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The data, charts, and graphs presented in this whitepaper are based on a 2011 Brandon Hall Group research survey on the use of video in learning. At the time of the writing of this whitepaper, 211 people had participated in this study.

Introduction

Learners have embraced the use of video in learning. They report that video is an effective learning modality that provides them with high levels of engagement. They also report that learners, likely dissatisfied with static page-turning content of traditional e-learning courses, are now **demanding** video.





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There are many ways that video can be used for learning and development. Popular video hosting sites such as YouTube have made embedding recorded video clips into self-paced online courses easy. Our research indicates that respondents list this approach as the most compelling use case for video in learning.

Combined, however, the use of **live** video for demonstration of products, procedures, and models; live one-on-one or small group tutoring; live multi-point video allowing instructors and audience to see each other; and recorded video segments presented in virtual classroom or virtual meeting sessions eclipse the use of embedded videos in asynchronous content.



Clearly, the use of video in live virtual sessions has become a critical part of the learning and development landscape.

Although some virtual classroom and virtual meeting applications lack live video capabilities, our research indicates that most people believe that it's important or moderately important to be able to see the speaker in a virtual classroom or virtual



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meeting session. Only five per cent of respondents listed the need to see the speaker as unimportant. This data should be carefully considered by presenters given that nearly all virtual sessions and Webinars consist of a speaker's voice accompanied by a slide presentation. We're a social species with brains highly attuned to interpreting facial cues. Seeing a speaker's face is one way our brains read between the lines to understand a spoken message. Seeing a speaker's face allows us to assess sincerity and interpret sarcasm, irony, and other subtleties of human communication.



Research Summary

- Learners have embraced the use of video in learning
- Seventy-three per cent of learners report effectiveness as a learning modality is their number one reason for using video. High engagement is listed as the second most popular reason at 59 per cent
- Combined, the use of **live** video for demonstration of products, procedures, and models; live one-on-one or small group tutoring; live multi-point video



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allowing instructors and audience to see each other; and recorded video segments presented in virtual classroom or virtual meeting sessions eclipse the use of embedded videos in asynchronous content in popularity.

 Seventy-four per cent of learners believe that it's important or moderately important to be able to see the speaker in a virtual classroom or virtual meeting session. Only five per cent of respondents listed the need to see the speaker as unimportant.

Creative Ways to Use Live Video in Virtual Sessions

Organizations considering using live video in virtual sessions for learning and talent management face two challenges:

- A reticence by some users to be seen on video. These individuals may be selfconscious, feel a loss of control, or may be in an environment they don't want to reveal on camera. All of these are reasons to prefer the anonymity of audioonly sessions. Given the choice, they will turn their Web cams off, freeing them to watch and listen only. Confidence and video adoption among these people can be improved by reinforcing the benefits of video, and by designing virtual sessions so that attendees contribute content. Rather than producing sessions using a single speaker and passive listeners, participants can be asked to present short sections. With time, their level of comfort in front of the camera will increase.
- An ingrained audio-only, or audio-plus-slides culture. Audio teleconferencing has been around for decades and has influenced how many organizations communicate to remote groups. In recent years, audio accompanying slides have become synonymous with the word "presentation." Organizations wishing to encourage a greater use of live video need to ensure that employees have the software and hardware required for all to access and feed video. Fortunately, built-in cameras are becoming universally available with new laptops and tablets. In addition, these organizations should increase the use of video for formal communications. Virtual round-table employee information meetings using live video should become the norm for all senior managers and C-level individuals.

Product or Procedure Demonstrations

We've all heard the maxim that a picture is worth a thousand words. Video, though, has the advantage of delivering multi-dimensional views and movement. The result is that video is much more powerful than viewing a static slide or image.



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Live video can be used to demonstrate new products, such electronic gadgets, medical devices, cars, textile, engineering models, etc. Live video can also be used to describe medical and other professional procedures. Live video can also be used to observe remote environments such as new office space and labs and monitor what is taking place in those locations.



Video-enabled virtual sessions can be effective in performance support and customer service. Field workers can work with remote experts using live video to understand what's required to repair equipment.

Support individuals can ask users to show them, using video, the configuration of a malfunctioning device. The support technician can then walk the individual through the correct setup procedures.



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Improve Training Accessibility

As the workforce becomes more global, trainers need to consider the needs of learners from other cultures whose first language is not English. In this case, video enables the audience to better understand the speaker's intent – for example, whether the statement is a joke.

In addition, live video can also be helpful for hearing-impaired individuals, allowing them to either read lips or see a sign language interpreter.

