



The Digital Learning Network's

Quarterly Technology Update

Summer 2016 Edition

Harness the Power of Live Video with the DLN!

No matter how small your project, the whole world could be watching and learning live via the Web!

The DLN Helps College Students Find Work at NASA with a Virtual Career Fair

Universities and colleges from across the country participated in a Virtual Career Fair that was created in partnership between the NASA Langley Pathways program and NASA's Digital Learning Network™. Hosts in LaRC's DLN studio interviewed former Pathways interns that are currently working at the center in the SAGE and RAD-X projects; sharing about their experiences and what it takes to become an intern.

The DLN to Partner with Department of Education (ED) for Afterschool Program

Starting this summer and continuing into the fall, the DLN will be supporting an Inter-Agency Agreement in which NASA and ED are working together to bring four design challenges and two scientific investigations to ED's 21st Century Community Learning Centers (21CCLC).

With the partnership now in its third year, the DLN will be the support that helps NASA scale its involvement up to 200 sites across 20 states. Each site will have virtual connections to NASA's subject matter experts in order to explain both the mission behind the student activities and what it is like to work at NASA. There will also be webinars for 21CCLC staff and a culminating virtual showcase each semester.



A Virtual Career Fair featuring Gugu Rutherford explaining how her internship at NASA led to a job



DLN Specialist Dr. Caryn Long getting ready for a virtual connection from the LaRC DLN Studio



NASA Is With You When You Fly: Weather – a NASA / NOAA collaboration at AFRC with digital expansion courtesy of the DLN

A representative from Human Resources shared information on how to navigate through the USA Jobs site for application to the program as well as requirements for qualification to be an intern. Old Dominion University, Elizabeth City State University, Fayetteville State University and William and Mary all joined live with the hosts and special guests asking their questions during the program while 10 other universities and colleges joined passively through the UStream webcast link and submitted their questions via email that were answered during the program. The Virtual Career Fair, the second one to be produced, will be a regular offering of the Langley Pathways and DLN projects starting this fall. A recording of the Virtual Career Fair can be viewed at the link below:

<http://www.ustream.tv/recorded/85619820>

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Virtual Connections Quick Reference

There are dozens of ways to share video over the Internet, and it can be difficult to pick the right one for your needs. The table below can help you quickly compare the benefits and drawbacks of several of the most popular methods. The quality column includes features such as resolution and cameras. The number of people column considers direct interactive connections as well as passive livestream viewers. Professional features include green screens and multimedia presentations. Reliability is how stable the connection is. Ease of use is how friendly it is for a novice. Cost can be one-time or subscription to set up yourself, but the DLN can often provide any of these services to make it less expensive for you to connect with your audience.

Service	Video Quality	# of People	Professional Features	Reliability	Ease of Use	Cost
Web Conferencing Platforms						
Adobe Connect	★	★★★	★★	★★	☺	\$\$
VidyoWeb	★★	★★	★★	★★	☺	\$\$
WebEx	★	★★	★★	★★	☺	\$\$
Cloud Based Video Platforms						
Skype	★	★	★	★	☺	Free or \$
Google Hangouts	★★	★★	★	★	☺	Free or \$
Cloud Based Video Streaming						
YouTube	★★	★★★	★	★★	☺	Free
Ustream	★★	★★★	★	★★	☺	\$
Room Based Video Platforms						
H.323 Codecs	★★★	★★	★★★	★★★	☹	\$\$\$

The DLN most commonly recommends VidyoWeb, Ustream, or H.323 Codecs, but we can take your virtual connection to the next level no matter what method you choose.

How the DLN Can Help

Our studios integrate state of the art virtual technologies and the latest in professional video and audio equipment to enhance your presentations to audiences anywhere with an Internet connection. The DLN provides the capabilities of:

- High definition, studio-quality camcorders;
- Multimedia presentations (e.g. PowerPoint, KeyNote, Prezi, etc.);
- Green screens / Virtual sets;
- Professional lighting;
- High-fidelity microphones;
- Video clips;
- Multimedia devices (e.g. iPad, document cameras, digital whiteboards, etc.); and
- Live video effects (i.e. picture-in-picture / text titles / crossfades & wipes, etc.).

We can help you produce engaging and interactive online video presentations that make your program look and feel professional! Schedule a tour of your local Digital Learning Network studio today!

Types of Events

By utilizing a DLN Studio, you can conduct, to name a few:

- virtual field trips
- panel discussions
- virtual career fairs
- lectures / seminars / talks
- live webcasts
- interviews
- science demonstrations
- virtual tours of facilities
- design challenges
- educator professional development workshops
- Intern-mentor meet & greets

What's more, the above are not just local! You can bring students and educators from anywhere with broadband Internet access virtually together with NASA subject matter experts for collaborative educational activities.





Surviving on Mars

Surviving on Mars was a limited time offering via NASA's Digital Learning Network for student in grades 4 and up. From October to December of 2015, 32 programs were presented, reaching over 1000 students. David Alexander, AFRC's DLN Specialist, took students on an unforgettable journey as he shared some of the challenges for human exploration of Mars, why we want to travel to Mars, and the technologies that are necessary in order survive on Mars. Students learned about NASA's pioneering work supporting the Journey to Mars and how it differs from the imaginative science fiction in the movie *The Martian*. **Surviving on Mars** showcases imagery from the movie to determine if particular scenes are science fiction or science fact. Students also interacted in a virtual activity called "Shipwrecked on Mars" to test their survival skills and ingenuity of surviving and thriving on Mars.



Students interacting with DLN Specialist David Alexander as part of "Surviving on Mars"

So You Want to Be a Martian

In October 2015, moviegoers across the nation rallied behind Mark Watney, Matt Damon's character in *The Martian*, as he struggled to survive on Mars and return safely to Earth. Recognizing the opportunity to embrace this spotlight on Mars, NASA Education reached out to the DLN to find new ways to connect with and captivate audiences while telling the story about NASA's Journey to Mars. As a result, DLN collaborated with NASA TV for **So You Want to Be a Martian**, a first-of-its-kind NASA education social media event on October 1st, highlighting a diverse panel of NASA workforce along with talent from the movie. A live studio audience of local high school students participated alongside an extended virtual audience of 64 schools directly connected through the DLN, so more than 5000 students had an opportunity to ask questions while hundreds of other schools shared the experience on the live stream and through social media.

If you have a story to tell about NASA or the role you play in it, the DLN can help you to connect with a larger audience or interact with under-served students and teachers across the nation. How do you provide access to NASA unique facilities, mission experts, research, or special events? The answer is that the DLN will help you to expand your impact digitally.



The DLN connected over 5,300 students during "So you want to be a Martian?"

Types of Service

NASA's Digital Learning Network provides a dependable service that can help you to create online experiences that are:

- Exceptional,
- Engaging, and
- Educationally sound.

The DLN Specialist at your Center has the equipment and expertise necessary to make sure that your content will reach your audience with the high quality and professionalism expected of NASA. Our team makes things easy.

Visit your local studio to find out how!



Training

Learn how to be an all-around better presenter or practice with a specific technology

Videoconferencing

Interact with up to three locations with high-end dedicated hardware

Webconferencing

Interact with up to 200 Internet-connected locations at once

Webcasting

Broadcast live video to the whole world!

NASA TV

Televise your latest breakthrough while letting the DLN handle the connection!



The whole DLN team is here to help you – just an email away!

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