

Case Study of an Industrial Trust Technical Textiles Event

Some 78 Design & Technology, and Science students from Dixons Academy, Bradford, Challenge College, Bradford, North Halifax Grammar, Halifax and Fulford School, York, attended an Industrial Trust organised Extreme Materials Event on the 13th. December, 2007. The event was hosted by the Dixons City Academy, Bradford.



Background

The event was the third of its kind organised by the Industrial Trust, as part of an ongoing initiative sponsored by the Drapers Company.

The UK is a major innovator in the field of Technical Textiles/Smart Materials and the Drapers Company are very keen to promote careers in this expanding sector to the student population. The local area particularly has a long tradition of textile production but nowadays following the loss

of traditional textile manufacturing to other countries, many companies nationally have redeveloped their business into technical textile production.

Objectives of the Event

- To educate and inform young people about technical textiles (TT) and the exciting careers that are available in the innovative companies in the sector
- To encourage students to study relevant including the sciences and technology
- To encourage students to consider application for jobs in the technical textiles sector
- To give publicity and exposure to the importance of the sector in order to alleviate skill shortages and thereby benefit the UK economy
- To provide information on the annual Industrial Trust/Drapers technical textiles competition.

Extreme Materials Event

After presentations by the Industrial Trust and John Ribchester, a Consultant, the event comprised 5 interactive workshops attended by students in rotation. Each was supported by experts from the technical textiles field, teaching staff and Industrial Trust personnel:



Fire Service – David Myers (Fire Station Manager – Calderdale).

Students were given the opportunity to observe how extreme textiles were used in fire service rescue operations. State of the art clothing was presented demonstrating how materials have changed in the last ten years and how students attending the event could possibly play a part in future years in further development.

Students were allowed to examine the equipment and try on the protective clothing. Particular reference was made to the ropes used for rope rescues, emphasising their high strength in comparison with their thickness.



Leeds University – Mark Taylor (Research Fellow)

Students were given an insight into the exciting research taking place at the University in the field of extreme materials.

Many examples were presented and demonstrated.

Climbing Frame – Dixons Academy teaching staff

The part played by technical textiles in the development of high strength climbing equipment was demonstrated by the teachers.

A highlight of the event was the students being allowed to use the high-tech equipment by climbing the wall themselves under supervision and the Academy's health & safety procedures.



Science – Martin Bendall – Science Teacher

Very much an interactive session with students testing the physical properties of various extreme materials.



Development & Technology – David Lussey – Director of Peratech

Hands on technical textiles workshop with state-of-the art materials

Presentation – Careers in the technical textiles industry – Emma Atack - Skillfast UK

Learning Outcomes

It was apparent at the end of the day that the students had enjoyed the experience and had acquired a comprehensive understanding of technical textiles re:

- The nature and properties of the materials
- Their application in various areas
- The importance of the sector to the UK and the career opportunities that it offers.

Conclusion

The teachers and students agreed that the event had been very successful, which confirmed the impact of this type of event.

Comments: *“An exciting event. The workshops were of a very good standard – would have appreciated more time.”* **Esther Clutton - Teacher**

“The constant reference to relationship between science and design was an important message. Exploration of the latest technology was appreciated.”
Brian Russell - Teacher