THE ELEARNING DEVELOPERS'

Strategies and Techniques for Designers, Developers, and Managers of eLearning **JOURNAL**_{TM}

THIS WEEK — DESIGN STRATEGIES

Avatar Technology: Giving a Face to the e-Learning Interface

BY RAJ SHETH

hen you come down to it, people who use e-Learning don't really care about e-Learning. They don't care about design, about media, or about the back end of the application. In fact, they don't care about anything that you the designer, developer, or project manager have labored over so long and so diligently. The people who use your e-Learning application only care about their own success, and anything that gets in the way of that success is an irritant and a cause of dissatisfaction.

When someone uses your e-Learning application, what do they see? They see only the interface that you have designed to facilitate interaction with the application. How intuitive is that interface? How easy is it for the user to understand what must be done in order to be successful? Many different designs and ideas have been tried in order to answer these questions. Some of these have worked quite well, and others have been abandoned. The challenge is to get the interface to do what an expert human teacher would

do, and to do it in a way that matches each individual learner.

Enter the avatar — a capable, useful, and increasingly acceptable personality that can stand in for a human teacher to provide an engaging, personalized, and simple interface. Beginning with chatbots and infobots, continuing with automated virtual newsreaders, and rapidly expanding in ability, avatars are now far more easily used in e-Learning programs. This article explains what avatars are, where

Continued on next page

What if you could put a human face on vour e-Learning program? The technology to provide a friendly, familiar, engaging "go-between" for the learner exists today and is being continuously improved. Discover how avatars are solving delivery problems for e-Learning now, and where this fascinating technology is headed. Learn how to let vour learners have a nice conversation with your e-Learning program.

A publication of





Publisher David Holcombe

Editorial Director Heidi Fisk
Editor Bill Brandon
Copy Editor Charles Holcombe

Design Director Nancy Marland

The eLearning Guild™ Advisory Board

Ruth Clark, Conrad Gottfredson, John Hartnett, Bill Horton, Kevin Moore, Eric Parks, Brenda Pfaus Marc Rosenberg, Allison Rossett

Copyright 2003. **The eLearning Developers' Journal**TM. Compilation copyright by The eLearning Guild 2003. All rights reserved. Please contact **The eLearning Guild** for reprint permission.

The eLearning Developers' Journal is published weekly by **The eLearning Guild**, 525 College Avenue, Suite 215, Santa Rosa, CA 95404. Phone: 707.566.8990. **The eLearning Guild** is an operating unit of Focuszone Media, Inc., 1030 Beatrice Street, Eagan, MN 55121.

The Journal is included as part of *Guild* membership. To join the *Guild* go to www.eLearningGuild.com.

The eLearning Developers' Journal™ is designed to serve the industry as a catalyst for innovation and as a vehicle for the dissemination of new and practical strategies and techniques for e-Learning designers, developers and managers. The Journal is not intended to be the definitive authority. Rather, it is intended to be a medium through which e-Learning practitioners can share their knowledge, expertise and experience with others for the general betterment of the industry.

As in any profession, there are many different perspectives about the best strategies, techniques and tools one can employ to accomplish a specific objective. This **Journal** will share these different perspectives and does not position any one as "the right way," but rather we position each article as "one of the right ways" for accomplishing a goal. We assume that readers will evaluate the merits of each article and use the ideas they contain in a manner appropriate for their specific situation. We encourage discussion and debate about articles and provide an Online Discussion board for each article.

The articles contained in the **Journal** are all written by people who are actively engaged in this profession at one level or another — not by paid journalists or writers. Submissions are always welcome at any time, as are suggestions for articles and future topics. To learn more about how to submit articles and/or ideas, please refer to the directions in the sidebar on page 6 or visit www.eLearningGuild.com.

DESIGN 1 strategies

their development is heading, and how they can be used today.

What is an avatar?

An avatar, in the broadest sense, is an image that represents one party in an interactive exchange. In some situations, the avatar may represent an actual human being, but in e-Learning, the avatar almost always operates as an agent of the e-Learning application, and generally simulates human activity. Avatars in e-Learning are somewhat similar to avatars in online games, and to bots in other applications. (See Sidebar, below.)

