

# Relationships between health and education providers

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## Introduction

In what follows I will identify trends in governance and provision that are making state funded education a more attractive site of activity from the perspective of health providers. I will identify reasons why pharmaceutical businesses might increasingly come to see education as a market. I will describe the basis of current claims that pharmaceuticals can improve educational performance. Finally, in order to illustrate how these three forces may combine in the near future, I will describe a recent strategic alignment of state-funded education providers with producers of a putative cognition enhancing product.

**Keywords:** health, education, psychology, teaching, politics

## A. Contexts

### 1. Every child matters

Since 2004, UK education policy has been shaped by 'Every Child Matters' (ECM). This provides for a new 'joined-up' approach to the delivery of children's services such as education, health and child protection. It also requires service providers to deliver measurable improvements in children's ability to:

- Be healthy
- Stay safe
- Enjoy and achieve
- Make a positive contribution
- Achieve economic well-being

One reason for the adoption of this approach was the long running concern that specific children's protection needs were sometimes lost in the gaps between services (Laming,

2003). There was also a concern that relative supply-side capture of both education and health services had made it difficult over the years to access efficiencies and synergies that a more holistic approach to the child might offer. For example, from a traditional teacher's perspective it may be difficult to justify the use of limited resources to discuss curriculum and pedagogy with a non-teacher, say a health psychologist, even though learning about self, beliefs and behaviours and health outcomes might all be closely linked in the perspectives of policy makers, parents and students, and use of these connections might speed positive behaviour change. Joining up services is expected to make it easier for service providers to coordinate their efforts.

A shift of emphasis from supply-side to demand-side perspectives can also be seen in the attention ECM gives to children's views of service provision and of their own needs, both locally in consultation with Children's Trusts, and nationally through Children's Commissioners. Whatever the real outcomes for the influence that children have, ECM has certainly established a default assumption that children should be consulted. It has also established the view that what matters primarily is the well-being of children, not the operational convenience of service providers. There are two features of ECM that are of particular significance to the present discussion:

- Relationships between health and education services are now open to re-negotiation on an issue-by-issue, initiative-by-initiative basis in the light of ECM aims
- Children's views of the services they receive will be solicited and may inform future service delivery

The recently published Children's Plan (2007), a ten year strategy for improving UK childhoods, underlines both of these key points. It adds commitments to making clear improvements in children's health, including obesity levels, and to reducing the numbers of young offenders. Together these policy directives establish a firm connection between education services and children's health and behaviour. These conditions arguably increase the scope for education and health providers, whether state-, charitable- or commercially-funded to form strategic alliances.

## **2. The promise of improved education services through Academies**

Currently UK government is committed to establishing 400 academy schools, having already established about 100. Opposition party support for the programme suggests this policy will survive a future change of government. Academies are all-ability, independent state schools funded in parity with other state schools, but established and managed by academy sponsors (variously faith groups, businesses, universities, philanthropists and educational foundations) most often in partnership with local authorities. Commercial sponsors are required to invest £2 million in a newly established academy, while 'educational' sponsors invest their reputation rather than money in the success of the academy. Typically based in purpose-built or recently renovated accommodation, Academies have tended, so far, to serve relatively deprived communities with a recent history of failing schools.

Academies manage their own budgets, answering directly to Secretary of State for Children Schools and Families under the terms of their funding agreements. Their funding and governance, independent of local authority control, makes them relatively free to invest in educational resources, such as IT, and to meet National Curriculum objectives as their leading teachers and governors see fit, as long as they can convince OFSTED of their plans. Thus the performance of Academies is closely scrutinised, the expectation being that their relative freedom should translate into innovative and excellent teaching strategies delivering improved educational outcomes measurable in terms of pupils' GCSE performance. Campaigners against Academies (eg [www.antiacademies.org.uk](http://www.antiacademies.org.uk)) claim that Academies' governance structure means that they lack local democratic accountability, raising questions about their ability to respond to local communities' needs and wants.

