing them to write stories, poems or a diary with a wordprocessor.

References

Michael J A Howe, Genius Explained, Cambridge University Press, 1999, paperback: ISBN 0 521 64968 4, ≤£12.05.

Judith Rich Harris, The Nurture Assumption - Why children turn out

the way they do. London: Bloomsbury, 1999 (paperback), ISBN 0 7475 4894 $3, \le \pounds 9.99$.

Jump Ahead Typing, Knowledge Adventure computer program, 1998, requires Windows 98 or 95, 66MHz 486 or Pentium PC (also MAC format), mouse, quad-speed CD-ROM, 16 Mb of RAM, MPC compatible sound card, 5Mb of hard disk, SVGA 640x480 256-colour graphics, ≤£19.99.

https://www.knowledgeadventure.co.uk/,

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