An avatar functions as a communications interface linking a user with the information the user needs. An avatar is not a video demonstration and neither is it a cartoon sample. An avatar has a built in element of interactivity. It responds to the users' requests and needs, it provides a clear, insightful, rapid link to an information database, and it does so in a manner that is easy to understand. Certainly, avatars are not the only communications interface in e-Learning, and they are not the interface of choice in every e-Learning application. But as the technology that makes them possible continues to advance and

become more accessible to developers, avatars are becoming more important where interactivity, learner engagement, and cultural factors are important design considerations.

Help avatars and an example of a not-quite-e-Learning, not-quite-avatar

One potential challenge arises in the idea that an avatar simulates human activity. This is often taken to mean that the avatar must also be human in appearance. However, this is not always the case. One of the most famous avatars of recent times has been Microsoft's much-maligned "Clippit," the Help avatar.

Clippit is a good avatar, technically speaking: interactive, animated and a reliable source of information. So why did people complain? The simple answer is that Clippit just wasn't part of the user experience. The character was too intrusive, distracting people from their work when all they really wanted to do was get on with typing their letter or essay as they had always done.

This is where avatars like Clippit differ from modern e-Learning applications. With an e-Learning application, the user is actively seeking information, knowledge, or skills. The application interface

SIDEBAR Avatars, bots and agents

Autonomous software programs known as agents can perform many functions for users, including simulation of human activity. Agents may manifest online in several different ways, depending on the activity in which the learner is engaged. Here is a short list of terms that relate to the avatars discussed in the main article:

Avatar: An image that represents a user in a multi-user virtual reality space. An avatar may also represent the system or a function of the system in an application. The avatar is a separate entity from the content it delivers, and usually requires support from an infobot or chatbot application in order to interact with users.

Bot: Autonomous software that operates as an agent for a user or a program, or autonomous software that simulates a human activity. From "robot."

Chatbot: A bot that is able to interact with humans in a conversation. A chatbot may be a complete Artificial Intelligence (AI) implementation, or it may be an interface only. Chatbots generally manifest as text only, although a few also have avatars.

Infobot: A bot that delivers content from a common database of information for users on a chat system. Infobots may often have a simple chatbot interface, to allow them to respond to key phrases, as well as to direct inquiries.

Definitions of these and other terms may be found in the Hyperdictionary online, at http://www.hyperdictionary.com/dictionary/

(which may be an avatar or may be something more conventional) delivers the information, facilitates the knowledge, and coaches the development and practice of the skills. Clippit, on the other hand, attempted to force information onto the user, whether it was wanted or not. This led to negative feedback from users.

In the past, instructional designers and subject matter experts have sometimes attempted to create personalized learning or to add "human interest" to otherwise dry topics by using references to, or photos of, famous people, products and popular advertising campaigns. For example, a site that originated at the University of Essex (originally as a fun feature rather than a serious e-Learning tool) titled, "Britney Spears' Guide to Semiconductor Physics" (http://britneyspears.ac/lasers.htm) became wildly popular (in terms of numbers of "hits") and won several press mentions. However well-intended and heavily-visited it is, the site itself is 100% non-interactive text, not e-Learning, and an appalling example of design and implementation gone wrong. People said they found the site interesting and the content fairly indepth. However the best guess is that adding the rock star's photos (adapting one into a mnemonic device) probably further hindered learning by male students because it distracted their attention. Any beneficial effect would have to have been due as much to the novelty of the idea as it was to the educational content.

It would actually be fairly simple to develop avatars to present these lessons, giving the user a choice of male or female avatars, and employing a more interactive design (in other words, not merely having the avatar read the text). Creating avatars that resemble actual famous humans would not be an impossible task, although the question of potential distraction must be considered. However, it is not impossible to think that the effect could be minimized, as many people hang on their idol's words. The theory is, as yet, untested.

