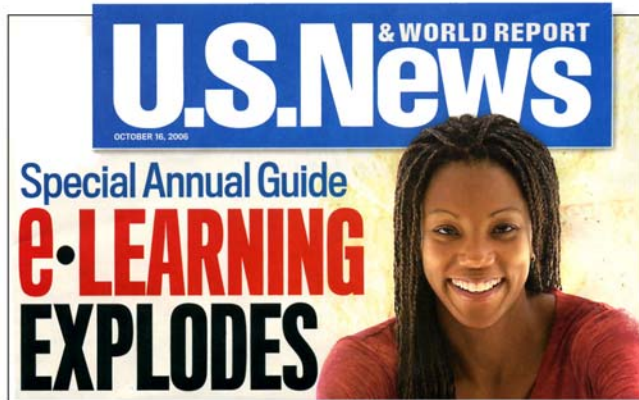


The KZO Network

Education and Training for the 21st Century

Online learning is exploding! U.S. News & World Report's October 16th issue features how e-Learning is transforming the educational landscape. Articles describe how students can remotely attend virtual classes to pursue that longed-for degree rather than commuting to and sitting in a college or grad-school classroom.



According to the Sloan Survey "Making the Grade: Online Education in the United States, 2006" roughly 3.2 million students took at least one online course from a degree-granting institution during the fall 2005 term, a substantial increase over the 2.3 million reported the previous year.

Research firm Ambient Insight claims the current market for *Self-*

paced e-learning products and services in the United States is \$10.02 billion and will reach \$38.1 billion by 2011. Furthermore, their research shows that the 2006 United States market for *Real-time Collaboration-based* e-learning products and services is over \$2.6 billion and by 2011 will be generating over \$11.4 billion in annual sales. Moreover, another Ambient Insight report claims that disruptive technologies are emerging with hosted solutions and new "open source" products gaining traction in the higher education market which are increasingly being adopted in other major e-Learning market segments.

The KZO Network (KZO), a series of subsidiary companies of Kidz Online, has been developing real-time collaboration-based digital tools over the past several years. It has incorporated these tools into a real-time collaboration-based e-Learning platform which it is selling as a service hosted on its 8-gigabit optical network. KZO's management believes this technology has the potential to transform online education and training.

KZO Flash e-Learning Platform

KZO has developed a proprietary e-Learning platform for the development and delivery of rich education applications on the Web. Building upon open source Flash video code and written in Java, this platform allows customization for adding optional dynamic and interactive features beyond streaming video applications including: commercially available Learning Management Systems (LMS), data tracking, polling, monitoring, messaging, chat, job location and placement. These are unique and customizable features that expand and enhance the platform's functionality and made possible because the Flash server is open source. Global educational and governmental sectors are rapidly moving towards adopting open source platforms to facilitate universal interoperability and the KZO Flash e-Learning platform is "first to market".

The de facto standard for emerging video websites is Flash-based due to its superb quality, low bandwidth requirements and universal viewing capability regardless of the viewer's operating system. Consider: both YouTube and Google Video have adopted the Flash video platform and 98% of Mac and PC browsers have Flash installed. This is a major benefit because Flash is streamed through the browser - not a video player as required by Windows Media, RealVideo and QuickTime requiring troublesome downloading and updating. Moreover, Mac's market share doubled to 12% last quarter yet Microsoft's products availability for the Mac is not as comprehensive and typically lags by several quarters. The KZO Flash e-Learning Platform provides the solution for supporting all operating systems.

With a Flash streaming server, viewers stream the video directly from the server utilizing dynamic and interactive viewing interfaces. This is unlike internet powerhouses YouTube and Google Video which employ progressive download technologies vulnerable to inherent security flaws when the video is downloaded onto the computer for viewing. Streaming the video provides an additional layer of security which is critical for protecting intellectual property from theft and repurposing.

With KZO's unique technology, educational and training organizations have the ability to live webcast and record presentations and events as chapters for simultaneous posting as video-on-demand (VOD). KZO's software provides a wizard for the presenter to pre-segment the presentation into short digestible learning objects which are tagged in real time. Concurrent with the presentation or event, the software uploads the "chaptered" video as a live webcast onto the e-Learning platform hosted by KZO. Enormous amounts of valuable programming can be inexpensively produced and archived into a searchable digital repository for subsequent "anyplace, anytime" learning.

The screenshot displays the KZO Flash e-Learning Platform interface. It features a video player on the left showing a lecture, a presentation slide in the center, a chat window on the right, and a table of contents on the bottom left.

Video Player: Chapter 2 - Calculus Variable Review. HEALTH 330%. 27:15 / 48:52. Zoom Video, Toggle Chat.

Slide Title: Solving Linear Equations

Slide Content: Compare graph on left to one in your book on page 224.