Key points to note here are:

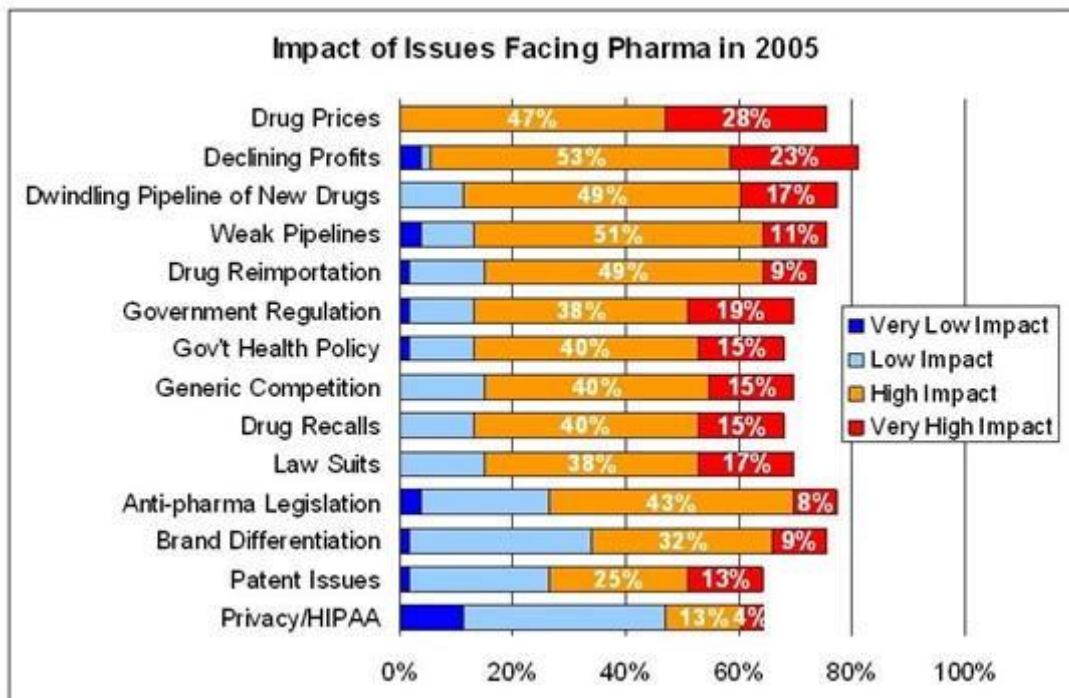
- Academies are expected to innovate and their leaders are under high pressure to ensure their pupils perform
- Academies are a very clear example of a purchaser/provider split in education delivery: local and national authorities are no longer to act as providers of education but should act instead as commissioners of education
- Academies' strategic positioning within education market and ways of delivering national curriculum are relatively open to the influence of their sponsors.

Clearly, not all schools are Academies. However, their relative freedom to experiment in the new policy context set by ECM and the Children's Plan and their close relationship with central government makes them a likely source of, and be test-beds for, future initiatives.

ECM diminishes conceptual and practical boundaries between 'education' and 'health'. Couple this with the accountability regime surrounding academies and their innovation brief, and pupils' health could become not only a key assessment criterion but also a key 'lever' in working toward excellence. Thus education will become more porous to health information. There are reasons for thinking that health provision may also become more porous to education providers. I am aware of an Academy that is turning its approach to pupils' physical education into a marketable product, becoming a 'health provider' of sorts for other schools. Further, the attention of health policy makers is turning from informing the public with health messages toward individual behaviour change (Taylor, 2008). It may be that education professionals and institutions are seen as possessing valuable skills in this area.

### 3. Pharmaceutical trading conditions and future strategy

As the table of worries below indicates, the pharmaceutical industry was experiencing declining profitability even during the recent economic boom.



