TECHNOLOGY ENHANCED INSTRUCTION:

Enabling Faculty to Leverage

Digital Media

Current Reality

While the recent pandemic has been incredibly disruptive, it has also illuminated existing gaps within Los Rios that if addressed could dramatically increase efficiency and improve student learning. One of these opportunities is to develop a more comprehensive approach to enabling the curation and use of digital media for instructional purposes.

Across the district, individual faculty are striving to create engaging learning experiences by incorporating video and other digital media. They are frequently hampered in their efforts because they do not have access to certain technologies and assistance that leading universities and multi-college districts have intentionally cultivated. Many faculty have expressed frustration because they lack the technological tools or technical skill set to efficiently develop, caption, store, catalog, edit, and manage digital media. Additionally, there is no common platform to share media assets among colleagues which results in repeated efforts to develop similar content. While some faculty have found inventive ways to navigate these issues independently, there is no readily available solution for all Los Rios instructors.

One option that might be suggested is to leverage the high-quality instructional content that exists among external sources (i.e., commercial or open educational resources). However, sifting through the sheer volume of available material is a daunting task for individual faculty because it is time consuming to locate and evaluate instructional media for content and quality. Moreover, the absence of a districtwide clearinghouse results in inefficient, duplicative efforts as faculty seek materials in isolation that may be relevant to multiple instructors, courses, or colleges.

While instructors continue to explore innovative methods to increase engagement and reduce textbook costs, many crave reliable assistance with navigating the myriad of details involved in intertwining Los Rios content with external resources such as obtaining necessary licenses to use copyrighted materials. When questions arise while uploading or downloading creative content, there is no quick way for instructors to get help from digital media experts which can result in unexpected delays during teaching preparation. Without specialized support, instructors spend valuable time researching digital media techniques, addressing interoperability issues, and converting video to compatible formats. Further, faculty are often left to the limitations of their own skill sets in testing and enhancing media as they attempt to optimize it to perform seamlessly for all students across all devices. The outcome of these fractured methods is an inconsistent and unpredictable instructional media experience for learners.

Hidden Risks

The gap highlighted above poses a significant risk to Los Rios that should not be ignored. When faculty must find their own answer for storing digital media, the options are often less secure and appropriate than what Los Rios could provide through an enterprise solution. While platforms such as YouTube are widely available, they can distract students from the learning process by exposing them to advertisements and alternate videos. They also lack sufficient privacy controls and have minimal protections for intellectual property. The use of various platforms without contractual arrangements offers Los Rios no safeguards regarding performance, security, or compatibililty with adopted systems such as Canvas.

Inadequate support resources for faculty undermine the viability of locating and vetting digital content efficiently. Likewise, lack of media expertise can inhibit instructional quality which consequently impacts learning and accessibility. In the highly competitive virtual environment, Los Rios must consider how mediocre digital media might influence its future growth and reputation as a premier online education provider. It is glaringly apparent to modern students when digital media lacks quality or appears amateur, so enrollments could suffer if faculty have insufficient technical assistance to locate and utilize digital media effectively. Finally, there is an inherent labor cost to the faculty time involved which could be better spent working with students instead of scouting the expanse of external content or cobbling together their own digital media systems.

Facilitating Excellence

The future of Los Rios may not be entirely online, but it is unlikely to return to the traditional model of textbooks, paper, and pencil. Engagement of a generation of students that are immersed in technology suggests that technology-enhanced courses will continue long after this pandemic subsides. Students who pursue education at a Los Rios college expect digital media of similar professional quality to what they experience elsewhere.

Pursuing excellence in the classroom, whether virtual or on-ground, should not require individual faculty to struggle through the quicksand of external content providers, technology options, production techniques, legalities, and usability concerns in order to provide students with engaging digital resources. Instead, Los Rios can cultivate the environment for instructional excellence by providing both the **technology** and **supportive expertise** to facilitate these tasks and promote collaborative, efficient sharing of high-quality digital resources.

Proposed Concept

Our proposed concept is to build capacity for technology-enhanced instruction through the development of a Los Rios digital media infrastructure that will combine a multi-functional, cloud-based video platform solution with an internal professional support team. Specific features that this concept seeks to provide are:

- Flexible design with options and services that faculty can choose to suit their needs
- Technology component: video platform solution
    - Cloud-based video hosting, streaming, and management
    - Individual faculty accounts to upload, download, and manage their videos or other digital media
    - Fully automated (machine generated) captioning paired with the ability for human editing
    - Capacity for automated lecture capture that stores to faculty accounts
    - Integration with Canvas as well as compatibility with on-ground classroom use of digital media
    - Private space for faculty to store materials for instructional use that are not intended for public sharing
    - Shared space to serve as a repository of learning modules so that faculty can build from the work of their peers
    - Search engine to allow discovery of curated content and shared digital media
    - Built for interoperability (works on any device) and accessibility (universal design)
    - High-level of confidence in reliability (e.g., uptime and redundancy) to ensure media is available 24-7
    - Security features including single sign-on (SSO) to limit access
    - Honors intellectual property relationships (i.e., no transfer of ownership based on technology hosting)
- Personnel component: professional support team
    - Local professional and technical expertise that can be accessed by individual faculty or small groups
    - Coordination of digital media to eliminate duplicate effort (e.g., 12 instructors across the district searching the internet for a high-quality video on the same topic)
    - Variety of assistance that enables exemplary instruction through services such as:
        - Curation and help with locating high-quality media for classroom use from the public domain (e.g., commercial and open educational resources)
        - Consultations on video design, scripting, quality, and other aspects
        - Conversion of existing media to different formats (e.g., Canvas supported video formats)
        - Testing and validation of interoperability and accessibility of digital media
        - Development of quick tutorials and other self-service resources to help faculty become best practitioners
        - Assistance with obtaining copyright licenses
        - Primary technical support for the video platform and liaison with the vendor
    - Charged with enhancing and extending the reach of digital media through innovative uses (e.g., digital storytelling and interactive video for game-based learning)

Benefits to Students

By implementing this concept, students will benefit on multiple levels. Seamless access to engaging video and other media enhances the learning experience for students and supports achievement of learning outcomes. Their learning environment will no longer be compromised by distracting advertisements and suggested videos that frequently appear alongside publicly-hosted video (e.g., YouTube). When instructors collaboratively share videos across related courses, students gain understanding as concepts are reinforced through consistent language and presentation. Student costs will be reduced as high-quality media replaces some or all of the content of traditional textbooks. Students also benefit when the amount of time and effort that instructors spend on tasks associated with video is minimized because it frees up instructor time to focus on meaningful interactions with students.

Benefits to Faculty

By introducing a district-supported video management platform, Los Rios will eliminate the need for faculty to find a free or paid location to store video and audio for instructional use. Faculty will also be better able to secure intellectual property from the misuse and infringement that can easily occur on public sites. Automated captioning will reduce the time and effort necessary to ensure accessibility of video content. Once a districtwide repository is available for shared learning modules, faculty will be able to collaborate more easily and build upon the work of their colleagues regardless of campus or location. Beyond technology, faculty will have quick access from a cadre of digital media experts who can provide curation, best practices, innovative ideas, technical support, and other types of assistance. By leveraging external content and sharing local materials that have already been developed, faculty will have more time available to spend on other aspects of their role such as working with students and building community. Most importantly, this model will support faculty at all skill levels because internal experts can tailor services to varying needs rather than relying solely on an off-the-shelf product.

Benefits to Los Rios

By investing in this concept, Los Rios will benefit from enhancing the quality of digital media throughout its learning experiences as well as increasing efficiency in how digital media is managed across the district. It will gain a more secure and robust platform that will become a powerful districtwide resource. Through the technical support team, it will streamline the process of locating ideal external content for instructional use and build greater capacity for innovative application of digital media. By providing effective tools and services for faculty, it will encourage collaboration and foster an environment for exemplary teaching.

When students have access to high-quality media in their courses and faculty have more time to spend with them, students will be better able to remain engaged, learn, and complete their studies which has a direct impact on the level of funding the district receives. Similarly, high-quality media subtly reinforces the Los Rios reputation as a respected learning institution.

While this concept is focused on instructional use, the technology platform could also be extended for use in student services, professional development, districtwide seminars, and other areas.

Models at Other Institutions

While the specific concept described is unique to Los Rios, many institutions enable their faculty with video platform solutions and supportive expertise. The following pages showcase some of the existing models.

