Building and Operating a Digital Media Lab
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Also available from PLA’s Quick Reads for Busy Librarians Series:

*Weeding Manual* (2016) by Holly Hibner and Mary Kelly
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Public libraries traditionally provide access to technology for their communities. This once took the form of electric typewriters, fax machines, and high-quality printing then moved on to computers, high-speed Internet access, and Wi-Fi. Now the digital media lab (DML) has emerged as the logical next stage in this firmly established evolution.

Today, patrons make creative content in innovative spaces chock full of computer hardware and software alongside audio, digitizing, graphic design, music, photography, video, web publishing, and other production equipment and resources. They use a DML in four meaningful ways:

• Curating their personal and community history such as digitizing and preserving photos, slides, and videotapes;
• Creating original digital content such as videos, music recordings, and graphic/web designs;
• Collaborating on projects through library-sponsored opportunities and informal partnerships; and
• Sharing finished work with the world for others to discover and use.

Having a DML empowers a library community to navigate and understand the sometimes bewildering technology landscape. Additionally, a DML bridges the digital divide by democratizing its tools and expanding access to them.
Imagine that the best and brightest staff members from your library gather and decide to launch a shiny new digital media lab. There’s agreement, fist pumps, and high fives all around. After this initial jubilation subsides, though, the reality comes crashing down. Now what?

The spark of an idea is not sufficient to take you where you want to go. This ‘Quick Read’ is a roadmap to the key components of building and operating a digital media lab. By sharing how-we-did-(and still do)-it strategies in these pages, we provide a solid framework for managing a successful lab that better serves your library community. Topics include:

• Developing a vision
• Creating the right space
• Arranging funding
• Hiring and training the best staff
• Buying the right equipment
• Writing policies and procedures
• Promoting the lab
• Holding popular classes and programs
• Overcoming common issues
Of course, the final route you take depends on how you apply these tips to your own unique situation, resources, and needs. Once you roll up your sleeves and get busy with all the details that this venture entails, proceed with confidence knowing that you took the time to both ask the right questions and find the best answers. And with a little creativity and chutzpah, you will overcome any limitations you encounter and bring a digital media lab to your library that your patrons will use and appreciate.

**HOW WE DID IT: A BRIEF HISTORY OF STUDIO 300**

After a successful referendum, the Fountaindale Public Library District (FPLD) in Bolingbrook, Ill., opened a beautiful new building in February of 2011. Initially, the lower level remained empty and many ideas for its future use were debated—more meeting space, an auditorium, storage—until the DML concept emerged as the leading plan. After visiting the nascent YOUMedia inside Chicago’s Harold Washington Library, the board decided to move beyond the teen-centric YOUMedia and make a DML lab to serve the entire community and all ages.

Construction began during the summer of 2012 and Studio 300 held its grand opening celebration on March 16, 2013 to great fanfare—and then promptly closed its doors one month and two days later when the entire lower level flooded following a punishing storm that dumped nearly ten inches of rain on the area.

The lab relocated to the third floor quiet reading room while Studio 300 was rebuilt. Although we couldn’t deliver all the services during this phase, we adapted the approach to maintain the momentum we’d been meticulously building before the opening. Five months later, we returned to the lower level and picked up where we left off.

Studio 300 is a lively seven-thousand-square-foot space consisting of six soundproof audio/music recording booths, three collaboration/meeting rooms (a.k.a. huddle spaces), two video/photography
production studios with one shared control room, and a large computer lab with eighteen iMac workstations, eight including dual screens. The studio also circulates a dozen MacBook Pro laptops for patron use in the spaces.

Our Macs contain an extensive collection of digital media creation software—iMovie, GarageBand, Logic Pro X, Pages—along with the full Creative Cloud with all the professional software from Adobe—Photoshop, Premiere Pro, After Effects, and others. A mix of additional software (some open source) fills in the gaps and augments the core functionality.

Materials include professional photo and video cameras, microphones, speakers, musical instruments, digitization equipment (e.g. photo/slide scanners and VHS to DVD), portable lighting, every cable and adapter imaginable, and all the related equipment to support our patron use. The video studios include two NewTek TriCaster television production systems with HD cameras. Thrown into this mix are makerspace items such as robotics, electronics, and minicomputers.

The collaboration rooms use the Steelcase media:scape display technology and furniture that allow patrons to host meetings, share content, and collaborate in-house and worldwide using videoconferencing and other meeting tools. The setup works especially well for staff and patron training. Additionally, an entire wall in each room is a whiteboard.

Studio 300 includes full-color laser and high-quality large-format printers that support a variety of paper stocks including canvas. Patrons can also avail themselves of the venerable Makerbot Replicator2 3D printer.

The Studio Services department has one full-time manager and seven part-time (25 hours per week) specialists. The department’s $20,000 yearly budget covers supplies, programming, materials, and new/replacement equipment. Computer hardware/software is folded
separately into the main IT budget.

Studio 300 averages around 1,000 unique users and circulates about 3,400 items every month. Room usage is typically 65 percent audio booths, 15 percent meeting rooms, and the remaining 20 percent for the video/photography studios. We offer up to twenty-five classes/programs monthly and join with our Children’s and Teen Services departments for additional events.

And why is our name Studio 300? Look to our library address for a clue.
Before confronting the nitty-gritty details, consider your ideal lab first. In this fantasy you can have it all. Dream big—don’t hold back! Brainstorm the boldest, brightest, biggest space you can imagine.

- What do you see? Hear? What is its ambience? Its personality and vibe? Is it visually inspiring?
- Does the space function as a hub for a diverse range of creative projects? Is it inviting, organized, and conducive to both individual and group work?
- Does the environment and people in it reflect the culture you desire?
- What skills are being learned? What classes, programs, clubs, and events are available?
- Is your lab empowering those who need more help? Or are most people already tech-savvy? Are you balancing self-directed learning...
CREATING YOUR POSITIVE VISION

with a knowledgeable, enthusiastic, and supportive staff?
- Is your space nurturing collaborative partnerships? Are people sharing tools, ideas, knowledge, and finished projects? Are you including cross-generational interactivity?
- Are you providing access to the right resources so patrons can create their own media? Are patrons reaching the outcomes they desire?
- Does your lab vision align with your library’s mission statement?

Do you have it? It’s a beautiful space, isn’t it? A dream come true for your library community. Go ahead and bask in all of its glory and heap on the superlatives: stupendous, marvelous, [insert hyperbole here]. You did an amazing job. Congratulations.

Now backcast and connect this future idea to your present circumstances. What will it take to make this dream for your digital media lab actually come true?

DRAFTING THE VISION

Refine your ideal so that it reflects your own particular community’s needs. Formulate a strategy and goal that leads to your vision. Together these serve as the frame for your plan. A sample draft:

- Strategy: To give our library community access to media creation, curation tools, and other technology resources to explore with expert guidance from staff.
- Goal: To promote digital literacy by helping people to move beyond being media consumers to becoming media producers.
- Vision: To help our patrons tell their own stories.

A large DML project might require adjustments to accommodate unforeseen issues. Defining your unique vision provides a structure that isn’t too narrow in scope. This way your plan has greater flexibility and more resilience to overcome these inevitable changes.
Your project team is your greatest source of knowledge and strength. Enlist support from every relevant department, especially IT and marketing. Who isn’t already involved and who should be? From that answer, gather four to six people and form a steering committee.

Share your vision with your library administration and board and keep them informed of trends and statistics. Pass on relevant articles, news, case studies, and other DML examples. Encourage them to attend conferences, webinars, and training opportunities or report what you discover as you expand your own knowledge. Take them along on tours of other digital media labs, online and in-person. And always show your vast enthusiasm for the project; it’s contagious!

Take the pulse of your patrons with a needs survey. Ask what they want to do with, and learn about, technology. Start offering programs and classes related to the DML services and materials you

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**Transliteracy**

Your DML can reflect the Transliteracies Research Project concept. Transliteracy is “the ability to understand and communicate—i.e., to be ‘literate’—across all communications platforms.”¹ This model may help you to pitch your vision.

