DVD-VIDEODISC, PT. 1: STANDARD DEFINITION DVDS-FEATURES, FUNCTIONS, USES

Paul E. Burrows Media Solutions, University of Utah, Salt Lake City, Utah USA

Pre-workshop Summary:

(Half-day) The creation of a DVD-Videodisc is almost as simple as making a CD-ROM, although there is still a learning curve in order to successfully author and burn a "one-off" DVD or a DVD master for mass replication. In this half-day workshop (first of two parts), the presenter provides background information about the Standard Definition (SD) DVD format as the medium that we've known and used for many years. There are industry standard specifications for DVDs and these form factors are critical to understand or at least appreciate. These specs are defined (configurations, file structure, storage capacity, MPEG-1 and MPEG-2 codecs, variable data rates). By comparing different sources of video (DV, Beta, VHS) with the compression options available, attendees witness how image quality differs and picture artifacts can be introduced or minimized. The relationship of data rates to DVD storage capacities is charted. Although familiar to most DVD users, the features and functions of DVDs are demonstrated (menus, navigation, audio tracks, subtitles, region coding, copy protection, aspect ratios). Compatibility issues are identified when writing "one-off" DVDs and attempting to play them in any DVD playback devices (desk-top and set-top). Although this workshop is not about how to author DVDs, authoring choices and some of the software tools available on the market are highlighted. The workshop invites discussion by the attendees on the integration of DVD-Videodiscs into health sciences and medical curricula, looking at how the medium is best used or where it should not be used. Be sure to sign up for Part 2 of this workshop where HD DVD-Videodiscs (HD-DVD & Blu-ray DVD) are examined.

Pre-workshop's Objectives:

Review the Standard Definition (SD) DVD-Videodisc medium, analyzing the format, its feature sets, compatibilities, and how DVDs are used in educational settings.

Pre-Workshop's Benefits:

If you are thinking about converting video and audio materials to the DVD-Videodisc format, or have already produced some "one-off" DVDs, this workshop will help you to understand the format issues and features behind the medium and its MPEG-2 digital architecture. Beginners and experts alike should discover valuable information that may make their next DVD project easier to produce and troubleshoot.

Pre-Workshop's Pre-requisites:

No prior video acquisition, editing, or DVD authoring experiences are necessary, although they are helpful in generalizing your experiences with the delivery potentials of the DVD medium. Expect some jargon and techie talk as technologies are being compared.

Pre-Workshop's Intended Audience:

Anyone interested in delivering full-screen, full-motion video and high quality audio through the DVD-Videodisc medium and who wishes to understand more thoroughly the format itself. Many DVD authoring systems tend to be "more than helpful" in the authoring processing by masking the complexities of DVD creation. Appreciating what is happening "under the hood" is very illuminating.

Paul E. Burrows
Manager, New Media Integration Group
Media Solutions/University of Utah
Office of Information Technology
101 So Wasatch Blvd 215EBC
Salt Lake City UT 84112 USA
801-581-7908
801-585-3584 fax
pburrows@media.utah.edu
http://www.media.utah.edu/