



New Technologies SIG

Tom Shepherd



NEW TECH SIG UPDATE

New TECH SIG

We need ideas

All you have to do is send me an email about something you would like to learn more about at

newtech@grandcomputers.org

New Technologies SIG

Meeting every month
3rd Thursday 3:30

Contact Tom Shepherd for additional information at

newtech@grandcomputers.org

2024 for New Tech SIG

Thursday, February 15, 3:30 GCC Classroom

Highlights of the 2024 Consumer Electronics Show

The Consumer Electronics Show (CES) is the largest technology event in the U.S., held every year in Las Vegas in January, attended by over 100,000 people.

This is where most of the major hi-tech companies introduce their new phones, tablets, laptops, home robots, and more.

Attend to hear a great summary of the most interesting announcements.

Club Events for February

General Meeting

February 7 – 2:00 pm Chaparral Center, Pima Room

Following a brief club update, we will have a presentation by CAM IT



February 8 - 8:30am Chaparral Center, Pima Room 8:30 am
City of Surprise

A presentation by the City of Surprise Marketing and Communications Director - Virginia Mungovan:

“The ways the City relays news and information to residents, how residents can stay informed about what's happening in the City, and what online tools are available related to various programs and services offered by the City.”

Today's Presentation

Technology and Education

A discussion of how technology is changing the way we learn and teach.

We will explore topics such as online learning, gamification, and the use of technology in the classroom.

We will also highlight new and interesting ways in which senior citizens can access online learning.



Agenda

- **The Big Trends for 2024**
- **A closer look at:**
 - **AI**
 - **VR/AR**
 - **Gamification**
 - **Mobile Learning**
 - **Adaptive Learning**
- **Dysart School District**
- **Universities and Colleges**
- **Senior Learning**

Trends

From Google Bard AI

Here are some education technology trends for 2024:

- **Virtual and augmented reality**

These technologies offer immersive learning experiences by engaging multiple senses. For example, students can use VR and AR to take virtual field trips, explore planets, or participate in interactive simulations.

- **Adaptive learning**

This technique uses data-driven instruction to tailor learning experiences to each student's needs. Adaptive learning systems track data such as student progress, engagement, and performance, and use the data to provide personalized learning experiences.

- **Cloud-based learning platforms**

These tools can adapt to changing educational demands, enhance teacher-student interaction, and make collaborative learning easy.

Trends

More from Google Bard AI

- **Gamification**

This can help students focus more on the task at hand, retain information better, build critical-thinking skills, and become active learners.

- **AI**

This can provide customized learning paths for students, taking into account their individual learning styles, pace, and progress.

- **Datafication**

The use of learning data will continue to gain momentum at scale.

Trends

From Bing AI

Artificial Intelligence (AI): AI is transforming the education industry by providing personalized learning experiences, automating administrative tasks, and improving student outcomes. For example, AI-powered chatbots can assist students with their queries, and AI algorithms can analyze student data to identify areas of improvement.

Virtual and Augmented Reality (VR/AR): VR/AR technologies are being used to create immersive learning experiences that simulate real-world scenarios. For instance, students can use VR/AR to explore historical sites, conduct virtual experiments, and learn complex concepts.

Gamification: Gamification is the use of game design elements in non-game contexts to motivate and engage learners. It can be used to make learning more fun and interactive, and to encourage students to achieve their learning goals.

Trends

More From Bing AI

Mobile Learning: Mobile devices such as smartphones and tablets are being used to deliver educational content to students anytime, anywhere. Mobile learning can be used to provide students with access to learning resources, facilitate communication and collaboration, and enhance engagement.

Adaptive Learning: Adaptive learning is the use of technology to personalize learning experiences based on the needs and abilities of individual students. It can be used to provide students with customized learning paths, real-time feedback, and targeted interventions.

Cloud Computing: Cloud computing is being used to store and share educational resources, collaborate on projects, and deliver software applications to students and teachers. It can be used to provide students with access to a wide range of learning resources, and to facilitate communication and collaboration.

Trends

More From Bing AI

Internet of Things (IoT): IoT technologies are being used to create smart classrooms that can monitor student behavior, track attendance, and optimize learning environments. For example, IoT sensors can be used to adjust lighting and temperature based on student preferences.

Blockchain: Blockchain is being used to create secure and transparent educational records that can be shared across institutions. It can be used to provide students with a verifiable record of their academic achievements and to streamline the transfer of credits between institutions.