1. [https://librariesandtransliteracy.wordpress.com/what-is-transliteracy](https://librariesandtransliteracy.wordpress.com/what-is-transliteracy)
will eventually offer. Bring in outside presenters as needed. Evaluate these initiatives to gauge where your community’s interests lie. Form a technology club consisting of community members and staff, and research the possibilities together.

Don’t let your digital media lab be an island. Get the entire library staff behind your vision. Show how the DML will be used by all ages and skill levels—technophobes and technophiles alike. Brainstorm ideas for possible programs targeted at children, tweens, teens, adults, and families. Make sure your entire staff knows what to expect when your lab opens and how it can complement and augment their future departmental plans as well.
What funding sources might you consider to pay for your dream digital media lab? Many libraries look for an initial cash infusion to fund the space, furniture, and equipment then draw from operating funds to round out the purchases and maintain the ongoing needs.

With both patience and fiscal prudence, a shrewd library plans a few years out to position the DML’s needed funds. Strategies include looking for underutilized funds in other areas that could be directed to build a reserve fund. Departmental budget add-on requests can serve as another method for building and funding a lab. Is there a new building or space renovation in the works? Make your lab proposal an integral part of the future planning process.

FPLD built and equipped Studio 300 using existing building fund reserves from the new building referendum. The Studio Services department staff and budget come out of the standard operating budget, as do new equipment purchases, supplies, and funding for programming. Following the flood, we were awarded a Disaster Relief Grant from the Illinois State Library to cover the deductible, and then insurance paid for the repair costs.

The Friends of the Library can be a terrific source for both initial and ongoing funds. Their mission to benefit the community as a whole means they are more likely to underwrite specific, tangible purchases,
such as equipment, over operating costs.

Researching grants could be another possible funding source. Chicago Public Library’s YOUMedia was initially funded by the MacArthur Foundation. One library took advantage of a trust that had been set up to fund new technologies. They approached the trust with their presentation and were generously awarded the requested funds.

Has your library received donations from community members or businesses that could be used to start your lab? Are there other community partnerships or sponsorships that you could pursue? Service organizations, such as Rotary, may help raise funds in exchange for promotional opportunities or naming rights. Consider teaming up with local businesses or even a national chain for cash or equipment donations.

When it comes to funding a digital media lab, libraries should do what they do best: get creative. Instead of a single funding source, look to blend a variety of ideas as mentioned along with those that may be unique to your location.
Having a clear idea of how patrons might use your lab to meet their personal and professional goals will help drive your logistics and daily operations. Your DML will engage patrons in a wide range of activities and projects. Examples include:

- Transferring VHS tape to DVD
- Recording an instructional video segment for a local business
- Drawing Manga using a tablet and illustration software
- Laying down beats, recording original vocals, then uploading the song to Soundcloud
- Creating an original model to make with a 3D printer
- Scanning pictures and creating a slideshow to celebrate a personal milestone
- Repairing a damaged photo, then surprising a loved one with a high-quality print of the restored version
- Recording a podcast
- Programming a robot to complete a task
- Designing an invitation
- Editing a video and sharing it on YouTube
- Earning a filmmaking badge as part of a scouting program
- Photographing products for an online store promotion
- Meeting with a client to discuss revamping a website
WHO WILL COME AND WHAT WILL THEY DO?

- Rehearsing with a band for an upcoming musical performance
- Printing a large poster to promote an event
- Collaborating on a school project

Most tasks focus in a single media discipline; however, some projects are surprisingly sophisticated, requiring many different skills and materials (see “Preserving Memories” sidebar). Every day in a full-fledged DML brings new, unexpected wrinkles. No matter how much you prepare, you can never fully anticipate every patron demand. Being flexible and nimble is the only way to satisfy requests.

Your DML is a potential extravaganza for entrepreneurs and small businesses that use these resources to create marketing documents and promotions; make product and service demonstrations and trainings; hold meetings both in-person and via web conferences; conduct interviews; and manage websites, including posting to blogs and producing audio and video podcasts.

Similarly, nonprofit and faith-based organizations use the lab to promote awareness, share case studies, support fundraising, attract members, and reach homebound members.

Preserving Memories
A patron visited Studio 300 with two items: a decades-old audio cassette recording of her grandfather narrating a slideshow, and the slides themselves. She transferred the cassette into a digital computer file and then used audio restoration software to improve the noisy old tape’s sound. Next, she scanned the slides and used photo editing software to enhance these digital images. Switching to a video editing program, she combined the slides with the original narration and made a new video of an event from over forty years in the past, sharing the final result on DVDs made for her family.
Studio 300 also works with local schools by hosting tours and field trips and supporting off-site programs such as STEAM nights and career fairs. We encourage teachers to assign media-based projects that their students can complete using the DML services and materials. Teachers are hesitant to assign a project if resources are unavailable; assuring them the library can assist overcomes their reluctance.

Demographics tend to be much older than most fledgling DMLs anticipate. Adult patrons are the daily majority of users. An exception would be a DML specifically targeted to younger patrons, such as a teen center. When adults use the lab, it tends to not appeal to the children and teens. The youngest patrons only use the lab in conjunction with a supervised program.

**WHAT DO THEY KNOW?**

Most patrons do not arrive with much experience or knowledge. Often they don’t know what they need to do or specifically how to do it; they just have a result in mind. Staff will need to help them get started and move them toward achieving what they want. Helping your patrons requires a variety of training methods including:

- Regular programs, classes, and workshops taught by expert staff and outside professionals
- Staff assistance in the lab (as needed)
- 1-on-1 in-depth instruction with appropriate staff members on specific topics or projects
- Online, subscription-based learning such as Lynda.com, Gale Courses, and Universal Class
- Access to owner’s manuals and instructional materials specific to your equipment, hardware and software
- Links to the best reference material on the web relevant to your DML
- Pathfinders centered on popular topics (e.g. 3D design, podcasting,
video production)
• Project sheets and videos that feature step-by-step instructions for common tasks
• Books, DVDs, and other self-directed learning resources

Teaching TV
Some patrons take a bold step toward trying something new and come to learn about TV/video production. We hold a three-hour training boot camp with a small group and follow that up with a separate one-on-one, hour-long training. This second training is less about mastering the television system and more about learning its full capabilities so the patron can better plan their production. To complement this hands-on training, we offer video-based options to expand knowledge. We then encourage a low-risk trial run before plunging into a full-fledged show. It’s a model that works well, and patrons do learn this sophisticated technology once a few productions are under their belt. Of course, staff members are around to help out in a jam, too. A regular patron remarked: “The first time I looked at the video system, I thought there would be no way I could master it. The amazing staff at Studio 300 continues to help out, and I’m quite happy with the progress I’ve made.”
ill you be using your existing staff or will you be hiring new? In either case, your DML staff needs a range of experience with a variety of equipment, hardware, software, and media production techniques. Library experience is less valuable than employing tech-savvy individuals with broad-based, real-world media production know-how.

A generalist who has mastered multiple areas may be preferable to a specialist. That reflects a far different personality—a lifelong learner who isn’t afraid to experiment, take chances, and say, “I don’t know, but I’ll find out” or better still, “Let’s figure this out together!”

DML staffers will need outstanding customer service, solid communication, and suitable training skills. It’s not enough to know this stuff; you have to be able to teach it to people of all ages and skill levels. Hire people who like to learn and share what they know.

You will need problem solvers because daily DML life is all about confronting issues, fixing things that go wrong, being patient, and explaining solutions well. The ideal candidate is curious, confident, flexible, and has a touch of bravado alongside a knack for improvisation. These people are rare—when you find them, hire them!

Additionally, if you will have multiple people staffing your lab, look for complementary skills. Collectively the group will know more and be able to assist with a wider range of patron projects.
**TRAIN 'EM**

Set the goal of having all DML staffers know how to accomplish the most common tasks and be able to use your most requested resources. Bring in outside trainers and send staff to off-site workshops. Search online for videos, podcasts, and webinars that address needed topics. Contact staff at other library DMLs as a possible training source. The Lynda.com courses are valuable to staff and patrons alike as are traditional library materials and databases. A web search provides a plethora of free online videos and a vast store of troubleshooting information with solutions to even the most vexing problems.

