

**Article Title:** Making a connection to the mothership: Launching a multimedia instruction program with maximum funk

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# **MAKING A CONNECTION TO THE MOTHERSHIP: LAUNCHING A MULTIMEDIA INSTRUCTION PROGRAM WITH MAXIMUM FUNK**

**LIZ HOLDSWORTH AND ALISON VALK**

## **MAKING THE MOTHERSHIP CONNECTION: OVERVIEW**

From data visualization to video editing, library instructional services are growing to include a wide variety of technology-rich offerings. Libraries can offer training on technologies and resources that enhance and supplement their campus curriculum. But for institutions who have not yet developed these classes, where are the starting points to implement such programming? Careful planning can reveal hidden barriers and obstacles in developing multimedia instruction. Other library instruction may only necessitate a projector and screen, but teaching multimedia skills requires the coordination of far more people, equipment, and knowledge. Multimedia skills should be taught with hands-on activities for users; librarians need to align an intricate skill set to another set of scholarly learning outcomes e.g., editorial, research, and aesthetic choices for an assignment. The strength of the program depends on relationships, materials, and a clearly articulated vision.

This paper will first discuss aspects of how the Georgia Tech Library developed their multimedia instruction program over the last five years. Using the Georgia Tech Library program as a model, these resources will act as a guide for addressing the pragmatic elements of effectively developing new educational programming in academic libraries. The main components of this interactive workshop include: developing a needs assessment; performing a stakeholder analysis; identifying open source or low-cost technologies; and, based on the principles of project management, crafting a program proposal framework in order to share with library decision-makers.

## **BRING ON THE FUNK: BACKGROUND ON MULTIMEDIA AT GEORGIA TECH**

Georgia Tech is a public research institution located in Atlanta, Georgia. It has a total undergraduate enrollment of 14,682 and graduate enrollment of 8,427 students. Degrees in Engineering and Computer Science make up nearly 80% of all undergraduate degrees conferred, while combined Humanities and Social Science degrees total about 3%. Regardless of major, all students are required to take ENGL1101 and ENGL1102 courses. The Writing and Communication Program (WCP) at Georgia Tech, which oversees ENGL1101/ENGL1102, requires the students to develop multimodal communication skills. This is referred to as the WOVEN method, which is the written, oral, visual, electronic, and nonverbal approach. Many instructors assign their students to create short videos, podcasts, and posters as part of their class projects.

Based on our observations, students often do not enter college with the technical skills necessary to complete assignments that use the WOVEN rubric, and instructors do not themselves possess the resources to teach them. The multimedia program at the Georgia Tech Library was first designed to collaborate with the WCP, however the instruction team has identified opportunities for teaching these skills in nearly every discipline. This is a valuable form of outreach that allows librarians to enhance student learning. Furthermore, the multimedia program works closely with other library instruction teams that also have a high level of interaction with the WCP. The skills taught in the multimedia program map to those taught in "fake news" classes and the research foci of the ENGL1101/1102 classes.

## **WHY MUST I CHASE THIS CLASS: FIVE WHYS**

Before considering multimedia programming, instructors benefit by exploring its necessity using root cause analysis. The original intent of root cause analysis is to discover the profound error in a system, rather than a cursory identification of the problem and how it occurred. Taiichi Ohno further developed root cause analysis into the "Five Whys" for the Toyota Production System in

1988 (Ohno, 1988). In the auto industry, the “Five Whys” digs into the deeper causes of an issue to its essential features. The “Five Whys” have been adapted and reimagined by other industries; it is now considered a standard of problem solving.

The Georgia Tech Library has taken this concept and used it to analyze new educational programming. Librarians can use the “Five Whys” to pinpoint whether a new initiative is warranted; the real solution may need to come from another campus actor. The five questions that librarians must ask themselves are: “Why are you doing this?”, “Why is this important to you?”, “Why is this important to your users?”, “Why should this come from the library?”, and “Why now?” These questions ought to be answered with validated information, e.g., student focus groups, usage statistics, faculty conversations, rather than conjecture on the part of the librarian. Pinpointing the precise need for multimedia instruction helps the librarian decide how to structure her lessons as well as the work of creating a sustainable program.

In this part of the presentation, the participants were encouraged to discuss with their neighbor the “Five Whys” for their multimedia instruction program.

## **WHO IS MY PARLIAMENT: STAKEHOLDER ANALYSIS**

After deciding to pursue a new program, the next step is developing a thorough understanding of the library users and their needs. In order to find a target audience, the Georgia Tech Library starts small and identifies the low-hanging fruit (the most easily reached) within particular user groups. A stakeholder analysis looks at potential external users to serve and additionally names internal allies and supporting partners. While this technique originated from the business sciences, it has evolved into a tool that can be used in many disciplines. Similar to the “Five Whys,” data is used to understand potential stakeholders, their role within an organization, influence with other groups, and general interest in a new initiative.