Trends

More From Bing AI

Robotics: Robotics is being used to teach students about programming, engineering, and problem-solving. It can be used to provide students with hands-on learning experiences, and to prepare them for careers in STEM fields.

Big Data Analytics: Big data analytics is being used to analyze student data to identify patterns and trends, and to inform decision-making. It can be used to provide teachers with insights into student performance, and to identify areas where additional support is needed.

Trends

From ChatGPT (first a disclaimer)

As of my last knowledge update in January 2022, I don't have specific information on developments in 2024.

However, I can provide some general trends in education technology that were gaining momentum leading up to 2022.

Keep in mind that the actual trends in 2024 may have evolved or taken new directions.

Here are some overarching technology trends in education that were prevalent around 2022 and could have continued to shape the landscape:

Trends

From ChatGPT

Online and Blended Learning: The shift towards online and blended learning was well underway, with many educational institutions adopting digital platforms to offer courses and resources. This trend likely continued, potentially with further enhancements in virtual classrooms, collaboration tools, and interactive content.

Artificial Intelligence (AI) and Machine Learning (ML): AI and ML applications in education include personalized learning experiences, intelligent tutoring systems, and adaptive assessment tools. These technologies are expected to evolve, providing more customized educational experiences based on individual student needs.

Trends

More from ChatGPT

Virtual and Augmented Reality (VR/AR): These technologies were increasingly being integrated into education to create immersive learning experiences. Virtual field trips, simulations, and interactive 3D models were being used to enhance understanding in various subjects.

Gamification and Educational Games: Gamification elements and educational games were being incorporated to make learning more engaging and enjoyable. This trend likely continued with the development of more sophisticated games that effectively combine entertainment with educational content.

Trends

More from ChatGPT

Blockchain in Education: Blockchain technology was being explored for secure and verifiable academic credentialing. This trend could have progressed further, with more institutions adopting blockchain for managing student records and credentials.

5G Technology: The widespread adoption of 5G technology was expected to enhance connectivity and enable more seamless streaming of high-quality educational content. This could result in improved access to online resources and collaboration tools.

Trends

More from ChatGPT

Cybersecurity in Education: With the increased reliance on digital platforms, the importance of cybersecurity in education was growing. Institutions were expected to invest more in securing their systems and protecting student data and privacy.

Robotics in Education: The integration of robotics and programmable devices in the classroom was gaining traction. This trend might have continued, fostering hands-on learning experiences and promoting STEM (Science, Technology, Engineering, and Mathematics) education.

Trends

More from ChatGPT

Global Collaboration and Remote Access: Technology facilitates global collaboration among students and educators. Platforms enabling virtual exchange programs, collaborative projects, and remote access to educational resources were becoming more prevalent.

Data Analytics for Student Performance: Institutions were increasingly leveraging data analytics to track and analyze student performance. This data-driven approach aimed to identify areas for improvement, personalize learning pathways, and enhance overall educational outcomes.

Let's look at some of these in more detail



AI

Here are some interesting websites

[How AI can transform education for students and teachers | World Economic Forum \(weforum.org\)](#)

[AI in education: where we are and what happens next - Oxford University Press \(oup.com\)](#)

[7 Artificial Intelligence Trends That Could Reshape Education in 2024 – The 74 \(the74million.org\)](#)

AI

Short Video

<https://www.youtube.com/watch?v=nhI5g2hRVKA><https://www.youtube.com/watch?v=nhI5g2hRVKA>

VR/AR

Interesting Websites and Videos

<https://imaginovation.net/blog/8-ways-ar-reshaping-future-education-training/>

<https://www.linkedin.com/pulse/immersive-learning-look-vr-ar-k-12-education-week-alterlearning-ww2hf>

https://www.google.com/search?sca_esv=597936199&rlz=1C1CHBF_enUS910US910&sxsrf=ACQVn099ZSTz6E7HZH07O8D7PNAj-FGHeA:1705100255676&q=the+Human+Anatomy+Atlas&tbm=vid&source=Inms&sa=X&ved=2ahUKEwjw1a64-diDAxWVJEQIHZLxBcAQ0pQJegQIDxAB&biw=1536&bih=730&dpr=1.25#fpstate=ive&vld=cid:8fafa92e,vid:v5TRM9ULvT8,st:0

<https://quivervision.com/>

Gamification Interesting Websites

<https://appicsoftwares.com/blog/gamification-in-edtech-a-complete-guide/>

<https://www.carnegielearning.com/blog/2024-trends-in-education/>

<https://www.carnegielearning.com/solutions/math/mathia-adventure/>

Mobile Learning Interesting Websites

<https://www.coursera.org/articles/mobile-learning>

<https://xperificy.com/mobile-learning/>

Adaptive Learning Interesting Websites

<https://meetaverse.com/blog/top-innovations-in-education/>

**Some interesting things I learned
about the local school district and their
usage of technology**



Let's look at their website

<https://www.dysart.org/mainsite>

Dysart Unified School District (DUSD) uses technology for instruction and operational administration.