Each staff person should also have their own go-to skills—preferably several!—that they generously pass on to the others and your patrons, too. Encourage staff to train one another by sharing particular knowledge and working together to learn. Phase in new technology slowly so that staff can master it before training patrons. Most people learn by doing, so give your staff the opportunity for low-risk, hands-on experimentation.

Before Studio 300’s doors opened, the staff trained together. We unpacked all the equipment and taught one another how everything worked. Usually one staff person would learn something and then show all of us and prepare relevant documentation. This strategy continues today when new gear or software arrives. We also hired an outside vendor for a day-long intensive training with our sophisticated TV production system. And we all use the same training resources that are available to our patrons to learn new skills and hone existing ones.

**WHO SAID WHAT?**

Staff communication is vital to daily operations and long-term success. We minimize e-mail exchanges and instead use a monthly log to
record relevant information. The online document’s entries include equipment failures, solutions to problems, patron issues, scheduling changes, event reminders, and, of course, silly jokes. Staff members consult it at the start of each shift and contribute to its ongoing effectiveness. The log means everybody is in the know about what’s what and who’s who in Studio 300.

Cultivating Highly Creative People

Be patient as creative people work through problems in roundabout ways. Indulge them a bit and provide the space to explore what interests them. Don’t micromanage; instead create an environment that encourages and supports risk taking and uses any mistake as an opportunity to learn. Reward those who consistently demonstrate good judgment with new responsibilities that help them to grow in their positions.
ill your DML support production, postproduction, or both? A production space requires sufficient, flexible capacity to accommodate a wide range of activities—making videos, taking photos, and recording music. Postproduction needs less room and generally has computer workstations that patrons use to edit videos made elsewhere, prepare pictures in software, and mix and sweeten music tracks.

Having a full-fledged dedicated space specifically designed and constructed to serve as your DML is rare. Most libraries repurpose an existing space, such as storage, meeting, study, or other un(der)utilized space. Smaller spaces limit themselves to single projects where only individuals or small groups can work. Larger spaces let patrons spread out and encourage sophisticated tasks and more collaborative efforts.

You may have to use your imagination and use your library’s space creatively. Create a “pop-up” lab that uses an existing space, such as a meeting room (part-time, perhaps a few days per week or month). Or make it a mobile digital media lab that moves from room to room or branch to branch. Both solutions necessitate taking a portable approach to your DML, using laptops or tablets instead of desktop computers and adding rugged equipment cases to protect your investment. Both options need storage when not in use, but they require far less space. The pop-up or mobile DML is perfect for testing the idea’s viability.
and gauging community interest. If the venture is successful, you will have the impetus to push for a bolder, more permanent solution. A step up would be using a small section of an existing larger space—think computer lab or teen center. Take a hub approach where several smaller spaces connect into a central area as the Arlington Heights (Ill.) library did. Alternately, dedicate mini-DMLs in different locations by building an adult lab and then adding separate children and teen labs within their respective departments as Skokie (Ill.) did. The components placed in these areas would then reflect the needs of those age groups. Sharing a dedicated space is another option. Your DML could do double-duty by being open to adults in the morning and evening and teens-only in the after-school time slot.

**Scalability**

You do not need a full-fledged DML from day one. The DML concept is highly scalable. You can launch with a few pieces—even just one dedicated computer in the corner of a room—and then add to your services and materials later basing what you acquire on your unique patron demands. Starting with a computer, digitizing equipment and related software, USB microphone, and MIDI keyboard, alongside a few circulating cameras, tripods, and peripherals makes for a fine DML. Appealing to adults and seniors? Start with digitization. Appealing to tw(e)ens? Photography, video, and audio. Children? Animation and robotics.

**WORKSTATIONS VS. THE MODULAR MODEL**

The workstation approach means building a specific function around a single, fixed computer. For example, add a scanner to a computer with photo enhancement software to create the photography workstation, a VHS-to-DVD converter joins a computer with powerful video editing software, a small recording booth with a high-quality microphone and
musical instruments combine with a computer running recording software. You could locate each workstation in a separate space or spread them around a larger space. The advantages of this approach are lower costs due to single seat software licensing and easier maintenance because the hardware stays in place. The disadvantages are limited functionality and skewed popularity resulting in an unbalanced supply and demand.

The modular model requires every computer to support multiple purposes and hardware. Patrons check out what they need for a given task and connect it together. Recording a voice-over may only need a USB microphone, headphones, and a laptop with suitable software; however, recording a band may require three-dozen individual pieces—microphones, stands, cables, speakers, headphones, musical instruments, audio interface, and a powerful computer with professional recording software.

The clear advantage is the immense flexibility of such a system. You can accommodate almost any project that comes to your DML. Equipment moves easily and efficiently among the rooms and patrons based on specific needs. The big disadvantage of this model is it requires additional staff time and expertise to troubleshoot any problems and train patrons on these set-ups. The multiple software licenses are also more expensive, and there are increased storage needs.

Studio 300 follows the modular model. Our production spaces are empty save for furniture. Patrons book a room and check out any equipment their

Sound Advice
Allowing audio and music recording may interfere with other library operations. Typical walls and ceilings are not sufficiently soundproof and tacking a few acoustic tiles up will do very little. Solutions include freestanding baffles; portable enclosed recording booths; and permanent, semi-custom spaces, as employed in Studio 300.
DML or Makerspace?

Originally, the DML moniker meant a mostly computer-based lab approach accompanied by audiovisual production equipment, while makerspaces used technology in a DIY fabrication framework. Today, these terms get used interchangeably. To quote Corey Wittig from his ALA webinar: “If patrons are creating in the space, who cares what you call it?”


project requires. They take the equipment to the space, connect it, and get to work. When completed, they bring the materials back for staff to check in. It can be complicated, but once you assemble the same items a few times, the work becomes routine.

Our main video room is the exception to our modular approach. The cameras and TV system remain connected and in place along with overhead lighting, green and white curtains, and the on-camera furniture. Patrons check out other needed items, such as microphones, for use in this studio.

Though obviously beyond the scope of this Quick Read, take time to plan the infrastructure elements that will need attention—sufficient power, network access, HVAC, lighting, furniture, paint/decorations, sound control, equipment storage, security, and the other necessary items that make your space both functional and welcoming.
As you consider equipment acquisition, understand that patrons generally look for DML resources to:

- Add to resources they already have. For example, they may own a camcorder, but not a tripod or portable lighting.
- Have better quality or more features. They may have a smartphone camera, but wish to take pictures with a Digital Single Lens Reflex (DSLR) camera.
- Serve as a try-before-they-buy role or give access to leading-edge or high-end tools that are far beyond their current means.
- Satisfy a short-term need, such as VHS to DVD, that once used is no longer necessary to the patron.

**GEAR GOTCHAS**

Similar to the modular approach mentioned in chapter 07, an item that has a single purpose is not nearly as valuable as one that can be used in multiple ways. For example, a tripod works with both video and photography, as does lighting equipment. Contrast that to a gadget that only works with one smartphone model that will be outdated by the next upgrade. The multipurpose approach extends down to generic items such as cables, memory cards, and rechargeable batteries. All Studio 300 equipment uses AA batteries and SD cards exclusively. Who
needs five different battery types or memory cards hanging around?

Similarly, sticking with a versatile manufacturer can simplify and extend your purchases. For example, buy one brand of DSLR camera and all of its peripheral gear—lenses, flashes, etc.—will work with all models of that camera line.

That said, there are equipment manufacturers that will require you to buy all the necessary peripherals, supplies, and replacement parts from them. Claims of ease of use and one-stop shopping may saddle your DML with costly limitations. Avoid restricted systems if possible and pursue more open options that let you source what’s needed from anywhere.

Software is generally a one-time purchase but may require additional payments for upgrades. Increasingly, software companies are using a subscription model with lower initial costs and regular payments—stop paying, and the software no longer works.