These avatars (including Clippy's descendants) could easily be programmed to do coaching, to ask questions and respond on the basis of the

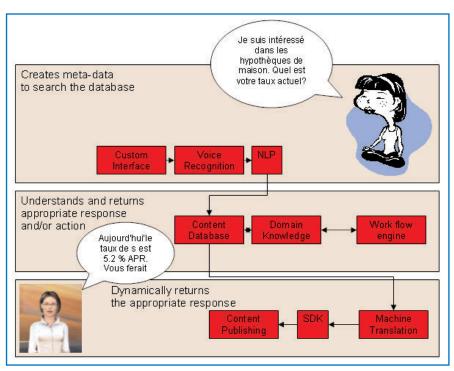


FIGURE 1 How avatars work.

answers provided, and so on. This would have the effect of creating an experience that much more closely emulates a one-on-one session with a tutor, rather than the typical "one-to-many" impersonal approach of e-Learning designs on the Web.

How does an avatar work?

To begin using an avatar all the student needs is a simple method of inputting a question, an answer, or other information. The input could be made in any of several ways, for example text, a custom interface for people with disabilities or even voice recognition software. (See Figure 1 above.) The article by Michael Allen, titled "Learner-interface Design: Recognizing Learner Gestures," published August 18, 2003 in The elearning Developers' Journal, addressed this issue at length.

Once the user's input is complete, the workflow engine processes it and retrieves the correct answer from a knowledge database. It would be difficult to create an avatar that was able to instantly report any subject at all. It would be the equivalent of a talking search engine. On the other hand, it is very easy to have an avatar work within a specific knowledge base. The potential range for content is huge.

The machine then translates the response into the appropriate code before adding the animation and lip synchronization to the avatar. All this is completely automated and takes only a fraction of a second, so the user is hardly aware of what has happened in the background.

It is text-to-speech software that gives avatars their interactive question and answer ability. By combining text-to-speech technology with sophisticated chatbot engines it is possible to hold a conversation with an avatar in "real language" as a question and answer session. For example, a student might ask, "When did the American war of independence end?" The avatar would very rapidly produce the answer in a common form, "The formal ceasefire was signed in 1783. Would you like to know more about when the ceasefire was signed?"

Text-to-speech software is incredibly powerful today. The computer doesn't use word recognition anymore. Instead it recognises combinations of letters and word clusters and works out what they should sound like. This makes the system highly accurate when guessing the pronunciation of a new word. In fact the computer has an accuracy rate of over 80%, which is actually better than most people can manage.

How avatars are being used in primary and secondary education in Scotland

Having good technology does not necessarily lead to mass-market adoption. Avatars will become more widely accepted as designers become more familiar with the benefits that avatars offer to the learner. It is important to remember that an avatar can be anything you want it to be. When people think of an avatar they often associate it with the image of a person, but this does not have to be the case

Urban Quest: Avatars for children's safe- ty education. For children's CD-ROMs or online learning aimed at children the preference may be for an animated character to which children are more likely to relate. For example, a popular children's TV character could be employed to teach children road safety or any number of topics.

The advantage would be interaction between the children and the character rather than a simple cartoon for them to



FIGURE 2 Ananova is a virtual newsreader.

watch. A trial of a similar idea with Glasgow City Council provided some very positive results. The medium is a Webbased game called Urban Quest in which children pick a character to aid them as they set off on a mission around Glasgow. The characters are rudimentary avatars, and represent both genders and more than one ethnicity.

The aim of the game is to teach children about safety in their home and

around the city. The style is not a traditional one associated with e-Learning but the messages for safety and responsibility are there. The Urban Quest game is a way to make a safety message more engaging for younger minds. The game includes hidden features such as minigames and encourages a bit of competitive play as the children look for the right result. An explanation of the game can be found at http://www.glasgow.gov.uk/ html/about/glasgowmag/march03/pdf/ p16-17.pdf. Only Glasgow school children are able to register and actually play the game, although the URL is provided in the article and anyone interested can open that page to look at the avatars, directions, and virtual environment.

Seonaid: Helping young people learn how the government works. In 1999 the world's first virtual newsreader, Ananova, made her appearance. (See Figure 2 above.) She can still be seen at www.ananova.com/video, and her technology has spread far and wide. The software takes text for the voice input and automatically adds the animation along a

San Francisco, California • November 12 – 14, 2003 Pre-Conference Workshops November 11, 2003



The Essential Conference for e-Learning Designers, Developers, and Managers







The program is divided into three core practice areas that mirror the three main roles that e-Learning producers are engaged in – Designer | Developer | Manager. The Program Committee, comprised of volunteer Guild Members, has identified the most critical topics that address these areas and those topics will be the focus of all our General Sessions, Think Tank Sessions, Concurrent Sessions and optional Pre-Conference Workshops.

