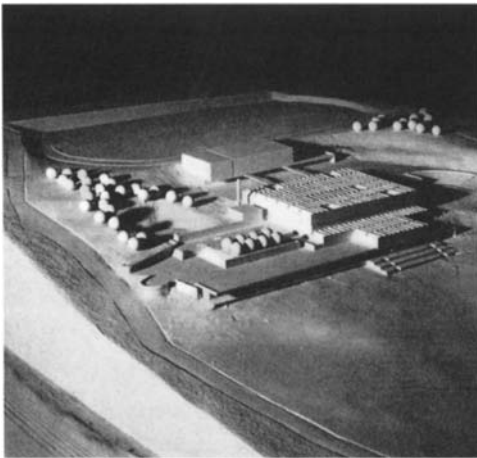


Educational Systems

In Germany as in most European systems, the structure of education is divided into a number of tiers: primary level, aged 6-10 years, secondary level 1, aged 11-15 years and secondary level 2, aged 16 - 18 years. Added to this are children's early years centres, which provide daycare and other related services for community use often organising before and after-school clubs. In some states of Germany, the comprehensive school remains the basic secondary type, although it is under considerable critical re-appraisal. After the age of 10 (in some states after 12), the system is by and large divided between academic schools, the Gymnasien, and schools with a more vocational focus, the Hauptschulen (up to grade 9) and the Realschulen (up to grade 10). Although the federal states have their own guidelines, school building is the responsibility of the municipal or district authority, with the superior school authority and the various ministries for cultural affairs granting final consent to new building projects. The PISA Study (Programme for International Student Assessment) of education standards in 28 OECD countries, conducted in 2000, caused considerable anxiety with its largely negative assessment of German students' achievements compared to other leading economies. This has created much public attention for education issues and school environments.



All-day secondary school, Osterburken, Germany, Bassenge, Puhon-Schultz and Schreck, 1967

In the UK, formal schooling commences at the age of 5, however 'reception' classes are now provided for 4 to 5 year olds and as part of the extended schools agenda, with two hour sessional nurseries for 3 to 4 year olds in some schools, which are being developed as a coherent 'foundation stage' whenever funding permits. Outside of this school based provision there is also the children's centre programme, with subsidised daycare for children in deprived areas, along with a range of community facilities for other local children and their families. The money for this comes from a new government funding regime called 'Sure Start', which is distinct from education funding for schools. The commitment is to open 3,500 children's centres in the UK by 2010, providing a centre in every community.

Infant schools which are often organised into two separate schools (yet usually within the same site) provide education for children aged between 4 and 7. Junior schools cater for the educational needs of children aged between 7 and 11 years. Secondary school commences at age 11 and runs through to age 18, although often the sixth form, aged 16 to 18, will be in a separate part of the school or on a different site operating as an institution in its own right, the so-called sixth form college. There are a range of different school types, such as the academically orientated grammar school, and the more vocationally orientated comprehensive school; these are both leftovers from an earlier regime which run along-side new initiatives such as the academy programme. The UK system has traditionally been de-centralised and run by local education authorities, under the guidance of the government department for education (DfES). Funding was allocated on the basis of required school places within each authority, with a certain level of capital allocated to provide maintenance on an annual cycle. However, the system has been subject to radical change to cope with huge investment currently underway; this is explained in more detail below.



Tulsa Hill Comprehensive School
London, London County Council, 1953-1966

In the early 1960s, the vertical, hierarchical organisation of the secondary school system in Germany was questioned. A more horizontal structure was proposed, similar to so-called comprehensive models first introduced to the UK and the USA during the 1950s. This was based on a more socially egalitarian approach, where all students of whatever academic ability attended the same institution. The new educational structure would require a new school building type, which reflected this evening-out of opportunities. In the UK many examples of this new school type were introduced during the 1950s, with mixed results architecturally and educationally; for example Tulsa Hill Comprehensive School (1956) was a perversely inhumane nine-storey slab block catering for 2,210 boys located on a single inner city site. Designed by the London County Council Architect's Department, it was an example of all that was wrong with arrogant local authority architects of the period. Middle class people, many of whom had attended private schools themselves, showed little care or respect for the well-being of their working class clients. Memories are still vivid, and it is understandable that for the current wave of school building public architecture has been placed in the hands of private practices with a proven track record in big public buildings.