Table of Contents:

PART	Chapter	Topic
1	1	Introduction
	2	Calculus variable review
	3	Definition of Topology, sequences, etc.
	4	Metric spaces
	5	Interchange of limit operations
2	6	Introduction
	7	Calculus variable review
	8	Definition of Topology, sequences, etc.

Who's Online: Fancy Pants, Jowilki, Jeff11883, nematoadjr, joelioio, Hyndood, IrishmanUMW

Chat Window:

Fancy Pants: If i have a formula: $y = 12.5 + 9.5 \sin(30x)$ how do i find what the highest and lowest value of y can be without drawing it?

Jeff11883: Consider the range of possible values for $\sin(\text{anything})$ and take it from there...

Jowilki: Greatest = $12.5 + 9.5$. Least = $12.5 - 9.5$. (The $30x$ is irrelevant to your question.)

Jowilki: My parenthetical remark is only true if x is a continuous variable. If, say, x is an integer then it's a different story.

Fancy Pants: Ah, ok. Thanks!

SEND

KZO's polling technology provides the functionality behind a number of interactive and collaborative features between the presenter and the viewers. Educators have the benefit of real-life, real-time feedback such as students raising their hands, a general look of confusion, etc. When presenting to a virtual audience, collaboration and interactivity become critical components for learning. This polling feature allows the presenter to push polls and questions to the viewers to gauge general comprehension, receive feedback, and evaluate the effectiveness of the lecture.

The screenshot displays the KZO Flash e-Learning Platform interface. On the left, a video window shows a presenter in a classroom setting with a chalkboard. The main content area is divided into three sections:

- Pre-Chaptering:** A vertical list of topics including "Introduction to Trigonometry", "Applications of Trigonometry", "Measurement of Angles" (highlighted), "Sine", "Cosine", and "Review".
- Control Panel:** A central area with buttons for "Start Presentation", "End Presentation", "Pause / Intermission", and "Exit".
- Pre-Polling:** A vertical list of poll questions such as "Does everyone understand?", "Do you want to take a break?", "How many are already familiar with this topic?", "What is Pythagoras' Theorem?", "Sine graph question", and "Difference between sine and cosine?".

On the right side, there is a "Who's Online (104)" list and a chat window with the following text:

Fancy Pants: If i have a formula: $y = 12.5 + 9.5 \sin(30x)$ how do i find what the highest and lowest value of y can be without drawing it?
Jeff1983: Consider the range of possible values for $\sin(\text{anything})$ and take it from there..
Jowilki: Greatest = $12.5 + 9.5$. Least = $12.5 - 9.5$. (The $30x$ is irrelevant to your question.)
Jowilki: My parenthetical remark is only true if x is a continuous variable. If, say, x is an integer then it's a different story.
Fancy Pants: Ah, ok. Thanks!

The custom built Flash video interface also allows for the seamless integration of blogs, wikis and other interactive Web 2.0 features that dominate new media on the internet. The ability to embed these features into the Flash video enhances the viewer's interaction with the content and with other viewers. Blog entries allow the aggregation of informational content while also creating a community of interested parties. User-generated learning content can be organized by topic, relevance, and freshness, and provide a forum for posting content and comment for the intended audience.

A live question and answer feature encourages digital dialogue in real time. A "smart FAQ" page also allows the audience to ask questions and KZO to trouble shoot technical issues. A chat room is incorporated so that viewers can interact with one another while watching the videos.

In addition to Flash streaming, a downloadable version of Windows Media files with Digital Rights Management (DRM) can be incorporated into the platform. This will

secure the video content and provide a registration system allowing the capture of marketing statistics regarding the number of viewers watching the videos, the amount of time each viewer spends browsing content, the number of repeat visitors, and the location of viewers. Videos can also be formatted for downloading as podcasts, viewable on iPods, PSPs, and Blackberrys; thus, expanding the market to mobile viewers with portable devices.



KZO Content Creator

Webcasting allows scalability to millions of viewers as an engaging digital medium for education, training, and communications over the internet using inexpensive and far-reaching technologies. Over the past five years, KZO Webcasting has produced hundreds of global webcasts for educational organizations, the federal government, and commercial customers. Proprietary interactive webcasting software developed by KZO has been integrated into the Flash e-Learning platform to enhance the functionality of its online communications and training solutions.



The hardware package consists of a camera, tripod, computer, encoder, and associated cabling. This portable unit allows the production of live webcasts from any venue including conferences, college classes, and training sessions. Once the initial investment is made for the portable unit, the cost of producing live and subsequent VOD content is minimal. With this technology, there is no need for expensive on-site video production crews or post production editing.

Websites throughout the KZO Network include:

- www.kidzonline.org
- www.kzowebcasting.com
- www.kzogov.com
- www.geospatial21.org
- www.masteringmoney.org
- www.streamingfutures.com
- www.hollywoodfutures.com
- www.kol-shaqaiq.org