General Rapport Building

Virtual sessions lacking video can make participants feel anonymous. Using live video, the online classroom can better emulate the natural classroom environment. Rather than speaking to slides, video enabled instructors speak with class participants and are better able to engage their students with eye contact and gestures.

In turn, students can see their peers. Platforms that shift the video focus to the active speaker allow learners to see who is asking the question or leading the discussion. Rather than simply hearing a remote voice, the learner can connect the voice to a specific individual.



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Development of Presentation Skills

Great speakers are made, not born.

The relaxed tone, body language, and sense of casual confidence exuded by skilled speakers come from preparation, repetition, and learning the best practices of oratory. Live video in a virtual session can be an effective way to hone one's presentation skills.

Practice sessions can be recorded, played back, paused, analyzed, and critiqued to see what works and what doesn't. In improving presentation skills, attention can be directed to posture, pace of delivery, eye contact, and hand gestures to ensure they all work together to best communicate a message.

Live video in practice sessions can also be used to assess the speaker's environment. Is the lighting appropriate? Are there elements within the video frame that can be distracting to attendees? Is the speaker's environment free of background noise that might hurt the effect this presentation? Is the speaker dressed appropriately?



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Recruiting

Organizations used to visit colleges, set up booths in common areas, and hand out information packages with the hope of convincing the smartest graduates to join their firms. Students today—if they can even be found in common areas—often have their eyes directed at smart phone, tablet, or laptop screens.

Virtual recruiting sessions are effective and make sense. These sessions allow organizations to reach a larger pool of potential candidates. The use of video in virtual recruiting increases intimacy and help to make the organization seem welcoming. Smart organizations understand that recruiting is a two-way street. The candidates are being assessed and the firm hiring is being scrutinized by candidates.

Top-tier graduates know that they can pick where they work. Having a recent hire speaking using live video about how much he or she enjoys working with the firm can make a very convincing case for why smart graduates should consider submitting a resume.



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Talent Acquisition

There was a time organizations located themselves in specific geographical areas because they would have access to large pool of potential employees in that region. For many jobs in the knowledge economy, technology has now made it possible to hire the best people regardless of where they are located.

More and more organizations are interviewing potential candidates using live video. Video-enabled virtual interviews allow you to hire people anywhere in the world. In addition, virtual sessions help reduce the cost of flying top-tier candidates to your location for preliminary interviews. Candidates who do well virtually in round one can then be invited to participate in more in-depth, face-to-face, on-site interviews. (If you're a job seeker or recruiter, consider improving your presentation skills as described above.)

Storytelling

Smart organizations value the knowledge and experience of employees. Procedure manuals are often used to document what a person does. What a person knows and has learned through experience, though, often leaves the organization with the individual.

Live video in virtual sessions can be an easy way to capture and record these valuable stories. Regardless of where in the world experts are located, short video-enabled virtual sessions can be used to document knowledge acquired through experience. Such stories can help others avoid mistakes and provide valuable insights that lead to success. Recorded, these stories form a significant knowledge repository.

Language Training

The increasingly global nature of work in the 21st century means that our colleagues are often as likely to be located across the world as they are across the corridor. English continues to gain adoption as the international language of global business. Consequently, many multinational organizations have a need to provide English as a second language (ESL) training to individuals located in countries where English is not the predominant language.

The best way to learn to speak a language is through conversation. One-on-one or one-to-small-group, video-enabled virtual ESL training sessions can quickly improve the language skills of employees. Learners benefit from this learning modality by being able to see the mouth position required to properly pronounce difficult syllables.

Mentoring

Everyone should have a mentor or be a mentee. Good mentors can provide frank opinions that peers may not feel comfortable communicating. Good mentors hold you



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accountable to goals, helping you reach your full potential. Mentors share their experiences, helping you avoid pitfalls and achieve success.

Live video in virtual mentoring sessions can help build trust and strengthen the bond between mentor and mentee.

Team Building

Successful bricks and mortar organizations spend a lot of time on team building. These organizations know that happy workers are less likely to jump ship when a competitor offers them a job. They also know that people who enjoy each other's company will work together more effectively.

Company family picnics, water balloon fights, karaoke nights, charity fundraisers, comedy shows, etc. are just some of the ways organizations try to strengthen teams and raise employee satisfaction. Unfortunately, being geographically dispersed, virtual teams are less likely to be able to participate in these types of events.

Live video can be used for virtual celebrations across regions. Such celebrations can help improve tolerance and understanding of different cultures, and can help create a culture where everyone feels included and valued, regardless of location.

Performance Evaluations

Performance evaluations should always occur face-to-face. The person being evaluated has the potential to feel insecure and under attack when discussing areas that need to be improved. Seeing the evaluator's face expressing appreciation for the work done by the employee, and a genuine interest in having the individual reach new heights will make the performance appraisal more effective.