An important part of the research process is not only finding answers but asking the right questions. In this part of the presentation, attendees were taken through a stakeholder analysis worksheet. Attendees were guided through questions that prompted them to think about who might benefit from multimedia programming at their institutions and who might be best suited to partner with them on this new initiative. When considering the beneficiaries of their instruction, attendees discussed programs that support student communication skills such as business classes, first year composition, and campus research centers that require findings to be publicly showcased. By identifying the low-hanging fruit, attendees then focused on user groups with whom they already had a positive relationship or those who might be most receptive to this programming. By focusing first on one user group, targeted pilot programming can be used as proof-of-concept to library administration for larger-scale activities.

After selecting the audience for their instruction, the participants conducted an internal scan. This was taking an inventory of existing instructional spaces, the available technology, and the skills of colleagues. An effective method for pulling a team together with the purpose of designing new programming is performing a skills matrix. A skills matrix captures not only what technical skills colleagues have and are willing to teach, but what they are interested in learning. There is frequently a mismatch between these two categories. This provides an opportunity for staff to share their skills and mentor one another while learning new concepts.

The worksheet provided the following prompts:

- Who on your campus could benefit most from multimedia training and programming? List as many as you can.
- Who from the above group would you consider the low-hanging fruit, i.e. those who are the easiest to connect with?
- What technologies and space do you already have available to you for instructional purposes?
- Perform a skills inventory. Who within your organization can teach this software? Who has the interest? Who might your partners be?
- Based on the answers you provided, consider two paths: Would your programming be better suited as optional drop-in workshops or course-integrated programming?

## **MAKE MY FUNK THE FREE FUNK: FREE TOOLS**

An important factor in building a multimedia instruction program are the tools available for the librarian. The librarian may get a request from a faculty member to teach students how to create a poster with no pre-selected visual design software, or he may need to find a cheap, common denominator audio editing software that will allow all students to create a podcast outside the library. Not every student has access to high-end software, nor does every library classroom come equipped with routinely updated subscription software. Free or cheap software solutions (freeware), therefore, ought to be part of every librarian's lesson or as a class foundation.

There are inherent limitations in using freeware in the classroom. These products may have fewer features or lack some of the flexibility of subscription software; work-arounds for various limitations would be an important component of the multimedia session. Freeware may be sporadically updated and can rapidly go obsolete. Should money become available to a librarian, she may want to purchase hardware in place of software. Proprietary software or subscription packages enjoy robust support and automatic updates, but often come with a higher price and aren't easily installed on all systems. Freeware has limitations, but mid-range hardware is necessary to create adequate media. No amount of editing will take a poor quality recording and turn it into good-quality media. Professional hardware can be a better long term investment than software. Examples might include: high-end microphones, cameras, tripods, and other computer peripherals.

During this section of the presentation, we opened a spreadsheet of high quality freeware or cheap software. Participants suggested additions to the spreadsheet and personal commentary on the products already listed. The librarians discussed their personal experiences with each software and discussed challenges they encountered. After the end of the presentation, participants continued to add to the spreadsheet. The spreadsheet is hosted at: <http://tinyurl.com/max88funk>.

## **HELP THEM FIND THE FUNK: COMPONENTS OF A PITCH**

After reviewing their prospective multimedia program by asking the "Five Whys," identifying stakeholders, and exploring free tools, librarians generally must take their idea to administrators for approval. It is more advantageous to treat this program as a pilot rather than a fully-fledged, long-term project. Small, documented successes are good predictors of future outcomes. Even if a pilot project does not require additional material resources to launch, a librarian's time and attention is finite. Library administration may feel that her time would be better spent on another program. Librarians can create a convincing pitch that addresses potential concerns of administrators in both a high level and granular manner. This document or series of documents nurtures a strong program rather than inhibits creativity. This also creates structure and accountability for the librarian.

The components of a good pitch are: objectives, deliverables, measures of success, stakeholders, scope, timeline, and—optionally—the budget. Librarians must respond to each of these in some way to offer a more complete vision of their prospective work. It should be noted that this pitch should match the preferred organizational communication style.

The components of the pitch are defined below:

- Objectives are a high-level understanding of the goals of the multimedia instruction program. They must also be specific and measurable. An example is, "Teach poster design sessions to 50% of the 400-level biology classes."
- Deliverables are the tangible supports of your program. For multimedia instruction this will include lesson plans, class schedules, marketing materials, and templates. Deliverables will allow anyone to continue your work in your absence.
- The measures of success are how you assess your multimedia instruction program. This is an opportunity to be both ambitious and realistic. These, like objectives, need to be numerically measurable in some way.
- Stakeholders have been discussed in depth in a previous section of these proceedings. Stakeholders are all the actors that may be impacted by the multimedia program, from students to those who provide IT support.
- Scope is a clear delineation and appropriate parameters of the work performed in support of the multimedia instruction program. Things that would be typically out-of-scope are labor performed by other departments or teaching skills beyond what is required by the instructor. Explicitly delineating what is in and out of scope protects the librarian from being overburdened and provides guidance on what work should be undertaken to support the program.

- The timeline of the instruction program has the due dates for each deliverable and provides an overall shape of the instruction pilot. It has assessment (measures of success) built into it. This is an opportunity for transparency of the librarian to the administration.