Take advantage of closeouts as new models launch to stretch tight budget dollars. A slightly older version of equipment is often still amazingly powerful and useful while selling at lower prices. Don’t ignore the ancillary items that go with many purchases. A microphone is useless without its connecting cable, stand, and pop filter.

Don’t forget about the maintenance costs that ride along with the computers and equipment you buy. The purchase price is not the only one that should be considered. Be prepared for when equipment fails and is no longer under warranty or covered by insurance. You may need to hire outside contractors to fix problems your staff are not prepared to solve. Examine the merits of adding extended warranty service for high-ticket items, including buyer protection or after-care programs that are well worth the added expense.

One last consideration concerns reusing and recycling older equipment. Salvage the parts from broken gear to repair other models. Outdated equipment still does what it always did (maybe not as fast or with
all the new bells and whistles, but it’s still worthwhile). These items can be repurposed in a number of ways; for example, we took four older cameras and combined them with extra pieces to build a portable rig that goes out on the road for school and summer events.

Privacy Procedures
We protect patron privacy, and two methods assist with that goal:
• We use Faronics Deep Freeze, which protects the computers by returning them to their original state after wiping out all changes, including patron content, upon reboot. The primary downside to this system is a reboot caused by a computer crash deletes everything patrons haven’t backed up to external media such as flash drives, hard disk drives (HDD), or cloud storage. You can combat this using dedicated “thaw space” for patron use, but we do not do this to protect patron privacy. Instead we circulate and sell portable storage.
• When a patron returns any device that uses an SD memory card, we immediately erase and reformat the card. This allows staff members to verify that the item is in working order and also deletes all personal content. We do the same with flash media and HDDs.

Computers
Creating digital media content is processor-intensive. Buy the best, most powerful computers you can afford, adding more memory, bigger HDDs, and higher processor speed. Include multiple high-speed USB ports to accommodate peripherals. The specific choice is up to you and your IT department. No computer platform is trouble-free, so you will need solid internal and vendor support. We have a mix of Apple iMacs (eighteen), MacBook Pros (twelve), iPads (two), a Windows laptop (for our 8mm/Super-8 film scanner software), a Chromebook, and an Android tablet. The latter two help us to support patrons who ask for assistance with their personal devices.
SOFTWARE
Buy software that supports, complements, and augments your DML services and materials and answers your patrons’ requests. Offer a mix of basic consumer and feature-rich professional options to provide patrons with a growth path as their project complexity increases. Here are the essential DML apps:

- Animation (stop-motion and computer-based)
- Audio and music, both recording and composition
- Collaboration software, such as video conferencing
- Image tools for drawing and 3D design
- Page design and layout and other print publishing tools
- Photo organization and editing
- Video editing and postproduction
- Utilities that extend capabilities and help solve problems (for example, offer different video encoders because one may not work with a patron video, but another will)
- Any drivers and support software that your peripheral equipment needs to function correctly, such as the software that a hardware scanner may require

We budget for the majority of our commercial software licenses, both one-time and ongoing subscription fees. There is also a plethora of powerful and dependable open source software available, and the truly budget-conscious should take advantage of them. The free software appeals to many patrons who can’t afford commercial brands. Including such options on your DML computers allows these patrons to try software in the lab with assistance from staff before using it at home.

Studio 300’s modular approach means all of our computers have essentially the same software running on each machine—with separate
licensing, of course. Every hardware peripheral works with every computer, and that makes it easier for staff to troubleshoot issues. First, our IT department installs all of the software and drivers on one iMac. Next, Studio 300 staff tests everything and reports any issues. IT fixes these problems and deploys the identical installation image to every machine. We repeat the process with our MacBook Pros. Studio 300 has three computer images, one for our dual-screen iMacs, another for the single iMacs, and a third for the MacBooks. The dual-screen iMacs have some extra professional (read: expensive) software plugins that the others do not possess.

We also stay behind the bleeding edge of software and OS updates and are not quick to jump to the latest updates, opting instead to let initial kinks get worked out before we commit.

DML Staff Software
The Pinnacle Library Cooperative, of which FPLD is a member, uses the Polaris ILS for managing its catalog and patron database. We manage computer sessions and printing using MyPC/PaperCut. Studio 300 uses Skedda to manage our rooms in-house. Currently, we drive our digital signage using Risevision. Internal communication is exclusively Google (Gmail, Docs, Sheets, etc.). We have free Wordpress, YouTube, SoundCloud, and Flickr accounts.

Can Patrons Add Software, Too?
We allow patrons to download and install software, including browser add-ons, drivers, fonts, and so forth, as long as the installation doesn’t require a reboot. The Deep Freeze product (see “Privacy Procedures” sidebar) protects our computers from any potentially unwelcome activity and deletes what patrons add upon rebooting.
We also track stats using custom software written by staff. Statistics you may wish to track include:

- Monthly total of lab users by age (juvenile, young adult, adults, and older adults)
- Room usage and attendance
- Programming attendance
- Circulating equipment totals
- Non-circulating equipment totals (limited to in-house use only)
- Lab computer sessions
- Laptop checkouts
- Reference questions
- General library questions
- 1-on-1 sessions

Studio 300 also tracks cumulative total of orientations (discussed later) and blog pageviews.

**HARDWARE AND OTHER GEAR**
The computers are only part of your DML’s lineup. Consider other equipment that supports the following activities:

**Digitization**
Every DML should offer the ever-popular ability to convert analog videos, photos, slides, negatives, vinyl albums, and cassettes into digital formats. Try to include other video formats beyond the ubiquitous VHS. Many, such as 8mm/Hi8 video, are no longer sold, and you need to rely on donations and the used market to find working equipment. Get an inexpensive VHS-C adapter, too. Studio 300 recently added 8mm/Super8 film transfer equipment. Complement all of this digitizing equipment with video, audio, and photo-editing software to create complete solutions.
Photography
Avoid low-end point-and-shoot cameras as smartphones have cornered this market; however, do add smartphone and tablet accessories, such as telephoto and macro lenses, tripod adapters, and perhaps a selfie stick (or perhaps not!). Select high-quality cameras with manual settings, such as DSLRs with interchangeable lenses. Peripheral items should include other lenses, external flashes and other lighting equipment, seamless backdrops (green screen and typical portrait backgrounds), photo tents for product photography, and tripods.

Video
The same rule applies: get better equipment than what patrons may already own such as an SD card-based camcorder that offers an external microphone input. Much of the same equipment useful for photography serves double-duty for videography (e.g. lights, backdrops, tripods). Many video cameras will shoot stills, and the inverse is also true—DSLRs shoot amazing video.

Audio
Handheld portable recorders with built-in mics cover basic sound recording of interviews, live performances, and podcasts. A few models support external mics for even more flexibility and greater fidelity. Teaming up a clip-on lavaliere or rugged handheld dynamic microphone with a camcorder works well for video interviews. A USB mic that plugs into the computer functions as a simple solution for recording voice-overs and podcasts. Windscreens for outdoor use and pop filters for minimizing plosives join stands, cables, and headphones to complete the audio needs.

Music
Supporting music means expanding your audio offerings into more
professional gear. USB mics won’t cut it for many sung vocals and instrument recordings. Consider including top-notch large diaphragm condenser and dynamic mics, and team these up with external audio interfaces that provide power to those mics that need it. Choose professional interfaces with multiple inputs for both microphones and electric guitars. All this gear plugged into a computer functions as the central hub around which a group of musicians can work. Provide musical instruments, such as electric guitar and bass, electronic drums, and MIDI keyboard controllers. You will also need cables, stands, pop filters, headphones, and speakers.

Studio 300 staff created a portable rackmount rig that greatly simplifies the audio setup for our patrons while saving wear and tear on the devices, thus extending their useful lives. The enclosed rack holds the high-quality audio interface, headphone amp that supports four sets, and a patch panel for connecting mics, guitars, and speakers.

**Graphics and Printing**
Offer high-quality printing in a variety of sizes and paper—bond, cardstock, photo paper. Studio 300 also has a large-format poster printer that supports media forty-two inches wide by up to one hundred feet long, and everything in between. Along with 3D printing, libraries also offer die-cutting machines and even laser cutters. Drawing tablets are also popular with many patrons.