Live Video Solutions for Training

There are a large number of options available for the creation and delivery of live video in virtual sessions.

Web-based applications such as Cisco WebEx allow anyone with Web access to view live video sessions. Low-cost Web cams are all that's required to show video. Consequently, such solutions require no substantial investment in hardware. These platforms can support hundreds of concurrent video streams, making them highly effective for the video use cases described above.

At the higher end of the cost spectrum, but offering the most engaging and realistic video experience, are full-room immersive platforms. Users of such platforms report that they need to remind themselves that people seated across from them at the



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conference table are not in the same physical location. One user recounted being able to read the fine print on a soft drink can located in a remote user's location. Unlike Web-based applications, full-room immersive systems require that all parties have access to the underlying technology. Consequently, these solutions are best used for small group sessions such as recruiting of high level executives, mentorship, and small group brainstorming.

New technologies are now appearing that allow for the merging of Web-based and full-room immersive approaches. These solutions can provide the best of both approaches, allowing those using the immersive technology to interact with Web-based participants.

For Web-based approaches, the quality of video is quickly improving. High-quality (360p) and high-definition (720p) video captured using the latest generation Webcams and connected devices such as camcorders can now mimic studio-quality video. With sufficient bandwidth, these new technologies eliminate the jerky quality of Web cams and can even self-adjust exposure and focus.

Case Study – USC Viterbi School of Engineering

Founded in 1880, the University of Southern California (USC) is the oldest private university in the Western U.S. It has been a pioneer in distance learning since the 1970s. Continuing the tradition of supporting remote learners, the USC Viterbi School of Engineering Distance Education Network (DEN) has embraced the use of videoenable online learning to reach is highly dispersed student body.

The USC Viterbi School of Engineering provides more than 30 Master's degree options available via online delivery in the following disciplines:

- Aerospace & Mechanical Engineering
- Astronautical Engineering
- Biomedical Engineering
- Chemical & Petroleum Engineering and Materials Science
- Civil & Environmental Engineering
- Computer Science
- Electrical Engineering
- Industrial & Systems Engineering

DEN's student base spans more than 40 states, 2 U.S. territories, Antarctica, Argentina, Canada, China, Indonesia, Mexico, Peru, Saudi Arabia, South Korea, and Taiwan. The



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university requires that DEN students have access to high-speed Internet (DSL/Cable minimum) as well as the Windows Media Player (downloadable for free). DEN students use Cisco WebEx to access lectures, work on projects, fulfill homework assignments, and participate in discussions. All DEN courses are available on the Internet live and on-demand.

Content Strategy

The Distance Education Network's content strategy is as follows:

- Learners access online lectures containing streaming audio and video
- These lectures are recorded, archived, and made available for viewing for the entire semester
- During the live events, students can phone into studio classrooms with questions, participate in chat, or threaded discussions
- Students can access supporting materials for the course that help to eliminate the need for students to take notes; allowing them to instead focus on lectures. These materials include course notes created by the professor, and digitized written materials such as PDFs and Powerpoint presentations.
- Students can also download homework assignments, which they complete and then transfer back to the university electronically
- Students who do not live in the Los Angeles area have exams proctored at a nearby testing center to ensure academic integrity
- Remote students can give presentations/lead discussions/show models during class (midterm, finals, presentations) from anywhere in the world
- Instructors/guest lecturers (Chevron, Pan Am airlines chief educator, panels for discussion) can participate

Use of Video

Video is central to USC's support of remote students. All live lectures are posted online for archived viewing within 15 minutes of the completion of a class. The large number of classes offered means that USC Viterbi School of Engineering generates over 2TB of video data every semester.

USC DEN has recently purchased Cisco TelePresence (Tandberg) MCU and infrastructure. This will allow the faculty to provide full HD video teleconferencing and will integrate with Cisco Webex for hybrid sessions. This allows the university to have remote experts present to students in an environment that closely mimics face-to-face presentations.

One of the most innovative uses of video at USC is the use of overhead cameras to capture the pen and paper transcriptions preferred by some instructors. Using this view, students are able to see instructor's notes and diagrams.



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The faculty has also embraced the use of video for uses outside of learning. USC Viterbi School of Engineering is leveraging the use of video for marketing, recruitment, as well as for orientation and information info sessions for incoming international students.

The Results

The USC Viterbi School of Engineering Distance Education Network's approach clearly works. The university boasts that remote students perform as well—and in many cases better—than on-campus students. In addition, more than 80 per cent of remote students complete their studies; clearly an indication that remote learners are as motivated and engaged as those on campus.