Samuel Merritt University - Media Library

The SMU media library is embedded as a folder within Canvas allowing easy access to video and audio recordings. Students view videos without unnecessary distractions in a mode that focuses on instructional content. For more information, see the Media Library Overview or Player Features for Students.
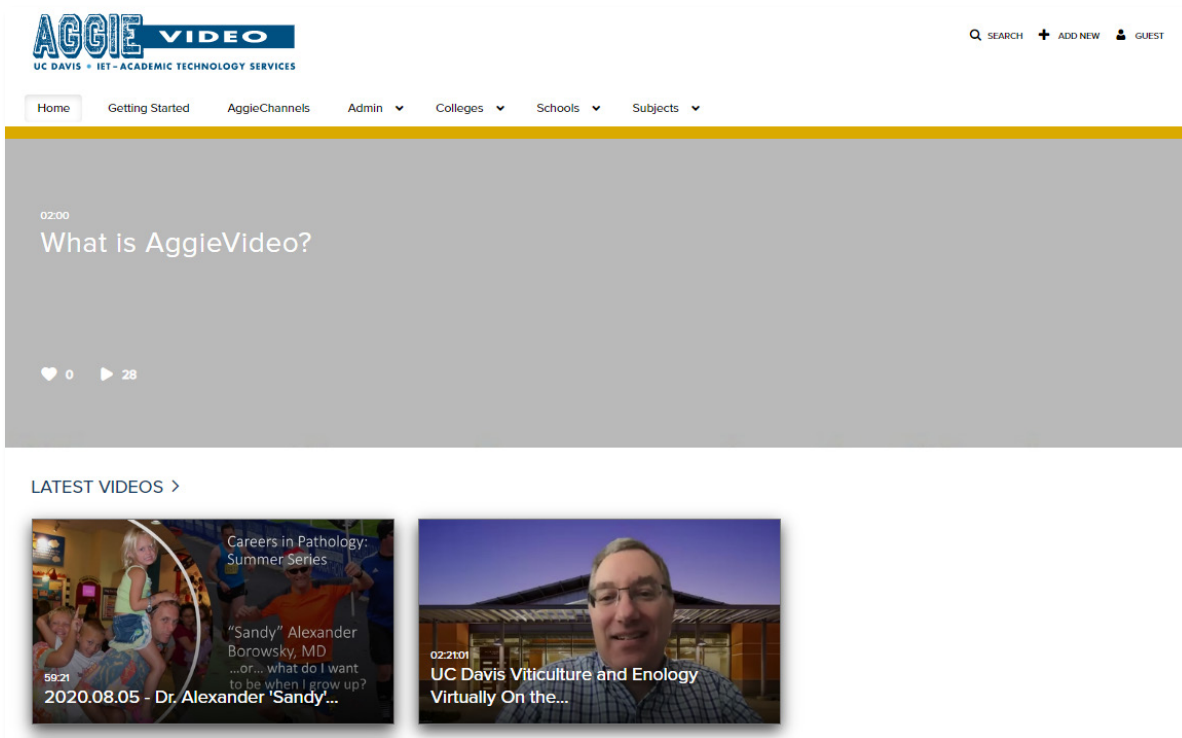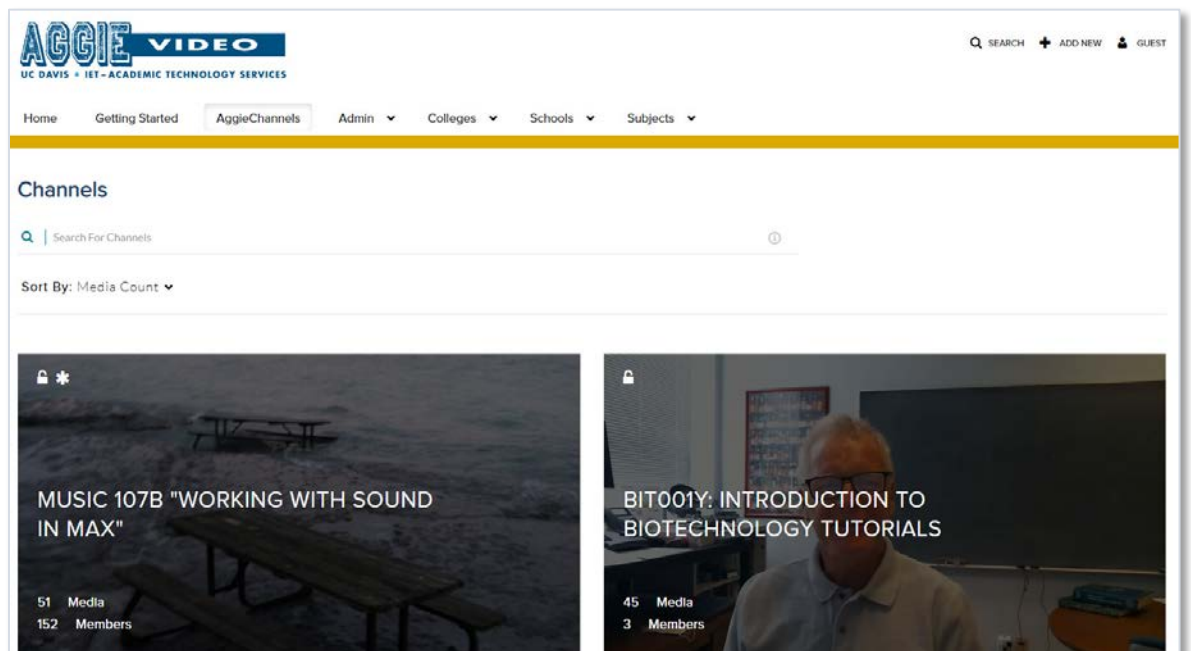
UC Davis – Aggie Video Services

Aggie Video provides faculty and staff with unlimited storage in a cloud-based video management system that includes the Aggie Video portal along with functionality for recording, storing, and captioning digital media. For more information, watch the video.