Optional but helpful:

- The budget alerts administration to how much additional funds they may have to expend. Those who are unfamiliar with multimedia equipment and software can be surprised at its affordability. However, it is incumbent on the librarian to include continuing costs that may be otherwise be overlooked, such as batteries, memory cards, and cables.

The definitions of these terms and the roles they play were included in the presentation. The participants were given a handout to fill in the components at a later time.

## **FINAL ANALYSIS**

Multimedia instruction is a versatile and enriching addition to educational programming for any academic library. Not only does it teach students and faculty valuable technical communication skills, it acts as a form of outreach into a variety of departments on college campuses. The thoroughness and thoughtfulness of a librarian's planning will help convince stakeholders to invest in designing a multimedia instructional program and provide needed structure for their work. No truly great idea crumbles under specificity, and charting out the future helps the librarian avoid pitfalls. With additional hard work and strategic timing, there is every reason for success in pitching and implementing a multimedia program.

## **REFERENCES**

Ohno, T. (1988). *Toyota production system: Beyond large-scale production*. CRC Press.

## APPENDIX A

### Pitch Components

**I. Objectives:**

The specific goals you hope to accomplish with your program. These should be high level and specific.

Example: “To increase the number of poster design workshops taught per semester.”

**II. Deliverables:**

The tangible things you are creating to complete your project. Deliverables can include lesson plans, templates for students to use, advertising, sample student work, and sustainability plans. (If you get hit by a bus tomorrow, someone can take your deliverables and successfully launch your project. )

Example: “Lesson plan for poster design workshop with modular examples.”

**III. Measures of Success:**

The standards by which you evaluate your work. These can be classes taught, students reached, number of new faculty contacts, etc. They do have to be measurable.

Example: “Number of poster workshops taught per semester increase from 5 to 8.”

**IV. Stakeholders:**

*See Stakeholder Worksheet.*

Stakeholders are everyone who is impacted by your project, from IT to the students you teach. Identifying who these users are, what they might need, and what they should get is important.

Example: “Stakeholders are the IT staff, students, copy center workers, faculty, library web developer, and other reference librarians.”

**V. Scope:**

Scope defines the things your project will cover and the things it will not. Managing your scope helps keep you from taking on too much or diverging too far from your original intent.

Example: “Designing poster templates is in scope. Creating posters for students is out of scope.”

**VI. Timeline:**

Your timeline is a high level understanding of what you’re doing. Built into your timeline are your deliverables, assessment, and the end of the pilot.

## APPENDIX B

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# STAKEHOLDER ANALYSIS

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### 1. WHO COULD BENEFIT MOST FROM THESE SERVICES?

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- Does your campus have any specialized programs that focus on building communication skills?
- Does your campus specialize in any sort of research or is it home to any research centers?
- Would students at your institution benefit from learning presentation skills and accompanying technologies? If so, any particular groups?  
Do you have any first year programs where this curriculum would fit?

**Think about these questions- name as many user groups as you can- using the questions as a jumping off point.**

**WRITE YOUR IDEAS HERE:**

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### 2. START SMALL- IDENTIFY THE LOW-HANGING FRUIT. -WHO MIGHT IT BE EASIER TO CONNECT WITH AND OFFER THESE NEW SERVICES TO?

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- From the programs or groups you mentioned above in 1. -  
**Identify 1-2 potential user groups that are the most promising – and briefly explain why you chose them.**

**WRITE YOUR IDEAS HERE:**

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### 3. INTERNAL SCAN- WHAT TECHNOLOGIES AND SPACE DO YOU ALREADY HAVE AVAILABLE FOR INSTRUCTIONAL PURPOSES?

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- Consider Library Computer Labs
- Existing instructional spaces
- Shared spaces with other departments/ who could you work with?
- Do a technology inventory- (see *Georgia Tech base Technology list* for reference).
- Consider campus license agreements

**Based on the list we've provided or technologies you are already aware of, list 2-3 software packages or technologies that might be necessary to offer this kind of programming**

WRITE YOUR IDEAS HERE:

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## 1. SKILLS INVENTORY- WHO IS SKILLED AT WHAT? BUT ALSO WHAT ARE PEOPLE INTERESTED IN.

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- Think about your colleagues or co-workers
- Who has specific technical skills?
- More importantly WHO is INTERESTED in learning these skills or has a desire to teach?
- Do a skills inventory- (see *Georgia Tech Skills Matrix*).
- Consider formatting training as a peer to peer, mentoring program.

*List 1-2 names of colleagues, student assistants, co-workers, or yourself. Then list what software packages these individuals are familiar with and/ or interested in.*

WRITE YOUR IDEAS HERE:

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## 2. PROGRAMMING TYPE: TWO PATHS

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- Based on your answers in 1-4 do you think this programming might be better suited as **Optional Drop In workshops and programming**, or **Course Integrated programming** or could you offer both.

Consider Why?

Course Integrated \_\_\_\_\_

If course integrated can you name a few courses:

Optional Drop-In \_\_\_\_\_

Both \_\_\_\_\_

Other \_\_\_\_\_

WRITE YOUR IDEAS HERE:

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