Pharma Marketing News 2005

<http://pharmamktng.blogspot.com/2005/01/drug-pricesdeclining-profits-top.html>

Pharmaceutical development and testing is a high risk business with both the efficacy and safety of candidate drugs in doubt until relatively late stages of development. From a profitability perspective a sensible development strategy is to focus attention on candidate drugs that are likely to have a large market in the affluent minority world. This accounts for the recent growth of 'life-style' drugs (Flower, 2004) such as Viagra and the emergence of the category 'medically enhanced normality' (Møldrup et al, 2003). The figures above also suggest that pharmaceutical businesses are motivated to influence government regulation of drug development and health policy.

The scoping exercise reported in 'Drugs Futures 2025' (Office of Science and Technology, 2005) brought policy makers, representatives of the pharmaceutical industry, and others together. It offers some insight into the industry's current and near future strategies. One aspect is of direct relevance here: the development of cognition enhancers (CE). Such CEs are believed to strengthen a range of cognitive functions, including memory, reasoning and concentration, by selectively enhancing or diminishing neurotransmitter function and synaptic efficacy. Regulators and the pharmaceutical industry expect both the size and product range of CE markets to expand in the near future. There is a history of soft drink and food manufacturers adding CEs to their products (Coke, Red Bull). Arguably, combining a CE with an otherwise desirable product would shift the conditions of consumer choice toward the state of ambient consumption that caffeine has long enjoyed. Food and soft drink manufacturers may act in concert with pharmaceutical manufacturers in the development of such products in the near future. An expansion of unregulated pharmaceutical CEA production by domestic and overseas concerns is also envisaged.

According to the anecdotal reports of some commentators (Turner and Sahakian, 2006) many adults and children who have no medically identified cognitive deficits are already finding uses for these agents, hoping to improve their performance in education, work and leisure. There is a large existing market for non-pharmaceutical agents such as dietary supplements and herbs and a new market is emerging in the 'off-label' use of pharmaceuticals. In this new market, drugs developed to treat pathological conditions are used by those with no diagnosed need in the hope of enhancement. Ritalin, for example, is often prescribed in cases of Attention Deficit Hyperactivity Disorder (ADHD), but can also be taken in the hope of boosting powers of concentration that are understood as 'normal'. Although pharmaceutical research and development activities are often subject to the ethical constraint that they must aim at finding a treatment for a pathology, consumers with no pathological condition are relatively free to experiment with the many opportunities and risks presented by self-prescription of pharmaceuticals, sourced through the internet or social networks.

#### **4. How effective is the current range of CEs?**

Jones et al (2007) identify 27 major agents believed to have cognition enhancing potential. These include ten dietary supplements and seventeen pharmaceuticals. Horne (2008) provides a synoptic review of evidence of their effectiveness which I summarise below.

i. Nutraceuticals: dietary supplements and vitamins

Vitamins E, B6, B12, folate, thiamine, lecithin, neurosteroids and Ginko biloba. There is insufficient evidence to assess their efficacy although there are suggestions of an association between vitamin B6 and memory in healthy individuals.

ii. Cholinergic drugs

These drugs enhance neural transmission through the cholinergic system that uses acetylcholine as its neurotransmitter. Cholinesterase inhibitors reducing the effectiveness of enzymes that breakdown acetylcholine, thus making it

more available within the brain. Lab tests have shown cognitive improvements in healthy subjects, although effects on different cognitive abilities vary between individuals. Nicotine and related compounds have been shown to have beneficial effects on attention, learning and memory in healthy subjects.

iii. Psychomotor stimulant drugs

These are often prescribed for Attention Deficit Hyperactivity Disorder (Adderall, Ritalin), where there is good evidence of their effectiveness. Ritalin can enhance spatial working memory, cognitive flexibility and reaction time in young healthy adults, but effects on verbal learning, vigilance and long term memory are relatively small and restricted to the special conditions found in the lab.

iv. Atypical stimulants : modafinil

Marketed as treatment for excessive sleepiness, there is evidence that modafinil (provigil) can benefit some cognitive functions in young healthy adults including verbal working memory, visual recognition, planning performance and executive inhibitory control. No memory enhancement has been demonstrated. Means by which the effects are produced is unknown.

v. Cerebral vasodilators

Cerebral vasodilators widen blood vessels in the brain. There is little evidence that they enhance cognitive function in healthy individuals.