**Maker**
Consider soft maker items such as traditional craft supplies (including sewing and embroidery machines) and hard maker kits (including robotics, electronics, and Arduino/Raspberry Pi computers).

**Storage Media**
Circulate high-capacity flash drives (16–32 GB) and HDDs (1 TB)
for patron use. Studio 300 also sells blank CDs/DVDs, SD cards, and different capacity flash drives.

**Meeting Rooms**
Equipment is fixed in the Studio 300 Group Collaboration rooms, but we have an assortment of display adapters (e.g. VGA to HDMI) for interfacing laptop computers and tablets with media:scape. Don’t forget dry erase marker kits for any whiteboards.

**Miscellaneous Items**
Be sure to budget for cases to store gear, cable ties, audio/video adapters, smartphone charging cables, headphone adapters (¼" to ⅛") and splitters so two people can share a computer, and all the other odds and ends that support the other equipment you procure. Protect your lens investment with UV filters on still and video cameras that when damaged are inexpensive to replace—unlike the lens itself.

**Cases and Cards**
Invest in hard shell, sturdy, customizable—and waterproof—equipment cases, such as those made by Pelican. These protect your precious cargo and also don’t fit in book drops and automated material handlers. We require all equipment to be returned directly to Studio 300. Recently, an expensive camera survived a car accident because it was safely stored in such a case. Inside each case is a laminated card with a picture of everything that should be in the case on one side and procedural reminders on the reverse (e.g. circulation limits, lab phone number).

**Backups**
Have replacement parts for the critical main components of any gear you purchase, including connecting cables, SD cards, and camera batteries.
Reference Resources
Building your print and database collection around your specific hardware and software provides both your staff and patrons access to helpful training resources. Start with manuals that come with the equipment you buy. Add staff-prepared training materials, including pathfinders. Many technology books change frequently, so keeping up is a challenge, but thankfully there are also several long-lasting books on production, photography, music recording, lighting, and video editing that remain relevant and applicable for many years. Include online resources, too. We built comprehensive links to online resources that show as bookmarks in the Firefox web browser installed on every lab computer and laptop.

Stock Media
In an effort to both mitigate copyright issues and provide added value, subscribe to a number of stock media resources that give patrons use of royalty-free graphics, video, and sound and music recordings.

Future Tech
Though we’re not in the prediction business, it’s prudent to stay up to date on emerging trends. Nascent technology is definitely maturing and becoming more widely available and affordable, and this includes:
  • Virtual and augmented reality
  • Robots and more robots
  • 360° video
  • More and better 3D printers along with reliable 3D scanning
  • A flood of DIY alternatives to commercial products (e.g. home automation)
While preparing this Quick Read, we informally asked a few DML veterans to relate the worst fear they had before opening their lab. Do you recognize yourself in any of these?

**WE ARE WORRIED THAT…**

**We will be overwhelmed.**
What if users need more hands-on assistance than we are prepared to provide?

It’s true that a few patrons will require more guidance than others. Offer patrons a range of training options that help them help themselves. Emphasize that your DML is the ultimate DIY space with staff available to assist and not “do” projects for them.

**We have no idea what we’re doing.**
We don’t have staff with backgrounds in music or video production—we have librarians and part-time college students who lack any real audiovisual background.

What do you already know? Celebrate that! What don’t you already know? Get curious. Where can you find the answers? What partners
can you team up with to get these solutions? Are there other DMLs nearby or technology groups that you could tap for answers? Having a we-don’t-know-but-we’ll-find-out attitude is a key quality that you want to search for in new hires and bring out in your existing staff.

In 2015, we teamed up with Skokie (Ill.) to host a DML Unconference, and an unexpected fifty-three different libraries attended to share ideas. Perhaps you could organize something akin to this for your library and neighboring libraries?

**Our expensive equipment will get broken or stolen.**
What if we don’t consider drastic measures to protect our investment and we lose it all?

Include a few key procedures in your plans. For example, in Studio 300 we check everything out on the patron’s account and back in requiring the patron to be present during both instances. We then double-check their account to be sure everything has been returned. Of course, anything missing or not returned will go through the usual recovery and billing channels.

In three years, only twenty-nine Studio 300 items have completely failed and nearly all have been insignificant (headphones, cables, pop filters, tripod leg, UV camera filter). Other items have broken, but staff steps in to repair minor cuts and abrasions. It easy to learn how to replace screws, glue or solder a part back in place and make other trivial adjustments.

Our equipment collection is insured through the library.

**There will be too much demand.**
What if we are too awesome and can’t meet all the interest?

While lab use is quite unpredictable, the initial rush of excitement will soon settle into a more manageable state. Meanwhile, follow the ideas presented here to build flexibility and scalability into your plans.
There will be gender dominance.  
Doesn’t this space only attract men? Won’t it be really hard to attract women?  
This is a marketing and promotional issue. Develop programs that appeal to different genders and all patrons. In reality, your stats will probably be quite balanced overall.

We will be swamped with teens.  
What if only a mostly younger demographic comes?  
Unless you have a teen-only DML, you will likely be astonished by how much older your patrons will be. This is probably the single most surprising outcome reported by libraries when first opening their lab.

We won’t be able to keep up with ever-changing and expensive technology.  
There remains a large contingent of perennials that don’t change at all or change very little, and these items (microphones, basic still cameras, camcorders, tripods, lighting, cables, etc.) will continue to serve your patrons well for a long time.  
Find a colleague who already enjoys watching trends and discovering what’s new, and ask them to keep you informed. Patrons also readily offer suggestions about hardware and software technology acquisitions.

The staff will respond negatively.  
What if a few staff members don’t care for the kind of change that our DML will bring?  
Involving people in the change early on is a pivotal component to making any transition go smoothly. Identify any objections and then work through them. Technology fear is common as nobody wants to look ill informed in front of a patron. Finding ways to train and re-assure your staff is the only way to beat this common issue. Before
opening Studio 300 we used staff in-service day workshops to showcase a variety of activities: green screen, podcasting, music composition, recording, animation, and had the staff participate in these demonstrations. We continue to offer similar staff training opportunities.

Be sure that all of the library staff knows what you do in the DML. You don’t want somebody in another department saying something unfortunate, like: “I have no idea what goes on in there.” Prepare talking points for staff to use and a who-to-contact document that details which DML staff members possess what expertise. We require new hires to take the same orientation we give to our patrons. We also encourage staff meetings in Studio 300 so we can better demonstrate what’s possible, and they can in turn be helpful to patrons and share some of the excitement that is our DML. Also, we network with other departments, attend their staff meetings, and offer to serve as a resource for their programs and initiatives.

Insert your looming fear here: ______________________.
What are you going to do to confront it and make it a non-issue?

CAUTION!

Do you consider every angle before deciding on a course of action? Unfortunately, this monument to good stewardship can hold back progress as every possibility gets considered. You can’t plan for every what-if scenario—so don’t try. Rather, build flexibility into your plan so you can adjust to inevitable change as needed and with ease. You will find your way by necessity. Not everything will go as planned (duh!). And some positive things will emerge that you didn’t expect (yay!). Learn from both circumstances and apply that hard-won education to improving what you do and what you bring to your patrons.
PATRON CONCERNS

You are not alone with possessing healthy reticence about the lab. Your patrons may have insecurities that also require preparation on your part.

- **Fear of Technology**—We regularly hear “I don’t know how to do that” or “I’m not good with computers.” Despite staff working to reassure that patrons can succeed, this remains a daily challenge. Your training resources and staff participation are keys worth promoting relentlessly.

- **Unrealistic Expectations**—Patrons need direction for planning a longer-term project. Workflows can be quite complicated, and helping from the outset can offset any potential misunderstandings and disasters. Also, patrons may not realize that finishing certain projects takes more than a single session and more likely days, even weeks. For example, converting a VHS tape to DVD is a real-time process; a two-hour tape takes a bit more than two hours to burn. Find the delicate balance between encouraging them to take on the big stuff without making them feel so overwhelmed that they abandon it altogether.