Every session is designed to allow time to hear from the experts, debate and discuss with your peers and explore topics to their fullest. In addition to the structured time you will spend learning in the sessions, you will also have ample opportunity to network with the other participants in morning discussion groups, over lunch, and during social activities. The size and format of the conference will help you develop important professional connections during the conference that you can continue in the months and years to follow.

Concurrent Sessions, Workshops, Think Tank Sessions online now! Visit www.eLearningGuild.com

timeline. An animator can manually add more expressions and emotions to go with the text, such as a raised eyebrow or even a smile. Once completed, the software renders the file and makes it available for viewers. The big advantage of this system is the automation and the enhanced speed at which content can be created and updated.

Seonaid, which is pronounced "Shona" and which stands for "Scottish **Executive News And Online Information** Distributor," is the electronic face of the Scottish Executive, and it is a system that extends the Ananova technology from "reading" to "teaching." (See Figure 3, right.) Originally designed to provide news and updates to the Junior Executive area of the site in order to educate and inform young people about politics, the avatar was an instant hit with young and old. The Scottish Executive experienced a 200% rise in website traffic and a 37% increase in unique users following the introduction of Seonaid. Her brief has since been expanded to cover the whole of the Executive. Now appearing in conferences, videos and campaigns, Seonaid is at http://www.scotland.gov.uk/pages/ news/junior/jxarticles.aspx.

The real advantage of the Seonaid system is flexibility. Seonaid's output is video that can then be turned into a Flash file for the web or even shrunk down for a mobile device. The footage, once created, can be delivered in file formats playable in Windows Media, Real Player or QuickTime. This gives the developer access to all the leading web media formats at once. If the application is CD-based, media format is not a concern as the player can be packaged on the CD.

The video can also be made to broadcast quality to allow combinations of media. An e-Learning developer can link with another organization, say a government safety initiative, to make a video featuring an avatar. Examples of this in which Seonaid interviews government officials can be seen on her site. The developer can then use the same character in a criterion test over the content. In all cases the input to the avatar can be simple text, with all vocalizations, lip

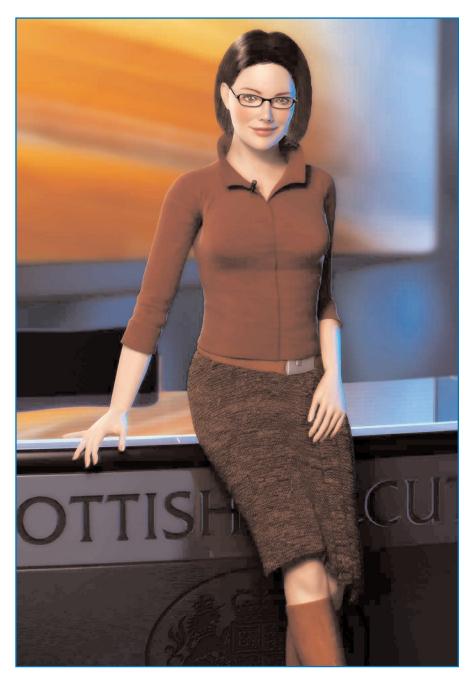


FIGURE 3 Seonaid ("Shona") is a flexible presentation system for e-Learning.

synchronization, and animation generated by the avatar software. The latest generations of avatar software are now able to accurately vocalise several languages in addition to English, and the lip synchronization will also match to these languages. As you can tell by watching and listening to Seonaid, regional accents within a given language can also be correctly done.

The development of the avatar

Of course, avatars this advanced

haven't always been possible, and we are still learning how to use avatars effectively in e-Learning. Publishing and broadcasting technology has advanced greatly since avatars first appeared in the mid 1980's. Originally, avatars were seen only as marketing tools with a novelty value. Today the appeal has grown much wider and the characters can actually help reinforce and build a brand, including the brand known as "e-Learning." There have been several phases of development along the way. (See Figure

Do you have an interesting story to tell?

Get It Published in...



This publication is by the people, for the people.