The comprehensive school in Germany usually took the form of a similarly large complex albeit low-rise and horizontal in plan. However, because the designers had to use deep plan structures, the result were dingy, artificially lit, air-conditioned groups of rooms. One of the first projects of this type was the all-day secondary school in Osterburken (1967) by Bassenge, Puhon-Schultz and Schreck. The system over-loaded the programme with rooms, mixing large and socially complex groups together, which brought inevitable



A limited budget spent on small-scale improvement raises the quality of the environment immeasurably. Nursery in Loup, Northern Ireland, 2005. Mark Dudek Associates, before and after refurbishment.

conflicts. Added to this, the new pre-fabricated form of construction was technically poor and aesthetically disastrous virtually wherever it was used. Buildings made of exposed concrete with little colour or textural variety were to a certain extent forced upon architects and developers, as a result of tight budgets and limited time frames. For 'comprehensive', read 'bog-standard' as one politician was heard to describe the secondary school system during the early stages of the new Labour government in 1997. This referred as much to the sad, run-down architecture of these places as it did to the grim social and educational experience many students received.

As part of the Labour government's social inclusions policies, since 2000 it has been investing heavily in the nation's school building stock. Tony Blair's strategy for power was exemplified by the watchwords he repeatedly used throughout his first term in office, 'education, education, education'. Secondary schools have been at the forefront of this huge capital investment, a process that will be ongoing for the next 20 years. The sheer lack of investment over a sustained period of 40 years previously, exacerbated mainly during the tax restrictive Thatcher governments (1979-1997), meant the pent-up need to invest in school buildings quickly and efficiently was clear. Quite simply when Labour came to power in 1997 the condition of many if not most schools was appalling. Something had to be done.

The results of this investment so far has been mixed in terms of the quality of many new secondary schools built since 2000. Whilst central government has attempted to micro-manage all aspects of the educational curriculum, its control over the quality of the new buildings it has commissioned has been less successful. A complex system of private finance combined with public funding, where the schools effectively lease their new school premises from private developers who build and maintain them over a duration of 25 years, has been operating. It is fair to say that many of the private developers involved in this sector have been cavalier in the delivery of quality; of equal concern has been the lack of a coherent framework in which quality can be defined and evaluated. If good design is concerned with complex, often subjective criteria, how can you leave design quality to the marketplace?

Another contentious area of policy is a semi-privatised approach to what was considered the most pressing problem, the replacement of large comprehensive schools located in deprived urban areas. The strategy promoted had been successfully implemented in a number of locations across the USA in the form of the Charter Schools. These are semi-autonomous public schools, founded by educators, community groups or private organisations that operate under a written contract with the state. This contract, or charter, details how the school will be organised and what students will be taught. Many charter schools enjoy freedom from rules and regulations affecting other public schools, as long as they continue to meet the terms of their charters. In the UK, this model gives a degree of autonomy to a private group or individual willing to invest a figure of GBP 2 million towards the capital cost of a new secondary school. As the cost of building the new school will be in excess of GBP 20 million, this is a relatively small amount in return for a degree of power not previously known. Although the school is subject to inspection by the government's office for education standards, the fear remains that a private backer may have influence in areas of the curriculum such as its religious ethos, which would undermine the parents' role.

Recent investment in educational initiatives, such as numeracy and literacy hours, has done much to improve primary school pupil performance within the UK. Educational reform has sought to increase central control of both processes and outcomes, with close monitoring and evaluation of curriculum, inspection and assessment. There has been some objection to this change, on the basis of an overly proscriptive system imposed across the board; however, the effects of reform since the introduction of a national curriculum in 1998 have mostly had great educational benefits.

The refurbishment and replacement of the majority of primary schools is still at its inception. The UK case studies illustrated here are the best and most innovative examples, however, many if not most of the new secondary schools built within the UK since 2000 are at best adequate and at worst dull and uninspiring. There is a long way to go in the provision of high quality school buildings, equipped with modern facilities, which run hand in hand with ongoing educational reforms.