- **Skepticism of “Free”**—When patrons visit the lab, often the next question is “How much does this cost?” We avoid using the word “free” and instead say, “There’s no extra charge. The entire lab and all of its resources—just like a book, DVD, or video game—are included with your library card.”

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**Make an Appointment**

Here’s an encouraging strategy to offer patrons who are working on large projects that require a substantial time commitment. Suggest they make an ongoing appointment with themselves, such as every Tuesday morning, to visit the lab and work on their project. They will eventually accomplish their goal.
Turn your attention to developing a policy and setting the procedures for your DML. You may try a more strict and comprehensive strategy at first and then scale back as needed. Rules, guidelines, responsibilities, and penalties are all important, of course, but with some tweaking and careful phrasing, these can be framed in a more positive and empowering way to encourage your patrons to experiment and learn while having fun.

Here are the areas to address and specifically how Studio 300 handles them:

- **Lab Users**
  - Fountaindale Public Library District cardholders
  - Access Pass—Allows a non-district user to essentially pay a resident fee to get the same DML privileges as our Fountaindale cardholders.
  - Non-District Users (NDU)—Limited access to the lab and equipment with advance reservations required.

- **Age Restrictions**
  - Adults aged eighteen and up get full access to computers, equipment, and spaces (see “Orientation” sidebar).
  - Patrons up to age seventeen may use the equipment and rooms when accompanied by a parent or guardian and during library-sponsored events with staff supervision.
• A parent or guardian of young adult patrons aged twelve to seventeen may choose to sign a waiver which allows the young adult to use equipment and rooms on their own without the parent/guardian present.

• Time Restrictions
  ◦ Computers—two hours a day with time extensions based on availability.
  ◦ Non-Circulating equipment—four hours a day. Equipment must remain in the lab at all times.
  ◦ Circulating equipment—three days, up to five items total. No grace periods, renewals, or extensions accepted.
  ◦ Spaces—four hours a day. Only one room per day, per patron. Groups that are “substantially the same” may not get another room by using another patron card.
  ◦ Room reservations—Up to ninety days in advance, eight hours per month. Drop-in use is unrestricted based on availability.
  ◦ Hours—Studio 300 is open sixty-two hours a week. It opens one hour after the library and closes thirty minutes before the library closes. The last half-hour is often needed to check in, clean, and store all the equipment returned at the end of the day.

• Task Restrictions
  ◦ Computers are for media production only. FPLD has an additional computing lab available to patrons with more general computing needs.

• Responsibilities
  ◦ We require the patron’s physical library card at all times (or the Cardstar smartphone app).
  ◦ The cardholder who checks out equipment and/or a room is fully responsible for any damage, loss, or misuse, and is also responsible for the activities of all other group members.
  ◦ FPLD requires a completed and signed waiver when checking
out equipment and rooms. These waivers reiterate basic rules and signing one acknowledges that patrons understand their responsibilities (more about this later).

• Fines and Restrictions
  ◦ Rooms may not be left unattended.
  ◦ Some equipment requires additional training before use.
  ◦ Credit card authorization—for circulating equipment valued beyond $750.
  ◦ Circulating items—$5/day overdue fine per item. After seven days, the patron is billed in full, and the item is nonreturnable.
  ◦ $25 fine for items not returned directly to Studio 300 staff.

Orientation
Studio 300 requires all patrons who wish to use the space and check out any equipment to attend a mandatory orientation. The thirty-minute program provides an overview of policies and procedures, details the patron’s responsibilities, and helps introduce the many resources available for their use.

This might sound like a negative, but experience shows that with the right focus, the orientation is essentially a marketing vehicle. Many patrons visit the DML with one or two (often rather fuzzy) notions of what they can do. Sharing how the lab works and what’s available actually expands most patrons’ ideas of what’s possible. The orientation gets patrons excited about Studio 300 and subtly lets them know the rules and what’s expected of them while they are using it.

On the more serious side, it also serves as the warning for issues, behavioral and otherwise. Studio 300 has a zero tolerance policy. A single infraction, and the patron is asked to leave for the day; their warning was during the orientation. We started this policy in response to a few escalating patron issues. This zero tolerance tactic brought the lab back into control quickly and is a policy that serves us well with patrons who might try to push the limits.
WAIVERS
The entire idea of requiring patrons to sign a waiver seems against what a public library is all about. But a case can be made that, due to the potentially large cost of DML equipment and rooms, the waiver may make sense for you procedurally. The language used in the waiver would typically be the same as in your policy. Studio 300 uses three different waivers:

- **Equipment and Spaces**—covers the room and associated non-circulating equipment. Patrons fill this form out every time with their name, card number, email, and phone number and sign to acknowledge their understanding of the waiver language.
- **Circulating Equipment**—carries the contact information, lists the items and their value, and due date along with the waiver language below which the patron signs. It may seem a tad overkill to sign a waiver for a $15 flash drive, but rather than pick and choose what requires a signature, we go with a blanket waiver policy; everybody signs.
- **Parental**—gives a youth, aged twelve to seventeen, pre-approved access to the space and its equipment in the parent’s/guardian’s absence. Once the parent/guardian signs the form, we link their accounts in our software so that when the youth wishes to use the lab, any equipment gets checked out on the parent’s/guardian’s linked account.

TRACKING ELIGIBILITY
We were fortunate to have an available and customizable field in our database software to flag patron accounts with the various settings we use:

- Studio 300 Orientation Completed
• Studio 300 Orientation Completed (NO WAIVER) — Underage patrons whose parent/guardian did not sign a waiver. Often this is for an eleven-year-old on the cusp of being eligible.
• Studio 300 Parental Waiver Signed (PARTIAL) — Gives the patrons aged twelve to seventeen access to only non-circulating equipment and the rooms.
• Studio 300 Parental Waiver Signed (FULL) — Gives the patrons aged twelve to seventeen full access to the lab and circulating equipment with the parent/guardian fully responsible.

A “Notes” field in our patron database records any special information related to an account, including credit card authorization information (see “Credit Card Authorization” sidebar).

The library also takes patron photographs that stay in the database as an added security measure. Studio 300 requires an e-mail address notification in the patron’s account because the short loan periods require a fast way to communicate with patrons.

### Credit Card Authorization

For circulating item(s) that total in excess of $750, we require a credit/debit card authorization—a temporary hold on the amount. The majority of our circulating equipment is below this $750 threshold, and only one item—a DSLR camera—triggers this procedure on its own. This also occurs when a patron takes out multiple items that total beyond the threshold. Once the patron returns the equipment, we release the authorization and their credit/funds get returned to them. If the equipment does not come back, we can authorize the full amount of the charge.* We record the authorization number in their account and do not store the actual credit card number. We discourage patrons from using debit cards because banks are notorious for not releasing the funds promptly.

* We’ve never done this!
COPYRIGHT NOTES

It’s important to understand copyright basics, including the Fair Use section. To protect your library, consider posting warnings on and near equipment that could be used for possible copyright infringement. The basic warning is something along these lines:

Notice: The copyright law of the United States (Title 17, U.S. Code) governs the making of reproductions of copyrighted material. The person using this equipment is responsible for any infringement.

At FPLD, we go a step further by adding the following language to our policy:

Content creation must conform to legal/copyright standards. Each patron is personally responsible for knowing the copyright status of any music, video, photography, or other graphic material included in their digital media projects.

As mentioned earlier, it is good practice to provide access to royalty-free stock media resources that your patrons can use without worrying about the copyright status of the media.
As you open your new DML, you’ll want to hold programs that inform patrons of the many resources available. Instead of offering video production on the first day, develop programs for groups such as seniors, educators, youth leaders, small businesses, and so forth that highlight general procedures and feature a wide range of services and materials. Gradually roll out the more specific classes that center on what your lab offers.

Later, highlight unique equipment and/or software with classes, always emphasizing the practical application of the newly learned skills. Adobe Photoshop, photography, DSLR basics, animation, 3D design/printing, robotics, blogging, digitizing, graphic design, TV production, video editing, audio recording and podcasting, and music production are perennial favorites in Studio 300, and we hold these classes regularly.