DUSD offers students and teachers internet access and email, and believes the internet provides unique resources.

DUSD also has BYOD classrooms, which allow students to use devices like laptops, iPads, iPods, tablets, and smartphones for educational purposes.

DUSD also offers a variety of digital resources, including:

Adobe/Creative Suite, Acrobat

Agilix/Buzz

Albert

Apple/iOS, Final Cut Pro, Garage Band

ChalkTalk

Clever

Code.org, CodeHS, CodeMonkey

DUSD also has a Discovery Science Tech book curriculum, as well as Generation Genius and Mystery Science

Dysart School District

As a parent and/or student in the Dysart School District, you must sign several forms related to technology

Electronic Information Services User Agreement Acknowledgements and Verification

Student & Parent Software Agreement

Electronic Information Services (EIS) User Agreement

Dysart School District

These forms outline what is acceptable and not-acceptable

Acceptable Use - Each user must:

- Use Electronic Information Services (EIS) to support personal educational objectives consistent with the educational goals and objectives of Dysart Unified School District.
- Immediately inform their teacher if inappropriate information is mistakenly accessed.
- Abide by all copyright and trademark laws and regulations.
- Understand that electronic mail or direct electronic communication is not private and may be read and monitored by school-employed persons.

Dysart School District Etc.

Follow the district's code of conduct.

- Understand that inappropriate use may result in cancellation of permission to use the EIS and appropriate disciplinary action up to and including expulsion for students.
- Publish information/student work only on DUSD servers or district approved web hosting vendors. Users placing information on the Internet using the district's EIS are publishing information on behalf of the district.
 - Be responsible for the appropriate storage and backup of their data.
 - Follow existing district policies and have appropriate administrative approval for information collection (online surveys, email, etc.).

Dysart School District Etc.

Unacceptable Uses:

- Users must not share their Dysart network credentials with any other individual.
 - Users shall not submit, publish, display or retrieve any defamatory, inaccurate, abusive, obscene, profane, sexually oriented, threatening, racially offensive or illegal material.
 - Users shall not use their own computing devices to access the Internet via personal Wi-Fi accounts or by any manner other than connecting through the secure wireless connection provided by the school system.
 - Users may not connect or install any computer hardware, hardware components or software, which is their own personal property to and/or in the District's EIS without the prior approval of the District Information Technology Department.

Dysart School District Etc.

Network Etiquette:

- I am expected to abide by the generally acceptable rules of network etiquette. Therefore:
 - I will be polite and use appropriate language. I will not send, or encourage others to send, abusive messages.
 - I will respect privacy. I will not reveal any home addresses, or personal phone numbers, or personally identifiable information.
 - I will avoid disruptions. I will not use the EIS in any way that would disrupt the use of the systems by others.

Here is some information about what ASU is doing

<https://news.asu.edu/20230824-solutions-user-experience-reimagined>

<https://edplus.asu.edu/>

And from the University of Arizona

<https://healthsciences.arizona.edu/news/releases/15m-dod-grant-will-create-virtual-reality-test-assess-tbi-field>

How about the local community colleges?

[Information Technology | Maricopa Community Colleges](#)

<https://technology.maricopa.edu/how-we-do-it/hybrid-work-learning>

<https://technology.maricopa.edu/how-we-do-it/digital-enablement>

Senior Learning

Senior Learning

Here is one alternative

[Live classes for older adults · GetSetUp](#)

[Why It's Become Crucial for Older Adults to Learn New Technology | The OECD Forum Network \(oecd-forum.org\)](#)

Senior Learning

AARP

[Online Classes for Seniors - Senior Planet from AARP](#)

Senior Learning

Here are some more websites

[Online Learning for Seniors: 6 Of The Best Free Online Courses \(storypoint.com\)](#)

[22 Free Online Courses for Senior Citizens \(Updated 2023\) \(frugalforless.com\)](#)

<https://www.openculture.com/faq>

Senior Learning

Several YouTube Channels
focus on Senior Learning

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



I hope you enjoyed this