That means it's written by YOU the readers and members of *The eLearning Guild*! We encourage you to submit articles for publication in the **Journal**.

Even if you have not been published before, we encourage you to submit a query if you have a great idea, technique, case study or practice to share with your peers in the e-Learning community. If your topic idea for an article is selected by the editors, you will be asked to submit a complete article on that topic. Don't worry if you have limited experience writing for publication. Our team of editors will work with you to polish your article and get it ready for publication in the **Journal**.

By sharing your expertise with the readers of the **Journal**, you not only add to the collective knowledge of the e-Learning community, you also gain the recognition of your peers in the industry and your organization.

How to Submit a Query

If you have an idea for an article, send a plain-text email to our editor, Bill Brandon, at bill@eLearningGuild.com, with the following information in the body of the email:

- A draft of the first paragraph, written to grab the reader's attention and identify the problem or issue that will be addressed.
- A short outline of your main points addressing the problem or resolving the issue. This could be another paragraph or it could be a bulleted list.
- One paragraph on your background or current position that makes you the one to tell this story.
- A working title for the article.
- Your contact information: name, job title, company, phone, email. This information is to be for the writer of the article. We are unable to accept queries from agents, public relations firms, or other third parties.

All of this information should fit on one page. If the topic fits our editorial plan, Bill will contact you to schedule the manuscript deadline and the publication date, and to work out any other details.

Refer to www.eLearningGuild.com for more details.

4 on page 7.)

In the first phase, the avatar was simply an attention-grabbing device. Some readers will remember Max Headroom, whose big job was advertising Coca Cola. Contrary to popular belief, Max was not strictly an avatar. He wasn't computer-generated, although most people were convinced otherwise. For a number of years, the role of avatars seemed limited to that of "gimmick," or a simple marketing ploy to associate technology with a brand or to develop a memorable message.

As the technology moved to the second phase, avatars generated like cartoons, as video clips, began to appear. Still not capable of interactivity, these avatars were used to do simple tasks that allowed their creators to appear very clever. You may have seen an avatar reading the answers to Frequently Asked Questions on a web site where a user would listen to the character speak — although the animations may have appeared very stilted with a rather mechanical voice.

We now seem to be entering the third phase, as designers begin to see the benefit of avatars as an aid to self-learning, and at this point we can begin to see how avatars will continue to evolve. In the simplest e-Learning application, an avatar can provide a one-way educational aid speaking the English language and discussing a given subject. A user listens to the avatar reading the words on the page, perhaps expanding on annotated notes or bullet points included in the main presentation, not unlike a lecturer.

One example of this usage is a product known as On Cue. The publisher of On Cue, Impatica, is not strictly an e-Learning company and the technology was originally developed for the corporate world. However around half of Impatica's business now comes from the academic sector. The reason for this is that Impatica enables people to publish Microsoft PowerPoint presentations over the Web in their original format but at a fraction of the size. The PowerPoint format has become common in today's university lecture theatres. However, as everyone knows, lecture is often a very difficult learning environment. [Editor's

Note: The On Cue product uses avatar technology licensed from the author's company.]

The On Cue system has been popular with university professors who want to put copies of their presentations online for students as a resource to which they can refer outside of class. The idea is not so much to produce an e-Learning solution but to simply add support to the lecture. The difficulty with this normally is that a PowerPoint presentation can, to put it mildly, be somewhat portly when it comes to file sizes. The large files can prohibit students with narrowband connections from accessing the information. On Cue can compress the file and stream it over the web at approximately a tenth of the original size, allowing even those with a 56k modem connection to benefit from the resource.

Now the people at Impatica have taken the software a step further with

the inclusion of an avatar. (See Figure 5 below.) Sitting above the presentation the avatar can read out the lecturer's full notes as he or she might have done originally. This means that the students don't have to rely purely on the Power-

Point bullet points as they can get the full notes from the lecture read to them in time with the appropriate slide.