Ask your patrons to suggest their areas of interest. Refer back to your initial patron survey results from before you started your DML. Also, research technology to learn what other people are doing with it and how you might apply their ideas to your programs.

Take note of the typical challenges or repeated struggles patrons face, and then offer classes to help solve those recurring issues. Once, a patron came in with ten thousand photos on her phone and wanted to squeeze even more pictures onto it! When we discovered she’d never
saved her precious images anywhere else—aha!—that generated a class idea about how to back up your mobile device.

Studio 300 staff members frequently discuss topics to explore. These ideas originate from specific interests or a problem-solving perspective. Meeting with other departments (teens and children) is another productive way to plan program ideas. And it’s frequently worthwhile to peek at what activities other libraries are pursuing to see if any fit in with your goals. Visit the Studio 300 blog, YouTube channel, and Flickr page for additional programming insight. (See “Resources” starting on page 60.)

Patrons respond favorably to our themed weeks, such as TV & Video Week, Photoshop Week, and Music and Sound Week. All of the scheduled classes fit the week’s theme and range from basic to more advanced topics. These weeks may fit alongside other library events, initiatives, or seasonal tie-ins.

Try these open lab ideas:

- **T(w)een Geek Out**—Close the DML to adults and allow only t(w)eens access to the lab resources following the HOMAGO approach.  

- **unLAB**—Revolve around project-based experimentation and learning. Similar to the above Geek Out, but targeted at adults. Staff prepares dozens of step-by-step project sheets on a variety of popular topics such as taking green screen photos, creating a ringtone, working in Photoshop, making an animation, and others. Patrons select and complete projects at their own pace with staff available to guide.

- **Digital Date Nights** (e.g. Daddy-Daughter and Mommy-Son)—Get families exploring media production together.

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Scheduling programs at different days and times will attract different age groups. We often schedule adult programs to meet during both the day and evening.

The most frustrating aspect of programming is its unpredictability. One class may bring in large attendance, another none. The first time you offer a class it’s a huge hit, but the next time you run it, the numbers aren’t there. Classes with a clear focus that promise tangible takeaways are usually better attended. Drop-in, open lab, or exploratory programs tend to result in lower numbers but offer a richer experience for the patrons who do attend. The only way to know what works best for your library is to test ideas a few times.

PATRONS HELP ONE ANOTHER
Does your lab support patron interaction? While most individuals and groups will work on their own, collaboration does occur as people see and hear what others are doing. Hold networking events to encourage this behavior. Your staff can also act informally to bring patrons together. Studio 300’s bulletin board, Patron Connections, allows our users to post a flyer asking for project help, which facilitates more patrons teaming up to learn and work together. Furthermore, both artist-in-residence and mentorship opportunities can provide more expertise to your patrons while building the local DML community.

FUTURE PROGRAMS
There are many new ideas emerging for both established and fledgling DMLs to explore. The natural extension is to capture and present what your patrons create. This may be as simple as a patron showcase event featuring DML-produced artwork, video screenings, and musical performances. Supporting self-publishing efforts is another possibility. Three inspiring ideas:

• Escondido (CA) Public Library’s LibraryYOU concept encourages
patrons to share their local expertise by making their own content—books, e-books, podcasts, and videos—and adding it to the library collection. ([http://libraryyou.escondido.org](http://libraryyou.escondido.org))

- Madison (WI) Public Library’s Yahara Music Library shares music and supports musicians from the local music scene. Cardholders can stream and download this content. ([www.yaharamusic.org/about](http://www.yaharamusic.org/about))

- The always innovative Skokie (IL) Public Library combines STEAM and DML/Maker ideas into a unique initiative called the BOOMbox, an “experimental space designed to facilitate learning for all ages.” ([https://skokielibrary.info/services/boombox](https://skokielibrary.info/services/boombox))

**PROMOTING YOUR DML**

Use a variety of promotional tools to share your DML’s story: newsletters, postcards, flyers, signage (including digital), advertising, publicity, web promotions, blogging, social media, and exhibiting at area events such as schools, small business expos, local service organizations, and everything and everywhere in-between. Prepare a brochure or series of brochures about your space and its resources, and slant them toward different groups (e.g. educators, nonprofits, faith-based organizations, entrepreneurs). Naming your DML is another important aspect of your overall marketing strategy. Will you design a logo? Consider giveaways and swag—promotional magnets, screen cleaning cloths, mouse pads, and branded flash drives.

Be a strong part of your library’s overall web strategy. For example, we use the Studio 300 blog to highlight upcoming programs, new equipment purchases, software tips, and to share completed patron projects. Also, the blog hosts our monthly technology podcast and a regular podcast for movie lovers, *Popcorn Diaries*, produced by two Studio 300 staff members. The blog also details our lab resources—equipment,
software and staff—and includes links to our YouTube and Flickr pages.

Complementing other library programs is a surefire way to spread the word. For example, FPLD held a large Star Wars event. The entire library was involved and patrons could participate in a variety of film-related activities. Studio 300 produced lightsaber photos during the event (see “Green with Envy” sidebar), so community members who hadn’t yet visited the lab now had a reason to stop in. Staff talked about the space and its resources while patrons waited for their photo to be taken.

Studio 300 staff members also make promotional videos for large events and library initiatives and produce short videos that highlight these events afterwards. Recently, we began using YouTube to live-stream large programs, such as our Genealogy Day, as a way to both promote Studio 300 and support library-wide goals. All of these examples showcase the projects that can be made and the staff expertise available to patrons in our DML.

Patrons participating in our Summer Adventure program complete activities to earn points. What might one activity be? Tour Studio 300 and earn a point.

**THE LAUNCH**

A unique space deserves a grand opening celebration with speeches by prominent guests, entertainment, food, and tours. Before the Stu-
dio 300 launch, we held several sneak peeks for our board, staff, and patrons. These programs demonstrated audio recording, green screen techniques, music composition, Photoshop, animation, and more—all with the intention of showing the possibilities of what could be done in the DML. After each preview, we distributed a survey for patrons to indicate what they wanted to learn. Their responses helped significantly with program development and future purchases.

We didn’t reveal any pictures of the completed lab leading up to our opening, preferring to debut Studio 300 on opening day. To build buzz, we placed advertising, produced a teaser video, were featured in news stories, spoke at any local organization that would have us, created talking points, had staff wear shirts that said, “Ask me about Studio 300,” and promoted relentlessly in our newsletter, on social media, and with signage around the library. We even rented a billboard along the busiest road leading into town, promoting our opening. It was terrific fun building up the name and getting the entire community excited about what would soon be available for them to use. The result? Our grand opening celebration hosted nearly a thousand visitors.

PROFILES IN ACTION

As the DML concept penetrates deeper into our public library world, exciting success stories emerge regularly. Perhaps your lab will be next! Meanwhile, here are a few profiles of DMLs that you should consult to further your education.

• Skokie (IL) Public Library is one of the first DMLs and to whom we owe the largest

If You Build It...

…everybody will want a tour.4 We do a lot of tours, impromptu, informal, and formal. It is, of course, the best way to promote your DML. And if you’re ever in the neighborhood, stop by Studio 300 for a visit. It’s worth the trip!

4. Actually Mick Jacobsen’s (Skokie, IL Public Library) joke that he shared at a DML Summit Unconference in 2015. But it remains true nonetheless.

- The Arlington Heights (IL) Memorial Library started one small lab as a proof of concept and then built their larger hub during the library’s renovation project. Visit them at www.ahml.info/studio.
- Ela Area Library (Lake Zurich, IL) stands as a fine model of doing more with less. This plucky group of adventurous librarians transformed two small rooms to create a thriving lab. Check them out at http://eapl.org/DMLs.
- The Barrington (IL) Area Library is another success story with separate digital and maker labs. Read an article about them at http://ideas.demco.com/blog/makerlab and visit their website at http://barringtonarealibrary.org/digital-studios.html, too.
- The Madison (WI) Public Library Bubbler (http://madisonbubbler.org) is worth noting as are the teen-centric The Labs at Carnegie Library of Pittsburgh (Penn.) (www.clpgh.org/teens/events/programs/thelabs).
- Finally, this Studio 300 article features two patron profiles (http://ideas.demco.com/blog/patrons-heart-studio-300).
The vast majority of your patrons will be quite excited to be using the lab and will therefore be cooperative. Because you are often helping them solve technology challenges, they are, on the whole, quite grateful for your assistance. Despite your best efforts, however, there will be days that try your patience, and the lab will cease to live up to your original vision.

