Museum Field Trip

When I walked into the Manchester Museum of Science and Industry, I was greeted with a sense of science and history intertwined. The converted old factory building retains the ruggedness of the industrial era, while the galleries are enlivened by modern interactive installations.

The textile machinery section, which occupies a large part of the museum, recreates a 19th-century factory scene, where wooden spinning machines are juxtaposed with electronic touch-screen explanations, and visitors stop to take photos and browse through them(Figure 1). In the adjacent "Textile Workshop" area (Figure 2), many children imitated the labour of 19th century Manchester weavers by operating a simplified model of a spinning machine. The sound of wooden gears and the feel of fabric transformed the history of the Industrial Revolution into a tangible experience.



Fig. 1





Walking up to the first floor, I found lots of interactive games. Children gather around a heat-sensing camera called Heat Vision (Figure 3) and observe the heat emanating from their bodies through the screen - some raise their hands, while others make faces at the camera. This intuitive experience makes the abstract principles of thermodynamics accessible. Around the corner, in front of the 'Shadow Stories' shadow wall (Figure 4), children used hand gestures to weave stories and make light and shadow appear on the wall. Mothers and daughters also worked together to create dinosaur shapes. This kind of language-free creation not only stimulates the imagination, but also brings parents and children closer together.



Fig. 3

Fig. 4

The design of the entire exhibition space skilfully balances education and fun. Through playful interaction, complex scientific principles are broken down into simple sensory experiences; the weight of history and technology is transformed into playfulness and collaboration at the fingertips. Visitors are not only spectators, but also participants in the experiment.