With the notes and presentation online the students have an extra resource at their disposal. Without this resource, stu-

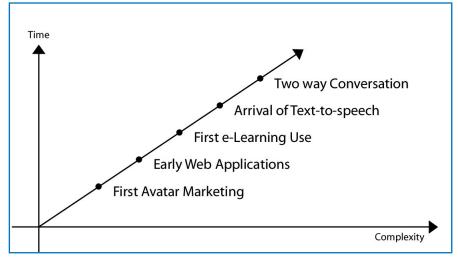


FIGURE 4 Avatar development history

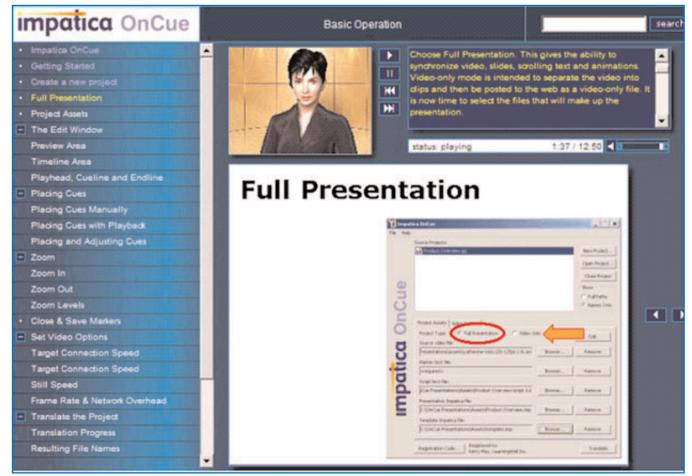


FIGURE 5 On Cue provides an avatar to narrate a PowerPoint slide show.

dents continue to find themselves simply copying the bullet points during the lecturer's presentation in class and being unable to pay attention to all things at once. The lecture model behind On Cue is admittedly not ideal, but it does allow e-Learning developers to provide additional support to academia as education undergoes the transition from sit-down lectures to a more truly learner-centered orientation.

Development of avatar capabilities to this point has been driven largely by improvements in text-to-speech technology. Speech synthesis engines have become increasingly complex and lifelike. The first systems created voices that were obviously computer-generated and typically featured only one language (English). As noted previously, it is now possible to add multiple languages with natural sounding voices. This is especially helpful for web-based learning as it enables users from around the world to access the resource.

Avatar technology is moving beyond mastery of multiple languages to be able to conduct a two-way conversation. An avatar today is equipped with a stockpile of questions, responses and intelligence

to answer a learner's query or responses on a variety of subjects. Rather than having to click on a link to get a standard response the user is now able to ask questions of the avatar in their natural language and receive a near-instant response in much the same way we might question an instructor or teacher in a classroom.

The ultimate goal of avatar technology within the e-Learning field is to offer personalised learning. The personalised learning approach will have a big influence upon how effective an e-Learning application is for the user. The aim is to create technology that can provide information, answer questions, facilitate discussions, administer a test and then go back over any areas of weakness without appearing to be criticising or singling a person out from the others.

Avatars respond to e-Learning barriers

The combination of changing attitudes towards e-Learning and improvements in technology performance provides e-Learning with increasing support for future growth. However, there are still barriers to deal with that go beyond simply gain-

ing acceptance for e-Learning. Avatars are one way to respond to some of the more serious barriers.

Figure 6, below, shows the results of a survey by the Forrester analyst group. The most common response to the question, "What obstacles limit online training?" was simply lack of interactivity. Most respondents likened their webbased learning experience to a workbook or manual with a few quizzes added. Considering the semiconductor physics example shown earlier, it is no wonder that the text-based model has not been successful online. Avatars, however, are rapidly gaining true interactive capability.

Cultural factors were also a problem with the obvious difficulty here being a language barrier. This is a major challenge in Europe with so many languages and countries close together, but it is also an increasing concern in the US with a large proportion of the population speaking Spanish, not to mention the multitude of other languages spoken by Americans. Again, improvements in the ability of text-to-speech software to accurately vocalise languages other than English may provide the key to the language barrier while lowering production costs significantly.

Bandwidth came out as a fairly major concern but is expected to be less of a problem in the next few years. The drive by Internet Service Providers (ISPs) to increase revenue and get users onto high-speed connections (especially where encouraged by the government) means that broadband penetration is on the increase. Currently many homes in the United States and Europe have Internet access or at least have access provided by a local college or library. Avatars that can make use of technology similar to On Cue will provide better support even over dial-up connections.