Key Takeaways

- Research indicates high levels of user engagement and appreciation for live video
- Organizations face two challenges in adopting live video: reticence of some users to be seen in front of the camera; and audio-only or audio/slides organizational cultures that stem from years of using technologies that lacked video capabilities
- Effective uses of live video in virtual sessions include:
 - Product or Procedure Demonstrations
 - Improve Training Accessibility
 - General Rapport Building
 - o Development of Presentation Skills
 - o Recruiting
 - o Talent Acquisition
 - Storytelling
 - o Language Training
 - Mentoring
 - Team Building
 - Performance Evaluations
- There are many different options available to organizations wishing to use live video. These span Web-based solutions to full-room, immersive systems.
- Organizations such as the USC Viterbi School of Engineering Distance Education Network (DEN) are demonstrating that live video-enabled virtual sessions can produce effective outcomes among remote learners.
- We're a social species with brains highly attuned to interpreting facial cues. Seeing a speaker's face is one way our brains read between the lines to understand the full meaning of a spoken message.



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Conclusion

Electronic communications have affected how people interact. Radio broadcasts changed storytelling, eliminating the need to be in the same location as the storyteller. Telephony allowed us to converse with others, whether they be next door or across the world. The Internet has provided myriad new communication options including e-mail, tweets, blogs and comments, ratings, forums, and social networks, to name just a few. Mobile technology expands our communication options yet again through text messages, location-based features, and more. These new modes of communications empower us to create new social connections.

The city or village borders that would have defined our social network a hundred years ago have been removed metaphorically. We may not know the people who live two doors away on our street but we're close friends with people across the world whom we've never met -face-to face.

Prior to the arrival of electronic communications a little over one hundred years ago, we socialized face-to-face. Entertainment comprised of plays and concerts, not TV and MP3s. Local pubs, churches, and schools were the Facebooks of their times. Status updates consisted of speaking face-to-face with someone and sharing news of our lives, not tweeting to our 5000+ followers that we're happy it's Friday.

Going to work meant actually going somewhere, not booting up a computer in a home office. Our careers entailed being located in a physical place with others, creating items for trade or delivering services to customers.

Here's the point: we used to look at faces all day long. Now we stare at screens that are far too often faceless.

Electronic communications have enriched our lives and are helping to make the world a better place. (It's getting a lot harder for a tyrant to do something horrible now that we're all carrying camera-enabled smartphones.) It's remarkable, though, how few of these electronic communications modalities support our deep-rooted psychological need to see human faces. We get 100 faceless e-mails per day. We take a dip into the faceless Twittersphere. Our Facebook friends have replaced their profile photos with pictures of their children or the logo of their favorite sports team.

The fact that humans are the dominant species on our planet is a testament to our ability to adapt physically. We have learned to thrive in the coldest, warmest, wettest,



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and most arid regions on the planet. These physical adaptations, though, did not occur overnight.

We have a very strong psychological need to see people. Our brains are so highly honed to interpreting facial cues that everyone can easily detect if a person is bored, angry, sleepy, happy, nervous, insincere, etc. As adaptable as we are as a species, we cannot go from a face-based to faceless existence in two generations and feel fulfilled.

Video-enabled virtual sessions stand out from the vast majority of electronic communications modalities in fulfilling our deep-rooted need to see human faces. Placed in this perspective, it's no wonder that 74 percent of participants in Brandon Hall Group's research state that they wish to see the faces of speakers in virtual sessions.



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About Brandon Hall Group

Having worked with more than 10,000 clients globally and after 17 years of delivering world-class solutions, Brandon Hall Group is the preeminent research and analyst organization focused on developing research-driven solutions to drive organizational performance for emerging and large organizations. Through the recent merger of Brandon Hall Research and AC Growth, Brandon Hall Group has an extensive repository of thought leadership, research, data and expertise in Learning and Development, Talent Management, Sales, Marketing, and Executive Management.

Brandon Hall Group Membership Program

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The Value of Membership

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- **Cutting-Edge Information** Our rigorous approach for conducting research is constantly evolving and up-to-date, providing your organization with current and future trends.
- Actionable Research Your membership includes advisory services that are research driven and provides you a breakthrough approach to addressing immediate challenges and opportunities inside your organization.
- **Customizable Support** Whether you are a Learning and Development, Talent Management, Sales, Marketing, or C-Level Executive, our research, frameworks, models and tools will provide insight and solutions that you can leverage across the entire organization.
- **Unlimited Access** Every member of your team has the ability to utilize research, next practices and advisory services wherever and whenever they need it to support critical decision-making.

To learn more about Brandon Hall Group, please call us at (561) 865-5017 or email us at <u>success@brandonhall.com</u>