

Task – Read and take examples for your assessment

Keeping it controversial

History is littered with the controversial use of sports technology.

The Polara golf ball is a case of an innovation making a sport too easy, effectively deskilling it. The innovation benefited lower-skilled players who had a greater tendency to make mistakes but not higher-skilled golfers who were already adept at making an accurate drive. It essentially deskilled the game – and was banned.

Full-body swimsuits captured the public's imagination at the 2000 Sydney Olympic Games. The introduction of the suit was shown to improve a swimmers' performance dramatically as the designs evolved. After 43 records were broken in 40 events at the 2009 World Swimming Championships and 130 world records were broken in less than a year, the global swimming governing body voted to ban the full-length suits.

The tragedy was not that the suits were banned but that the world records remained in place. This meant that future athletes did not have the same advantage as those that had set them. This decision was arguably unfair.

Likewise the case of South African sprinter Oscar Pistorius. In 2008, he sought to compete in both the Olympic and Paralympic Games. The use of his prosthetic legs with carbon fibre blades resulted in a furious debate on what advantage they gave him.

The safety conundrum

What about the impact of technological progress on safety? For example, the centre of gravity of javelins was changed in the late 1980s to ensure that they remained within existing throwing infields as athletes were throwing further and further. Likewise, headgear in amateur boxing was eventually adopted to provide extra protection to its athletes.

But unintended consequences also have to be taken into account. While headgear has reduced the general severity of head injuries, it can also give a boxer an increased sense of invulnerability. This might explain why there has not been a reduction in the number of recorded head injuries since headgear was introduced.

Ultimately, there is a philosophical difference between technologies that facilitate a sport and those that enhance it. Empirical science often needs to be accompanied by philosophical debate. In the case of runners with an amputation, it isn't just about how a prosthetic limb performs. It also challenges perceptions about disability and how closely humans should engage with technology.

Technology is there to facilitate a sport and to challenge the limits of our performance. But this has to be tempered with caution and vigilance to ensure a sport remains fair, safe and accessible.