Lack of interactivity Cultural resistance 41% Bandwidth 36% Measuring ROI 8% Browser problems 5% Firewalls 3% No standards 3% Percent of 39 companies interviewed (multiple responses accepted)

"What obstacles limit online training?"

FIGURE 6 Forrester survey results: "What obstacles limit online training?"

Where next?

Two way communication and systems like On Cue are only the beginning. The next e-Learning strategy that will benefit from avatar technology may be "just in time learning." With the development of colour mobiles and wireless devices, performance support for technicians and others at remote locations could easily

be significantly improved. Imagine a technician at a remote site who has encountered an equipment failure that she has no idea how to correct. Using a handheld PC or even a mobile phone she could easily have an avatar explain the technique complete with graphics and advice on each step of the process. With an avatar that can "speak," the technician can be listening while she works, rather than trying to watch the screen of her wireless device while making the repair. The same advantage applies to more domestic uses. Not sure how to install and set up your new satellite television system? Simply access the manufacturer's website on your mobile and have it explained to you in real time along with a demonstration.

One of the major benefits of introducing avatar technology into the e-Learning field is the ability of avatars to solve supply problems, specifically a lack of content or follow-up to support effective learning. By providing the right resource to an institution, association, organization, or business e-Learning producers can help provide effective content and materials the student might need to continue their studies outside class. This is particularly applicable to the US where the onus is more on the student to study hard outside class than it is in the EU.

The avatar could be used to supplement the students' own notes in a way similar to a help section on a PC. The students might not need to know everything, but they can dip in and ask questions in areas where they feel less confident of their knowledge and skills. The information is then presented in a clear manner that engages and sustains the student's attention.

The avatar could also offer to test the students on a given topic. In the case of an educational curriculum, the students could take a preliminary test that covers their learning objectives for that semester. The avatar will point out areas of weakness, offer to repeat information or provide more detailed information on any particular subject. The same application might help one student with their studies on the Great Depression but another with the factors leading to the outbreak of World War II. It is the same package

An avatar is a communications interface linking a user with the information the user needs. An avatar is not a video demonstration and neither is it a cartoon sample. An avatar has a built-in element of interactivity. It responds to the users' requests and needs, it provides a clear, insightful, rapid link to an information database, and it does so in a manner that is easy to understand.

and the same database but each student is getting a personal service to aid individual studies.

The avatar is non-judgmental and does not get frustrated about repeated questions. A lecturer or teacher in a classroom has to focus their attention on many individuals at once and will try to help as many of them as possible. Asking the avatar in the privacy of their own home or alone on a PC is much less challenging for the student than repeatedly asking questions in class which the tutor may not have time to answer in full. Often there is a stigma attached in class with students not wanting to appear to be a "geek" in front of their classmates. Being able to ask questions and fill in knowledge gaps in private removes this issue, and allows the student to reaffirm his or her interpretation of the class.

Summary

The world of e-Learning is moving forward rapidly. Changing social habits, our familiarity with computer systems, and the prevalence of mobiles and handheld devices have all combined to create a more technology-savvy population than ever before. Hand-inhand with advancing technology is a constant thirst for more knowledge.

For once, too, it is not just the children who have all the fun. Learning packages are crossing the generational divide through government-encouraged schemes like life-long learning and retraining of manual employees to skilled or technology-focused jobs. The elderly too are beginning to embrace computers. Retirees find they have more leisure time than ever, and are often willing to take up new hobbies or advance their knowledge online.

The avatar offers learners a more engaging and memorable experience, encouraging higher adoption and usage rates through improved results. Although avatars have traditionally been seen as having appeal for a younger audience, vendors are finding a mass market in the higher education sector.

Given a choice, learners still often prefer instructor-led training. Unfortunately the current image of e-Learning involves someone sitting in a room reading a computer screen rather than a book. Avatars allow e-Learning developers to challenge this outdated view with a product that delivers real personality — and more.

Able to create animated video content from text or audio input, developers can then embed the avatar within e-Learning applications, instantly providing a more interactive experience to the user. An avatar is your multilingual expert on screen, able to read text in approximately 19 languages or to speak in any number of languages via a recorded voice input.

