# PLANNING GUIDE: DIGITAL CREATION & LEARNING SPACE

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Creating a new learning space is a great first step in offering programs and services that address 21st century skill development. One of the major perspectives to be mindful of while planning and thinking about such services and related facilities is that programmatic considerations should always drive the design for the space. That may seem obvious, but as the planning for details, space, etc. moves forward it will become even more evident.

**I. Library & Programmatic considerations:**

- Why does your library desire to have this type of programmatic focus and space? What drives this interest/project?
    1. Learning oriented goals, objectives and vision
    2. Desire to reach youth and teens with more effective services
    3. Want to have a cool place for all ages to experience
    4. Need to address the perspective of 21st century skills learning as described in the IMLS report: Museums, Libraries, and 21st Century Skills http://www.imls.gov/pdf/21stCenturySkills.pdf
- Are you planning on offering learning opportunities for all ages? Specific ages? If specific, what age group (e.g., 13-18, etc.)?
- How often do you hope to offer these learning opportunities (e.g., daily, weekly, monthly, quarterly, etc.)?
- Are there only certain locations that will offer these opportunities? If so, what are they?
- Who (i.e., what positions) and how many staff will be involved in working with digital creativity learning?
- What is the ongoing budget support for this service? Is this a sustainable effort? Is it an innovative project to test out?

**General spacing considerations:**

All square footages (SF) listed here are recommended estimates. Square footage allotments may fluctuate based on situation and need.

- Stage or Staging area (200 SF)
    - For activity, instruction, white board, projection screen usage and/or platforms for staging (acting, full motion filming)

- Public Technology clusters and/or computer workstations (40 SF each)
- Teaching/learning and/or Help station/cluster (50 SF)
- Publicly available storage (min. 50 SF)
    - For props, costumes, miscellaneous equipment such as cameras, tripods, microphones, speakers, drawing pads, etc.
- Closed storage (40 SF)
    - Lockable storage (cabinets, closet, etc.)
    - This type of storage area is typically reserved for technology and big ticket items, such as instrumentation panels for networking, lighting and sound, expensive and sizeable cameras, portable LCD projectors, HVAC control, etc. It is similar to a network closet with a little more purpose and room for things other than network racks.
- Storage for tables and chairs (100 SF)
    - This is most often used in a multipurpose type of space utilization, but it can also apply to a more permanent space.

**Scenarios:**

The following outlines a few different space scenarios. Again, square footage (SF) allocations depend quite a bit on what the goals and objectives are for the service.

- A fairly permanent and/or multiuse space would require around 800 SF of overall space. This would include:
    - 10 x 20 staging area (200 SF)
    - 8 hardwired or laptop workstations requiring 40 SF each (total of 360 SF)
    - teacher/leader workstation (50 SF)
    - public storage space (50 SF)
    - private storage space (40 SF)
    - table and chair storage (100 SF)
- A portable setup/programmatic service would require at least around 300-400 SF. This would include.
    - 5 x 10 staging area (min. of 50 SF)
    - 6 laptop workstations requiring around 35 SF each (total of 210 SF)
    - combined teacher station/public storage space (50 SF)
    - table and chair storage (100 SF)

- computers should be connected via a wireless network, so there is little need for private storage
- *Note: you can create a single workstation digital creativity corner if you so choose.*

**Equipment considerations:**

- Computers (hardwired and/or laptops, Macs or PCs)
- Flat bed scanners
- Digital cameras (still and video)
- Photos/Video with Smartphones
  - Apps for iOS & Android devices**:** Photoshop Express, Pixlr-o-matic, Magisto, Splice
- Digital Journaling/Storytelling with Smartphones
  - Apps for iOS & Android devices**:** Evernote, Microsoft OneNote, Adobe Ideas Digital Sketchbook (iOS only), Day Journal (Android only)
- READY Animator portable animation station
  - For more information see http://www.readyanimator.com/
- Green/blue screen (purchase or create)
- Youth Digital Arts CyberSchool (courses & software)
  - For more information see http://www.ydacs.com
- Software
  - Apple (iLife: iPhoto, iMovie, Garage Band): http://www.apple.com/ilife/
  - Adobe (Creative Suite): http://www.adobe.com/products/creativesuite/
  - Microsoft (Office Suite): http://office.microsoft.com/en-us/default.aspx
  - Open Source:
    - Open Office (office suite): http://www.openoffice.org/
    - Gimp (photo editor): http://www.gimp.org/
    - Audacity (music/podcast editor): http://audacity.sourceforge.net/
    - YoYo Games (game design): http://www.yoyogames.com/make
    - Alice (game/interactive programming): http://www.alice.org/
    - Scratch (game/interactive programming): http://scratch.mit.edu/

- Input tools and devices (e.g., white boards (small & large), markers, figurines, stencils, drawing pads)
    - For more information see: http://www.wacom.com/en/us
- Sound system
    - Consider adjustable sound controls and speakers in the ceiling or walls
- Sound
    - Includes microphones, headphones, speakers (attached to each computer/workstation)
- Screens
    - Includes projection screen(s), SMART Board(s), etc.
    - For more information see http://www.smarttech.com
- Projectors
    - Includes portable (e.g., http://www.epsonprojectors.com/mobile_1715c.jsp) and mountable
- Lighting system
    - Should include controls for acting or positioning of full motion scenes or studio settings of various types – possibly positioned in a small staging area

