

The seat of learning

Education has undergone an ICT revolution and the BSF programme has overhauled the design of the UK's learning spaces. Now, furniture is expected to be flexible enough to keep up with a number of new demands.

Schools face a number of unique challenges: insufficient budgets, teacher shortages, student performance assessments and technology-driven lessons are just a few. A solution to these problems could be simpler than you ever thought. Amazingly, it could come down to the right kind of furniture!

This is the belief of Jonathan Hindle, Group Managing Director at KI. "Furniture is a crucial component in creating a quality learning environment," he says. "Seating should be comfortable and durable and work surfaces ought to be able to accommodate specific tasks including note-taking, laptop computer use and conducting experiments. Beyond these functional aspects, the image portrayed correlates to student perception of teachers' performance expectations - an attractive, highly functional, quality environment tells them you expect excellence."

School furniture has never been renowned for its comfort - or its attractiveness. It is only in recent years, that the importance of ergonomically designed tables and chairs has been realized.

"If the children are not sitting comfortably then they will fidget and disrupt the class," says Hayley Watson of Morleys. "The chairs and tables/desks that are in the classroom need to allow the children to move around, as this increases blood circulation and so improves learning. You also need furniture that does not cause children to fidget because they are



uncomfortable, due to poor posture caused through incorrect seat heights and the relationship between the height of the seat and the desk or table."

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"The major challenges in producing furniture for schools are cost, durability and size - particularly in the ICT arena," says Jeremy Mills

from Innomensa Ltd. "Squeezing 30 students plus 30 PCs, monitors and desks into a traditional size classroom is hard work. Schools have widely varying requirements so providing a one-size-fits-all product is impractical.

"But, low volumes tend to mean expensive products, which forces some companies to cut corners on quality to meet the price points. We produce a range of furniture with a high degree of modularity so that we can customise a basic design to tailor it to the needs of each individual school while staying within the budget

constraints. We have invested heavily in computer-aided design (CAD) to help us respond quickly and economically."

"Designing classrooms with more functional flexibility means that a teacher can easily vary instructional methods to accommodate different learning styles and course topics simply by utilizing reconfigurable furniture," agrees Hindle. "For example, teachers can arrange seating into rows for test taking, circles for group discussions, semicircles for lectures and presentations, or several smaller groupings for collaborative team projects."

Morleys also produces individual pieces that can be used in a number of environments. The company's Academy Tables have solid laminate tops for a multitude of lessons (including science and technology) that are resistant to scratches and chemical spillages.

And if the lessons and environments have changed in the last few decades - so it seems have the children! "The range of children's heights in the classroom is greater now and children are still growing in height for their age. This means furniture needs to have more adjustment built in to cover the existing and future pupils, due to the length of time the furniture will be in the school, which is down to its build quality," points out Hayley Watson.

Finding the right quality of furniture that is both comfortable, flexible and affordable is of course the challenge.

Rob Minshull from Nortek furniture is astounded at the lack of thought schools often put into choosing their furniture. "It seems incredible that people can spend £15 million to build a beautiful new school with great architecture, as green as can be, with every conceivable feature and then put complete rubbish into it," he says.

"The situation went wrong because while the education authorities held the purse strings they simply put out tenders for chairs lets say for three years - and the only thing that mattered was cost. So you got cheaper and nastier furniture," he adds. "You got to a situation where people in schools thought that was the norm, well, it isn't the norm. It's the norm in this country but if you take a look at the rest of Europe, the quality of the furniture is fantastic and lasts a long time."

Nortek chairs are ergonomically designed to minimise back problems and increase concentration in the classroom - so they actually help students to achieve better results. "I know it sounds strange but the fact of the matter is when kids are comfortable they don't fidget and they concentrate more. It's a win/win situation," adds Minshull.

In order to ensure that you are investing in the best quality furniture that will last the course, it is worth considering companies that offer guarantees. Morley's furniture carries various guarantees carries from 5 to 25 years. "We expect the furniture to last at least 5 years looking good for the whole period. Certain products will wear, tops and seats, but these can be replaced reusing the frames," says Watson. KI also offers up to 'Lifetime' warranties on some of their products, especially if very durable items are requested.

"We expect our furniture to last well beyond 10 years, though schools differ widely in how well



they look after their furniture (and other equipment)," says Jeremy Mills. "Robustness is a big issue for schools and we work closely with our schools to learn from the issues they face and adapt as their demands change. We will also work to make retrospective changes wherever possible to ensure that the product keeps working for them even after they have purchased it."

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Another consideration should be industry kite marks. Morley's furniture conforms to EN 1729 part 1 for dimensions and part 2 for strength and stability and FIRA's School Certification Scheme and KI's furniture has all the necessary BSEN standards.

Hayley Watson believes, however, that many other companies are not as scrupulous in their quality and testing standards. "Very little of the furniture schools buy conforms to any current standards, either general tests for strength and stability (i.e. BS EN 15373) or specific tests for Schools such as BS EN 1729 parts 1 and 2, which

cover dimensional suitability and strength and stability," she says.

"Testing is very expensive but necessary to ensure compliance. A lot of suppliers cut corners by only having one chair out of the range tested and then say that the whole range conforms to the required standards," she adds.

Doing good research will pay dividends in the long term. Jeremy Mills suggests asking to see - or test - a sample of the furniture. "Flexibility and robustness are the key criteria. Assessing the build quality of furniture by looking at website pictures is a gamble - much better to ask to see a sample product and see for yourself if the product is likely to stand up to daily life in your school. Also check how easy it is to supply power and data to the equipment, and ask for references from other schools that have used the furniture."

Finally, the environment must also be considered when buying new furniture for schools. Morley's uses timber and steel as these are both recyclable. Water based lacquers are also desirable as these do not put so many volatile organic compounds into the atmosphere. Innomensa uses wood-based products such as MDF and MFC to offer the best balance of cost, functionality and sustainability, together with steel and aluminium for strength and rigidity.

It is incredible to think that for so many years, school furniture was an afterthought. And yet our children spend so many hours of every day using these items. It is believed that there is already a generation who will struggle with bad backs due to cheap chairs and heavy school bags, let's hope this will be the last. Think of furniture as an investment and choose well and you will not only have to replace it less often, it can contribute to students' concentration and improve results - and that really is the kind of support every school needs.