Problems happen. A computer could crash and take a patron’s project with it, their time wasted. Offensive lyrics—that appeal to some and enrage others—may scream forth when a soundproof door opens. And there are those who continuously test your procedures and policies. The most common infractions include:

- Food and drink in the lab
- Behavioral issues (“pretend” fighting, unwanted touching, public displays of affection)
- Offensive or inappropriate language
- Misusing or abandoning equipment
- Ignoring room capacities
- Not minding reservation times
- Vandalism and other intentional damage
- Intoxication

You will need to develop conduct policies that combat these issues.
and impose appropriate penalties for non-compliance. At FPLD, minor infractions usually result in being asked to leave for the day; bigger problems generate a week suspension. Major infringements can result in up to a six-month suspension.

Endure these inevitable pitfalls by setting a positive example and working to create a welcoming, creative environment. Is your staff genuinely enthusiastic to be helping your patrons? That kind of attitude touches everyone in a constructive manner. Train your staff to deliver excellent customer service. Help them to know when it’s the right time to bend the rules and be mindful of applying fair exceptions.

FPLD has a dedicated building security team. They patrol the lab regularly and also call to inform staff about something witnessed on the lab’s security cameras (e.g. eating or rambunctious behavior), and then Studio staff takes care of the matter. The security team also provides assistance for issues that we are not comfortable handling ourselves.

**BLACK BELT TIPS**

Warren Graham, a.k.a. the Black Belt Librarian, suggests that you practice a quiet awareness of what’s happening in your lab.\(^5\)

Walk around. Listen. Pay attention. Not only will you discover issues that need to be addressed, but, on a more positive side, you may notice a patron struggling with a project. Though this patron may not have asked for help,

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**How to Say No**

Graham also suggests that you don’t apologize or mention any specific rules or policy points. Just say: “The library doesn’t allow that.” Then move on without lingering and waiting for compliance. Alternately, say: “I know you didn’t know, but...” and then describe the issue. For example, “I know you didn’t know, but you can’t eat food in Studio 300.”

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\(^5\) [http://blackbeltlibrarians.com/drupal/](http://blackbeltlibrarians.com/drupal/)
he or she will gladly accept assistance when you step up and offer it.

When enforcing the guidelines for disruptive behavior, Graham urges being consistent. Often saying “no” is better and easier than giving in. That said, you do have to weigh the pros and cons and treat each person and situation on its own merit and circumstances.
Are you excited about the prospect of bringing a digital media lab to your community? Use the information in this book to make that happen. Remember, taking baby steps is perfectly acceptable, and so is starting a crazy by-the-seat-of-your-pants extravaganza. Or perhaps something in-between is more to your nature.

Whatever you decide, buckle down and use the resources you have at your disposal and get started today. Enjoy the effort it takes to explore and realize this important adventure, and be sure to share your story as your vision takes shape and takes off.

Much success to you!

Jeffrey P. Fisher
September 2016
Fountaindale Public Library
Studio 300 Policy - http://fountaindale.org/policies/studio-300-policy
Studio 300 Blog - https://fplstudio300.wordpress.com
Studio 300 YouTube - www.youtube.com/user/fplstudio300
Studio 300 Flickr - www.flickr.com/photos/fplstudio300
Studio 300 SoundCloud - https://soundcloud.com/fplstudio300

Digital Media Labs
Anythink - www.anythinklibraries.org/thestudio
Arlington Heights Public Library - www.ahml.info/studio
Barrington Area Library - www.barringtonarealibrary.org/digital-studios.html
Carnegie Library Pittsburgh - www.clpgh.org/teens/events/programs/thelabs
Ela Area - http://eapl.org/DMLs
IdeaLab - Denver - https://teens.denverlibrary.org/about-idealab
Madison Bubbler - http://madisonbubbler.org
Pop-Up Podcast - www.popuppodcast.org
Skokie Public Library (https://skokieliibrary.info/services/computers-technology/digital-media-labs) and their BOOMbox (https://skokieliibrary.info/services/boombox) and a PLA podcast about it (http://publiclibrariesonline.org/2016/04/the-boombox-at-skokie-public-library).
YOUMedia - Chicago - www.chipublib.org/browse_audience/youmedia
Patron Projects in PAC
Yahara Music Library - www.yaharamusic.org

Sound Control Solutions
Freestanding acoustic control - www.auralex.com/products
/absorption/freestanding
Whisper Room (www.whisperroom.com) or Vocal Booth (www.vocalbooth.com)
Noise Barriers - www.noisebarriers.com

Computers / Software / Hardware
Adobe Creative Cloud - www.adobe.com/creativecloud.html
Cardstar phone app - www.cardstar.com
Deep Freeze - www.faronics.com/products/deep-freeze
Newtek Tricaster 40 - TV Production - www.newtek.com/products
/tricaster-40.html
RetroScan - 8mm/Super8 Film - http://moviestuff.tv
Risevision - Digital Signage - www.risevision.com
Skedda - Room Scheduling/Booking - www.skedda.com

Equipment Suppliers
American Music Supply - www.americanmusical.com
B&H Photo-Video - www.bhphotovideo.com
Makerbot 3D Printer (http://store.makerbot.com/replicator) &
Thingiverse models (www.thingiverse.com)
media:scape - Steelcase - www.steelcase.com/products/collaboration
/mediascape
PhotoJoJo - http://photojojo.com
**Equipment Protection**
Protecting your gear - a Studio 300 case study - [https://fplstudio300.wordpress.com/2015/11/18/protecting-your-gear-its-no-accident](https://fplstudio300.wordpress.com/2015/11/18/protecting-your-gear-its-no-accident)

**Programming Ideas and Such**
Code Academy - [www.codecademy.com/#!/exercises/0](http://www.codecademy.com/#!/exercises/0)
Content Rules by Handley & Chapman - [www.contentrulesbook.com](http://www.contentrulesbook.com)
Creative Programming - [http://create.coloradovirtuallibrary.org/creative-programming](http://create.coloradovirtuallibrary.org/creative-programming)
50 Ways to Tell a Story - [http://50ways.wikispaces.com](http://50ways.wikispaces.com)
Geek the Library - [www.facebook.com/geekthelibrary](http://www.facebook.com/geekthelibrary)
Libraries = Education (www.valeriegross.com/Home_Page.html) and a PLA podcast on this subject with Valerie Gross ([http://publiclibrariesonline.org/2015/12/fyi-002-valerie-gross](http://publiclibrariesonline.org/2015/12/fyi-002-valerie-gross))
Playing with Media by Wesley Fryer - [http://showwithmedia.com](http://showwithmedia.com)

**Stock Resources**
Archive.org - [https://archive.org/details/prelinger](https://archive.org/details/prelinger)
Audio Blocks - [www.audioblocks.com](http://www.audioblocks.com)
Digital Juice - [www.digitaljuice.com](http://www.digitaljuice.com)
GraphicStock - [www.graphicstock.com](http://www.graphicstock.com)
Video Blocks - [www.videoblocks.com](http://www.videoblocks.com)

Security
Black Belt Librarians - http://blackbeltlibrarians.com/drupal

DML Case Study
Patrons at Heart of Studio 300 - http://ideas.demco.com/blog/patrons-heart-studio-300

Training
Adobe TV - http://tv.adobe.com
Gale Courses - http://solutions.cengage.com/GaleCourses
Media College - www.mediacollege.com
LearnFree - www.gcflearnfree.org
Lynda.com - www.lynda.com
Thanks, of course, to PLA for supporting this Quick Read with extra special mention to Kathleen Hughes who believed in the project from the start and applied her skillful editing to shape my workmanlike prose into the book you now see.

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