Thematic STEM Debate 2025 – 7th Edition
Primary Sector – Year 6

Do digital games help children learn important skills or mostly distract from learning?
Theme: Digital Gaming

A. Introduction
Digital games are electronic games played on devices like computers, tablets, and consoles, enjoyed by many children around the world. These games can vary widely from puzzles and adventures to sports and strategy challenges. Some games are designed mainly for fun and entertainment, while others have educational goals, helping players learn skills like problem-solving, critical thinking and teamwork. Digital games often engage children with colourful visuals, interactive tasks, and social elements that allow them to play and communicate with others online.

There are benefits to digital gaming. Many games can support learning by encouraging players to think creatively, improve memory and develop skills that can be useful in school and daily life. Some games provide safe spaces for children to explore emotions, collaborate with peers and build confidence. Digital games also increase children's familiarity with technology, an important skill in today's world.

However, digital gaming has potential drawbacks too. Excessive screen time can lead to distractions from homework and other important activities. Some games contain violent content that may affect behaviour and there is concern that heavy gaming might lead to social isolation or reduce physical activity. Additionally, not all games are created equally in terms of educational value and sometimes the gaming experience may not align with learning goals.

As you prepare for your debate you may consider exploring these questions to help you understand the complex impact digital games have on our lives.

B. Potential debate questions

1. What important skills can children learn from playing digital games?
2. How can children balance gaming with schoolwork and other activities to avoid distraction?
3. Can excessive gaming harm children's mental health and well-being?
4. Do multiplayer games help children build positive social connections, or can they cause social isolation?
5. Do video games contribute to aggressive behaviour in children, and what evidence supports this?
6. What roles should parents, teachers, and schools play in managing gaming to ensure it benefits learning and development?

C. Links for further reading and research

- Kids and Video Games: The Good and The Bad — Akron Children's Hospital explains how video games can help improve skills like memory and impulse control but also points out the risks of too much gaming, like less social time and poor sleep. It includes parental advice on limits in a kid-friendly way.
  Read here
- The Video Games Your Child Plays Have an Effect on Their Behaviour — University of Utah Health shares simple explanations of the positive and negative ways video games can affect children's social skills, grades, and health.
  Read here
- The Good and the Bad Effects of Video Games on Children — Educational Advancement blog gives a clear overview of both helpful skills kids can gain and potential problems such as violence exposure and distraction.
  Read here

- Can Digital Games Enhance Children's Well-being? — Joan Ganz Cooney Center explains in simple terms how some games can help children feel happier and more connected.
  Read here
- Digital Vs Physical Games - The Pros and Cons of Digital Games – Which is better?
  Watch here
- How Playing Video Games Affect Your Brain - Depending on the types of video games you play and time you spend playing, your brain may be changing in a variety of ways.
  Watch here
- Positive effects of video games and mental health - Michelle Chen is a video game designer who recently completed a PhD focusing on designing games that represent people's experiences of mental health. The resulting collection of games is called 'Mental Jam'. The aim of these games is to promote empathy, reduce stigma and increase mental health awareness.
  Watch here
- Are Violent Video Games Bad For You? - You might have heard that playing violent video games makes people more aggressive, but is it true or is it just a myth?
  Watch here

D. Links to suggested organisations related to digital gaming.

Below is a hyperlinked list of suggested related organisations related to digital gaming, for further research.

- Institute of Digital Games, University of Malta
  A research and education centre focusing on game design, game analysis, and game technology, contributing to academic and industry knowledge around digital gaming.

- Malta Gaming Authority (MGA)
  The regulatory body responsible for licensing and overseeing gaming operations in Malta, ensuring fairness, transparency, and protection of minors and players.
- Malta Esports Association (MESA)
  A body supporting esports growth in Malta, organizing tournaments, fostering community, and representing Malta in European and international esports federations.
- OECD (Organisation for Economic Co-operation and Development): Provides comprehensive reviews and research on children's digital media use and its impact on development, including digital gaming effects on health and social well-being of children.
- Digital Wellness Lab - A research initiative that explores children's and adolescents' views on digital gaming, emphasizing prosocial benefits and the social experiences of games like Minecraft and Fortnite, including support for children with autism. They focus on well-being and responsible game engagement.
- Defence for Children – Utrecht University Game Design Research - Explores the intersection of game design and children's rights, helping to understand both positive effects on leisure, play, socialising, and learning, as well as potential harms related to overuse or economic exploitation.
- Game for Change - a non-profit organisation focused on serious games for social impact. It organises events, festivals, provides resources, and brings together individuals and organisation working on the potential of digital games for learning and social change.

This document has been compiled by the Primary Science Team within the STEM & VET Curriculum Hub, Pembroke, Directorate for STEM and VET Programmes, (MEYR) in collaboration with the Institute of Digital Games and the Faculty of Information & Communication Technology, University of Malta.