The avatar is not using anything new. The content is the same, but the avatar is able to provide an animated image complete with a natural sounding voice. Updates to the application require very little input from the developer. As revised versions appear the developer only has

About the Guild



The eLearning Guild™ is a Community of Practice for designers,

developers, and managers of e-Learn-ing. Through this member-driven community, we provide high-quality learning opportunities, networking services, resources, and publications. Community members represent a diverse group of instructional designers, content developers, web developers, project managers, contractors, consultants, and managers and directors of training and learning services - all of whom share a common interest in e-Learning design, development, and management.

The eLearning Developers' Journal™

The Guild publishes the only online "e-Journal" in the e-Learning industry that is focused on delivering real world "how to make it happen in your organization" information. The Journal is published weekly and features articles written by both industry experts and members who work every day in environments just like yours. As an active member, you will have unlimited access to the Journal archive.

People Connecting With People

The Guild provides a variety of online member networking tools including online discussion boards, and the Needs & Leads™ bulletin board. These services enable members to discuss topics of importance, to ask others to help them find information they need, and to provide leads to other members.

Resources, Resources

The Guild hosts the e-Learning industry's most comprehensive resource knowledge database. Currently there are over 3.300 resources available. Members have access to all of these resources and they can also post resources at any time!

Guild Research

The Guild has an ongoing industry research service that conducts surveys on a variety of topics each year. These topics are identified by the Research Advisory Committee. The data collected is available for all Members.

It's About Leadership

The Guild draws leadership from an amazing Advisory Board made up of individuals who provide insight and guidance to help ensure that the Guild serves its constituency well. We are honored to have their active engagement and participation. The Guild has also established two committees made up of active members who help steer its events program and research efforts.

Discounts, Discounts

Guild members receive discounts on all Guild conferences and on other selected products and services. Your Guild membership will save you 20% off the list price of Guild events!

Join today at www.eLearningGuild.com!

Become a member today! Join online at www.eLearningGuild.com.

THANK YOU TO THESE GUILD ENTERPRISE SPONSORS



Because the most dramatic learning happens through first-hand

experience, everything we do is focused on creating experiences — engaging, challenging and yes, fun, experiences - that people will take back to work and use every day to improve their performances.

www.alleninteractions.com Contact: Jackie McMillan jmcmillan@alleni.com 800.204.2635



Cyclone Intera-Interactive ctive is an interactive media and web development

firm creating online, CD and presentation solutions for a wide range of clients and industries.

www.cycloneinteractive.com **Contact: Earl Dimaculangan** earl@cycloneinteractive.com 617.350.8834

To learn about **Guild** sponsorship opportunities, please contact David Holcombe at dh@eLearningGuild.com or call 707.566.8990.

to update the text and the animation engine takes care of the rest.

The eventual outcome of all this is the power for e-Learning developers to offer instructor-led training at remote locations using existing text-based content anywhere in the world. At the moment avatars are entering the two-way communication stage. As the e-Learning industry grows increasingly widespread we hope to see avatars realizing the potential they have always promised.

AUTHOR CONTACT

Raj Sheth is responsible, within DA Group Plc, Edinburgh, Scotland, for making learning sessions more engaging, fun, and productive through the deployment of avatars in learning environments. Before joining DA Group Plc, Raj held the position of head of strategy (UK) for a global NASDAQ-listed firm, was a business consultant at a Big 5, and worked with lobbying organizations for policy de-regulation on behalf of global mining firms in Asia.

Raj holds an MSc from the London School of Economics, an MBA in International Business, and graduated in accountancy and financial management. You can reach Raj at raj.sheth@dagroupplc.com.

ONLINE DISCUSSIONS

Extend your learning beyond the printed page! If you are looking for more information on this topic, if you have questions about an article, or if you disagree with a viewpoint stated in this article, then join the online discussions and extend your learning.

Follow these easy steps to participate:

- 1. Go to http://www.eLearningGuild.com and log in.
- 2. Click on the Online Discussion link on the left-hand navigation menu.
- 3. Select this article by title from the e-Learning Discussions list, or use the Search Subjects/Post box to find it.
- 4. Click on Add A New Message.
- 5. Enter your message. It will be posted as soon as you hit the Add Message button on the form.

Additional information on the topics covered in this article is also listed in the Guild Resource Directory.