Houston Community College – EduTube

HCC has extended their video management system into a branded video portal. According to their website, "Edutube is HCC's own version of YouTube. It provides a facility for uploading a variety of media formats quickly and easily … In addition, it offers private space for faculty to store media not for public consumption in order to link it from their Eagle Online courses or Learning Web page."

The media options showcased below offer a good example of how services and technologies can be packaged to meet the varying needs of faculty. Rather than just offering training on a district-sponsored platform, the PCC technology offers support across a variety of methods.

Instructional Support

We work with faculty and departments on a variety of instructional projects. Our goal is to eliminate any barrier that technology may present, so that students can have the best learning experience possible. Whether teaching in the classroom, fully online, or a hybrid course that combines both modalities, we can assist with the planning, development, and implementation of your instructional goals.

Media Options

Instructional Technology Specialists (ITS) are here to help you decide which process is best for you and your instructional media needs. Check out this page for other media support needs, such as audio visual support or video production support.

Use Existing Media
Pick media from existing collections, like Khan Academy & Ted Talks.

Do It Yourself (DIY)
Create your own videos using your computer or mobile device.

Get help from a Pro
The Video Production Team can help you create a professional video.

Converting Media
I have media, but it's not in the right format for use in my course.

University of Wisconsin, Madison – Design Lab

The University of Wisconsin equips faculty through a team of internal consultants that support instructional use of digital media. These consultants are drawn from UW academic employees who have expertise in media, including video and audio production, graphic/web design, scientific communication, and other related topics. They provide individual appointments, custom workshops, referrals to other campus partners, and a variety of self-service resources.

DesignLab is a digital media design consulting service for students and instructors at UW-Madison. Through one-on-one and small group consultations, we are helping the UW-Madison campus work more effectively in digital media.

DesignLab has a two-part mission that includes services for both UW-Madison students and instructors. First, DesignLab seeks to expand expertise in digital media design on the UW-Madison campus by providing high-quality tutoring for all undergraduate and graduate students as well as digital design consulting for researchers in all fields. Second, DesignLab seeks to improve instruction at UW-Madison by offering curricular services and support to instructors using digital media assignments in their courses. Through these combined goals, DesignLab is contributing to the UW-Madison's central mission to provide a learning environment in which faculty, staff, and students can discover, examine critically, preserve, and transmit the knowledge, wisdom, and values that will improve the quality of life for all.
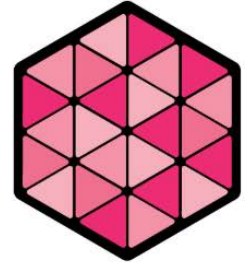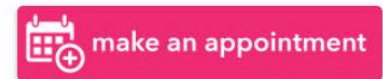

RESOURCES

Use this page to learn more about the various digital media projects that DesignLab supports. Click below to get overviews, examples, links to software support, and more.

WHAT ARE YOU WORKING ON?

- Presentations & Posters
- Infographics & Data Viz
- Imagery & Text
- Audio
- Video
- Web

LOOKING FOR MORE HELP?

make an appointment

DESIGN TOOLS & FREE RESOURCES

Expand all | Collapse all

- + Design Principles
- + Copyright / Citations
- + Colors
- + Fonts / Typography
- + Images
- + Video
- + Audio
- + Equipment for Checkout

Example Vendors

Two of the many vendors offering video platform solutions that are tailored for a higher education audience are:

Vendor	Product(s)	Higher Education Clients
Kaltura	Kaltura Video Platform (Website) Kaltura Mediaspace Video Portal (Website) Reach Captioning and Enrichment (Website) LMS Video Plugins (Website) Video Cloud for Education (Website)	UC Davis North Essex Community College Houston Community College and many others – see website
Panopto	Panapto for Education (Website) Panapto for Education (PDF Brochure)	UCLA Northwestern University And many others – see website Developed at Carnegie Mellon University

The examples above are provided to clarify the type of technology platform that is being discussed in this document. The list is not intended to be comprehensive of all potential vendors or to indicate a vendor preference.

Anticipated Costs

This concept will require both one-time and ongoing costs in the areas of personnel and technology. While the actual cost are highly variable based on vendor choice and product, the expected categories are described below.

Category/Item	Estimated Cost
Personnel (salary and benefits)	$TBD
Faculty mentor with expertise in digital media creation, captioning, or other relevant topics Technical support staff with expertise in system administration, video editing, and other related topics	
Technology/Contracted Services	$TBD
Software as a Service (SaaS) – Licensing of a cloud-hosted video platform solution (ongoing) Implementation Costs (one-time)	
TOTAL	

Contact

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