

SMSC in The Trafalgar School at Downton Computational Thinking Department

Spiritual. Computing is a creative force and one that requires little infra structure to make an impact which means it is within the reach of everyone. The Trafalgar School students are shown how computing can be used to change peoples' lives for the better and ultimately, the world around us. From app and website creation through to hardware solutions, computing is an enabler to all with an imagination and the means to persevere. It is perseverance and independence that is most celebrated in computing and what provides the most spiritual gratification to students.

Moral. With great power comes great responsibility and computing provides students with great power. The next generation will see an even greater shift towards automation. This will result in humans being taken out of certain roles and even certain decision making processes. The Trafalgar School students are made aware of the dangers that automation can bring both in terms of technical problems but also social problems. Another key area The Trafalgar School students are assessed on is the responsible use of technology. From cyber bullying to copyright laws, our students are taught right from wrong.

Social. The Trafalgar School students are taught to work collaboratively and understand the importance of clear written design work and readable computer code. Technology also provides the ability to live our lives virtually and The Trafalgar School students are taught how to be safe online whilst making the most from what the Internet can offer.

Cultural. The Trafalgar School computing students are taught about computing and technical discoveries from around the world, where they exist. Credit is given to these discoveries of other cultures. Computing is also seen as a contemporary activity and developments are made all over the modern world. It is therefore an activity undertaken by a wide range of men and women in many different cultures both now and in the past. The interdependence and sharing of knowledge by world cultures through the Internet is central to computing.

Examples of SMSC in Computational Thinking are:

- Study of common communication protocols that span the globe connecting different cultures
- Study of how to use computer systems and social networking sites safely
- Study of how to develop computer code as part of a team
- Researching computer technology developed within the UK and abroad
- Developing solutions to world problems and changing peoples' lives for the better

Empowering students to be the source of their own success ...