It is clear that there is more evidence for some CEs than for others, but also that there are gaps in evidence. While the availability of a high standard of scientific evidence may be salient for some actors, for others possibility and anecdote are just as convincing. As Martin et al (2008) argue, bio-science development, marketing and public reception are shaped by an economy of hope as well as available evidence. The 'gold standard' of medicines research, the double-blind control study, is certainly not the only available metric of effectiveness, even if it can claim to be the best. It is likely, then, that individuals and perhaps organisations will find their own 'tests' of CEs.

Drug Futures 2025 (2005) also raises the issue of drugs testing. As more psychoactive and enhancing drugs are brought to formal and informal markets so the technology for detecting their use has become more widely available. For example Access Diagnostics ([www.drug-testing-kit.co.uk](http://www.drug-testing-kit.co.uk)) offer a saliva test kit at a rate of £5.50 per test to cover cannabis, cocaine, opiates, amphetamines and benzodiazepine that promises results within 10 minutes. According to Drugs Futures 2025 such testing is likely to be an increasingly common feature of the management of drug use in the classroom and at work, but it is unclear just what types of drugs will be tested for in what circumstances. For example a test might be used to assess a child's compliance with a prescribed mood or performance-altering substance and another might be used to deter the same child from the use of recreational drugs. Some US schools apparently allow children who have been diagnosed with ADHD to attend school only on the condition that they have taken their medication.

## **B. Relationships**

## **1. Might relationships between educators and private concerns in the information technology and health sectors come to resemble those between medics and drug companies?**

There is a good deal of research and commentary on relations between pharmaceutical companies and medical service providers. Much of this work is critical in intent, raising questions about the balance between the influence over medics' prescription habits and the support the industry offers medics in pursuing their professional goals and status. Moynihan (2003) gives pithy expression to the issues when he asks 'who pays for the pizza?' But this is more complicated than a question of luncheon bribery. It is not clear that the sponsorship of professional meetings and conferences by commercial interests, for example, is inappropriate. If medics and drug companies are 'entangled' with one another, this is the result of decades of mutual support and shared interest. Are there reasons to think that educational professionals of the near future might encounter similar relationships and ethical issues?

It has proved difficult to find published peer-reviewed evidence relevant to this question. However, the author recently enjoyed a 'guinea-pig' role in an information technology firm's new marketing strategy. Having seen my name on publicity material for a conference organised by an educational research charity, the sales director invited me to address a small audience of IT marketers and academy heads. He had never invited an academic to speak before. A pleasant lunch was provided. Key elements of this meeting indicate that strong parallels between education and health marketing and public relations strategies are emerging. These include the mobilization of an 'expert' to give the meeting a respectable research/professional development flavour, the provision of free lunch and travel budgets, and a smooth segue into post-lunch session of product demonstration.

## **2. What factors might strengthen relationships between educators and private sector organisations?**

There are structural parallels between the emergent organization of primary health care and the burgeoning Academies programme that can shed further light on our issue and lend the anecdote above a policy context. As Pollock et al (2007) argue, 2003 saw the creation of a market in primary care. Primary care trusts in England, health boards in Scotland and local health boards in Wales gained new powers to negotiate contracts with commercial companies. This has brought about a diversification of providers in the health-care market. The range of health care providers, often firms employing general practitioners or practices managed by general practitioners, are now regulated primarily by commercial contract. There is a close parallel here with the purchaser/provider split that converted Local Authorities into commissioners rather than providers of educational services and the independent status enjoyed by Academies. In both cases the split is used in the hope of reducing supply-side capture, of locking 'market discipline' into service provision chains and, ultimately, of improving services to individuals.

Current regulations already allow academy sponsors a good deal of creative leeway when it comes to delivering on OFSTED defined targets. The Times Educational Supplement (14 November 2008) reports on a deal involving Edison Schools, a profit-making business, taking charge of up to 12 academy schools charging each academy £1.2 million for a three year contract. Full payment will be conditional on improvements in exam performance and pupil behaviour.