**Furnishing considerations:**

- Flexibility and mobility is the key to all furnishings. Can they be moved, reconfigured, etc.?
    - Strongly consider workstation tables and task chairs with casters.
    - Storage units with lockable casters should also be considered when appropriate.
- Workstation tables should have ample room for scanners or other materials.
- Tables should be able to accommodate stop motion animation and allow for constructions with blocks, Legos, figurine placement, etc.
- Stools and/or chairs should be portable, durable, and ergonomics. Seating should coordinate with the other elements of the space.
    - There may be a need for a few high-end chairs for workstations that require a considerable amount of sitting time.
- Some type of instructor/leader podium workstation will be needed, and again this should be flexible/mobile and could also contain some storage

**Space construction considerations:**

- Heating and cooling
    - The biggest issue with heating and cooling is noise level. Sometimes heating and cooling systems create an inordinate amount of noise.
    - The other issue to consider is the amount of heat generated by computers, other technologies, and having a large number of people in an enclosed space. This can generate an imbalance in temperature that will need to be adjusted as appropriate. Make sure that the space has its own thermostat. If it doesn't, make sure staff members can easily control the rising temperatures.
- Lighting
    - It is important to have a variety of adaptable lighting.
    - It is imperative to have good indirect lighting in the staging area.
    - It is advisable to maintain low levels of lighting in the learning/creating space – the space with most of the computers, etc. Low and indirect lighting is preferred here.
    - Note that some lighting systems can give off additional heat, so that should also be considered.
- Flooring
    - Carpet tiles are a good overall recommendation for most of the area. Carpet is especially useful in sound and noise management and the tile format will allow for easier long-term maintenance.
    - A different type of flooring might be considered for the staging area. Such flooring should allow for movement of people and objects when acting or creating a more motion-oriented piece. Options might include recycled rubber, wood with cork underlayment, cork, etc.
- Wall color, décor, etc.
    - White or off-white walls are recommended. You'll want something that reflects and holds light well.
    - If desired, a chroma-key green or blue screen color can be painted on one wall or on a portion of a wall. A piece of fabric in the appropriate color can also be used.
- Noise and sound
    - There are various ways to tackle noise and sound absorption in a space. Baffling is one method. Sometimes a fabric covered wall or insert on a wall with a Styrofoam center will do. There are many solutions depending on your situation with construction and budget.

**Expense considerations:**

Budget is a big factor and takes a considerable amount of thought when introducing a digital creation space and service. It's fine to fly by the seat of your pants as long as that's the understood method by which the library intends to operate. That being said, the recommended course of action involves some thoughtful planning and incorporating a budget line specifically dedicated to this space and service and its future development. Many digital creation spaces and programs exist and thrive with just a minimal number of computers, software, equipment, a great deal of ingenuity, and a few dedicated and talented staff members.

It is highly recommended that a progressive plan be developed so that these services can be offered as pilots for two to three years in order to try a variety of digital arts and services with different audiences. Such "testing" allows the organization to get a feel for things and get buy-in from staff and the public.

An important expense to consider is the initial creation of the physical creation space as well as the ongoing evolution and upgrading of the space. This should be built into the budget and will help a library adapt to unforeseen issues, problems and/or new technologies or activities. To cover this, a library should plan for approximately 5-10% of the original construction costs.

- **Technology budget** **$5,000 - $100,000**
    - Depending on size and scope, this number can vary greatly.
    - One key point to consider is that if a library puts $100,000 into technology it needs to make sure that there is ongoing budget for technology refreshment and replacement. In other words, is there a continuing effort and budget line for this programmatic service?

- **Ongoing maintenance** **$2,500 - $50,000**
    - Again, depending on size and scope, this number can vary greatly.
    - **Maintenance recommendations:** The technology needed for this service will require a consistent amount of care that can be incorporated into existing computer services or information technology competencies and routine. Plans should be made for incorporating this responsibility into existing computer services or information technology department either with a comparable staff allocation or with an outside contractor who works with both tech and programmatic staff.
    - **Tech/IT Staff competencies**: Tech staff needs to have adequate skill levels and interests. Because Apple provides some of the best hardware and software options for this type of programming, it can sometimes be a stumbling block for PC/Windows based IT

departments. If this becomes an issue, weigh the costs and benefits of going with PC vs. Mac. You may also want to investigate options for using an outside service or consultant.

- **Equipment care and feeding:** The rule of thumb here is to insist that when technology/equipment is acquired there is a subsequent plan for maintenance and replacement of the equipment. If this for some reason can't be a part of the actual budget, it is recommended that it become a part of a working or phantom budget so it stays in the minds of those who make funding decisions.

- **Programming** **$5,000 - $20,000 per year**
  - This aspect of the budget relies on the library's plan and ongoing support for this effort. The important thing to take into account is that there are ways of offering this programmatic service with little staff adjustments and education. If a library moves in the direction of contracting services or offering classes and programs that learners can approach in a self-paced manner, the library may need to budget more for programming and less for staff and space creation.

**Staffing and staff training considerations:**

Effectively and appropriately staffing a digital creation space and service is key to the program's success. It is important for an organization to realize there's a new skill set needed by library staff. As more and more Library and Information Schools are preparing graduates in the areas of web development and design and competency, there are an increasing number of recent graduates who can handle the demands of a digital creativity programmatic effort. It is also prudent to consider talented individuals who possess related education and/or experience in digital art, media production, educational technology, and/or technology/media/art education.

Training options may include, but aren't limited to:

- Having staff take courses at a local community college, university or online service.

For example, http://www.ed2go.com/

- YDACS classes. See http://tinyurl.com/ydacs-classes
- Lynda.com. Online video tutorials to help you learn software, creative, and business skills. See http://www.lynda.com/

- Contracting with a consultant specializing in this service.
  - See Matt Gullett, Library Technology & Innovation Consultant https://www.linkedin.com/in/mgullett
  - See the Library Consultants Directory online at http://www.libraryconsultants.org/