Theme

From Digital Awareness to Digital Literacy

DataSys 2025 & ComputationWorld 2025

Coordinators

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Q&A

How to adapt curricula?

How to reach a critical mass for digital education?

How to prevent digitally impaired users from being defrauded and marginalized?

Is Digital for Dummy a good approach?

- **Bias is a human reality**
  - **At its core, AI-tools are fundamentally 'based on input data' and 'less explainable mechanisms'; If trained on bad decisions, it will advise wrong decisions**
  - **Both data and data processes can be uncontrollably altered (on top of being potentially faked or only partially true)**
  - **Models have a dose of uncertainty: ML do not add to certainty either**
  - **Understanding and explainability are key, but unlikely to be transparent and rather impossible to be achieved with a comfortable level of trust**
  - **The outputs of AI-tools reflect the data they are trained on and the weights (quasi-artificially, by recursive learning) given to data**

- **> Digital awareness is advised**

Biased Machines (too!)

- **Potential outcome with biased influence**
  - **Unbalanced** per-domain and cross-domain data
  - **Unfiltered**, invalidated data
  - **On purpose** or **hallucination bias**
  - **Poor and risky** (unchecked) **customer feedback**
- **> Datasets and LLMs at rescue (?)**

Usefulness

- **Where it can be useful**
  - On a **naive narrative** - reasonably fair
  - On **a summary:** good and quick
  - On the rest: try and trust, before trust and accept
  - It could be a **good vlogger**
  - It provides **summary** on various scientific themes (survey of checked/unchecked **collections**)
  - It has some **abilities to work step-by-step** (e.g., 2 + 2 = 4 for kinder-garden)
  - It can **mimic digital art** (movie, advertising, etc.)

- **> Digital Literacy**

- **On education**
  - Any AI-tool answer **assumes accurate and appropriate background** (5G vs spectrum allocation vs latency vs ...]
  - Artificial tools/entities lack **experience by failures**, as **no pain** from any decision, then, less learning by mistakes
  - Artificial entities can create **mental bias** by wasting time and engaging in useless activity
  - Artificial entities might trigger potential danger in **deskilling** (knowledge and judgement, cognitive impairment)
  - It might create digital dependency, so adequate **digital literacy** and **digital awareness** are mandatory
  - It creates **digital divide**
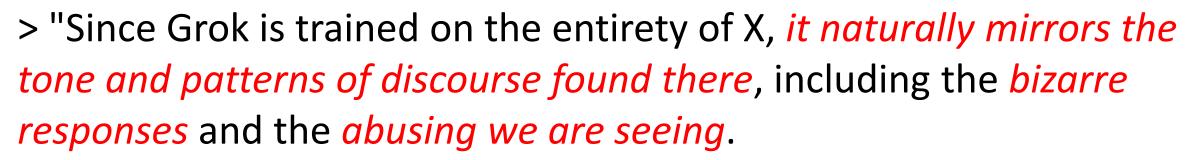 - **> Digital (gradual) infusion vs Digital (controlled) dependency vs Cultural (heritage) perception**

Soutik Biswas - BBC India correspondent

23.03.2025

https://www.bbc.com/news/articles/cd65p1pv8pdo

Why Elon Musk's Grok is kicking up a storm in India

> "Since Grok is trained on the entirety of X, *it naturally mirrors the tone and patterns of discourse found there*, including the *bizarre responses* and the *abusing we are seeing*.

> "This isn't about ideology; it's about the nature of the input shaping the output".

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