As this report indicates, the policy context has significant consequences for the dynamics of key relationships. The establishment of purchaser/provider splits decreases the practical relevance of the moralised and politicised distinction between 'public' and 'commercial' service provision within professionals' everyday decision-making. It also

replaces a hierarchical scheme of centralised decision making with a relatively dispersed range of decision and negotiation points. A number of assessments of this are possible. For Pollock et al (2007), like antiacademies.org, this will diminish local public accountability of service provision. From a current government point of view it will make services more responsive to individuals (including children) allowing for the greater personalisation of public services (Leadbeater, 2004). From the point of view of the current paper, however, it seems likely that educators will become more available for the influence and persuasion of commercial interests as they come to view such relationships as beneficial to the service delivery they are responsible for.

### **3. The emergence of a new educational 'strategic imaginary'?**

Publicly funded education has long involved relationships with commercial organisations. From exam boards to publishing houses, exchange and conversion between commercial interest and 'disinterested' professional bodies, between saleable product and authoritative knowledge, has a long history. So what might be novel about increased pharmaceutical or IT business involvement in today's education policy environment?

In 2007 Durham County Council investigated the effects of a fish oil dietary supplement on pupils' GCSE exam results. They began with 3000 pupils at year 11 taking supplements at home and at school. The fish oil supplements were provided free of charge by the company Equazen, manufacturer of such products as the widely available 'eyeq chews', a fruit flavoured, sweetened preparation of 'naturally sourced' Omega 3 and Omega 6 oils. By the time of the GCSE exams around 800 pupils were still compliant with the programme. In order to estimate the effects of the supplements on GCSE outcomes, the Council's Children and Young People's Services division compared the results of children who had remained compliant with those of children who had not taken the fish oil that Equazen provided. The two groups' performance did differ, Equazen takers scoring higher than the others.

This investigation generated a great deal of positive publicity for fish oil supplements. Its status as scientific research has, however, been called into question by a series of closely argued articles by the science journalist Ben Goldacre ([www.badscience.net](http://www.badscience.net)). There is no good reason to attribute the differences in performance to the oil, given that the compliant group was self-selected and perhaps more invested in educational achievement than the others. No attempt was made to control for placebo effects. Further no information was sought about the diets and supplement use of children who did not take the Equazen product.

In a recent press release (25 September 2008), the Head of Achievement for Durham County Council's Children and Young People's Services acknowledged that the study's design did not allow any positive inference to be drawn about the effectiveness of fish oil in raising children's achievement. Having said this, however, he pointed out that had no difference been detected between groups, Durham would have been likely to dismiss fish oils entirely. Combining this imaginary negative result with the actual but scientifically meaningless positive result enabled him then to maintain hope in the effectiveness of fish oils:

'... taking all this into account, it is our view that this study has produced some interesting and possibly exciting issues for further investigation that could be the basis for future scientific trials ...'

<http://www.durham.gov.uk/durhamcc/pressrel.nsf/Web+Releases/9B151A656B3FD9AB802574CF002D51F1?OpenDocument>

Even though they fly in the face of scientific reasoning about effectiveness, I would suggest that these manoeuvres allowed him to maintain something of value - the possibility of a strategic alliance between Durham Children and Young People's services, Equazen, and aspirational service users designed to meet policy objectives.

Whether this trial was good or bad science and whether fish oils really can raise performance is not the central issue that concerns me here. Instead it sheds light on trends in relationships between education service providers and commercial operations.

The Durham trial and its aftermath suggest that the current education policy environment has generated a new 'strategic imaginary' amongst key stakeholders such as Heads of Achievement for local authority young people's services division, Academy leadership, and sales and marketing agents in pharmaceutical and IT companies. I describe the 'imaginary' as 'strategic' because it is closely aligned with the delivery of ECM and Children's Plan objectives, and is concerned with actively seeking, choosing and organising promising materials and opportunities from whatever sources become available to deliver those objectives. I describe it as an 'imaginary' because it is knitted together with possibility and hope. I would emphasise that this is an observation not a critique.

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