

An Evaluation of Content-ICT-Tools

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Content Tools

- Facilitate delivering a certain content using ICT technologies
- Can be presented in multiple formats:
 - Video / Text / Audio / Interactive
- Strives to motivate learning by using aspects such as:
 - Multimedia learning / gamification / personalised and adaptive learning

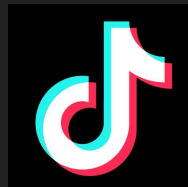
Content Tools

- [Khan Academy](#) (2016)
 - “free, world-class education for anyone, anywhere”
- [Google Arts & Culture](#) (2011)
 - virtual access to creative work and information
- [YouTube](#) (2005)
 - an online open-source platform for all content



Content Tools:

- [Ted Talks](#) (2005)
 - influential videos from experts on different topics
- [TikTok](#) (2016)
 - short, meme-like, fun video clips
- [Gapminder](#) (2005)
 - fights misconceptions for a fact-based worldview



Content Tools:

- ChatGPT (2022)
 - human-like interaction in dialogue format



SAMR-Model:

Tool evaluation:

- Substitution *substitutes one tool with another*
- Augmentation *augments the existing function of... by...*
- Modification *modifies the function of... by...*
- Redefinition *redefines... by...*

R

REDEFINITION

Technology allows for the creation of new tasks, previously inconceivable



M

MODIFICATION

Technology allows for significant task redesign



A

AUGMENTATION

Technology acts as a direct substitute, with functional improvement



S

SUBSTITUTION

Technology acts as a direct substitute, with no functional change



TRANSFORMATION

ENHANCEMENT

Khan Academy

Substitution

- Khan Academy takes the traditional classroom and presents it in an online easy-to-access format
- Withholds learning structures and curriculums
- Multilateral design: content / assessment / community tool

Khan Academy

Augmentation

- This technology allows students to pause / rewind videos
 - Mitigates misunderstandings
 - Adapts to different rates of learning
- “Mastery” concept design
- Includes elements of “gamification” to help motivate students

Khan Academy

Modification

- Khan Academy's approach enables students to navigate and define their own learning objectives - i.e. their own curriculum
 - This helps students feed their own personal curiosities, fueling independent learning and self-orientation
 - Enables parents and teachers to understand the students interests and needs on a more personal level

Khan Academy

Redefinition

- Khan Academy redefines traditional classroom learning by connecting students, teachers, and educational scientists and developers from all over the world to learn and create together

References

<https://www.khanacademy.org/>

<https://www.youtube.com/>

<https://artsandculture.google.com/>

<https://www.ted.com/>

<https://www.tiktok.com/en>

<https://www.gapminder.org/>

<https://chat.openai.com/auth/login>