



MULTIMEDIA LEARNING STATIONS

By Jen Spisak

THE BEGINNING

Tiring of the same lesson on databases and sources, I decided to spice up my library lessons by adding a new format to my middle school library program. Building on an idea from a colleague, I decided to try using learning stations. This method would give me a way to introduce different types of reliable sources to my students, enhance my teachers' curricula and give the students some variety. Seven years later I have built a repository of more than sixty sets of learning stations, and I'm still creating new ones all the time. These learning stations have evolved from mostly book-centric stations to multimedia stations.

WHAT ARE THEY?

Multimedia learning stations are activity and research-based stations with rotations. They allow students to research using a variety of resources, such as databases, streaming videos, podcasts, websites, music, photos, books, and educational apps. Using this approach, students have a chance to research many subtopics within an overall theme, and they also get to experience using multiple types of research for practical purposes.

PURPOSE

Multimedia learning stations can be used to serve a variety of purposes. Teachers have their subject standards to teach. We have our AASL standards. Our library standards can easily be used in conjunction with subject standards to produce collaborative multimedia learning stations. Learning stations can be used as extension activities and assessment tools.

For curricular purposes, this format for teaching, exploring, and learning can be used

as a way to locate and access information, analyze information, and/or react and respond to information. Teachers can use the stations in several different ways: an introduction to a lesson or topic, part of an overall unit, review, a culminating activity, or an extension activity. Multimedia learning stations can also be used as a way for students to gather necessary research they will use for a larger project. The design will vary from lesson to lesson, depending on the purpose and use.

TYPES OF LEARNING STATIONS

When learning stations are used as an introduction to a unit, it is important to realize that the material and many of the resources are brand new to the students. If students haven't learned to cross-multiply, they can't use a proportion to figure out the statistical likelihood of our next state governor's political affiliation. If a student is unfamiliar with the Cold War as a whole, we cannot expect them to understand and analyze the relationship between the Soviet Union and the United States. It would be hard to triangulate the origin of an earthquake if they haven't learned what triangulation is. These learning stations tend to concentrate on locating and accessing information.

If students are tasked with locating and accessing information, the type of learning stations I create concentrate on using sources I want the students to go back and use when they are doing independent research: databases, reliable websites, our video streaming service, advanced Google searches with .gov results, and nonfiction and reference books. I also work with students on citing these sources as they go, so they can practice using that skill and see its necessity when doing research.

However, if a class comes to the library with some background information on a topic already, and they are using stations to reinforce what they are learning in the classroom, I ask them to think critically about the material they locate by analyzing or reacting and responding to it. I use the same types of sources I want the kids to learn, but I also concentrate on using quality questioning that employs the higher levels of Bloom's Taxonomy:

- What adaptations do you see in animals living in the tundra biome, and why do you think they occur?
- Imagine you are a child living in the Warsaw Ghetto during World War II. Predict what life would be like around you.

Teachers like that learning stations reinforce their curriculum and provide the students with a different atmosphere and learning experience.

- Can you elaborate on the reasons why Martin Luther King was an effective leader in the civil rights movement?
- How is probability related to a player's batting average?

A Bloom's Taxonomy Question Wheel is a great resource to use for question starters for each level of the new Bloom's. There are many on the market, and some free printable versions can be found online.

When students use stations to gather information for a research project, have them use multiple types of sources. When designing these stations, I have students explore different resources and cite them: databases, websites, advanced Google search, a pathfinder of teacher-gathered resources, books, etc. Once they have had the opportunity to gather specific information using each source, I let them choose the source they like best to gather information for their last topic or two. This way I can guide them when they have trouble and help them with their citations. It is a great method of helping to establish positive dispositions for future research.

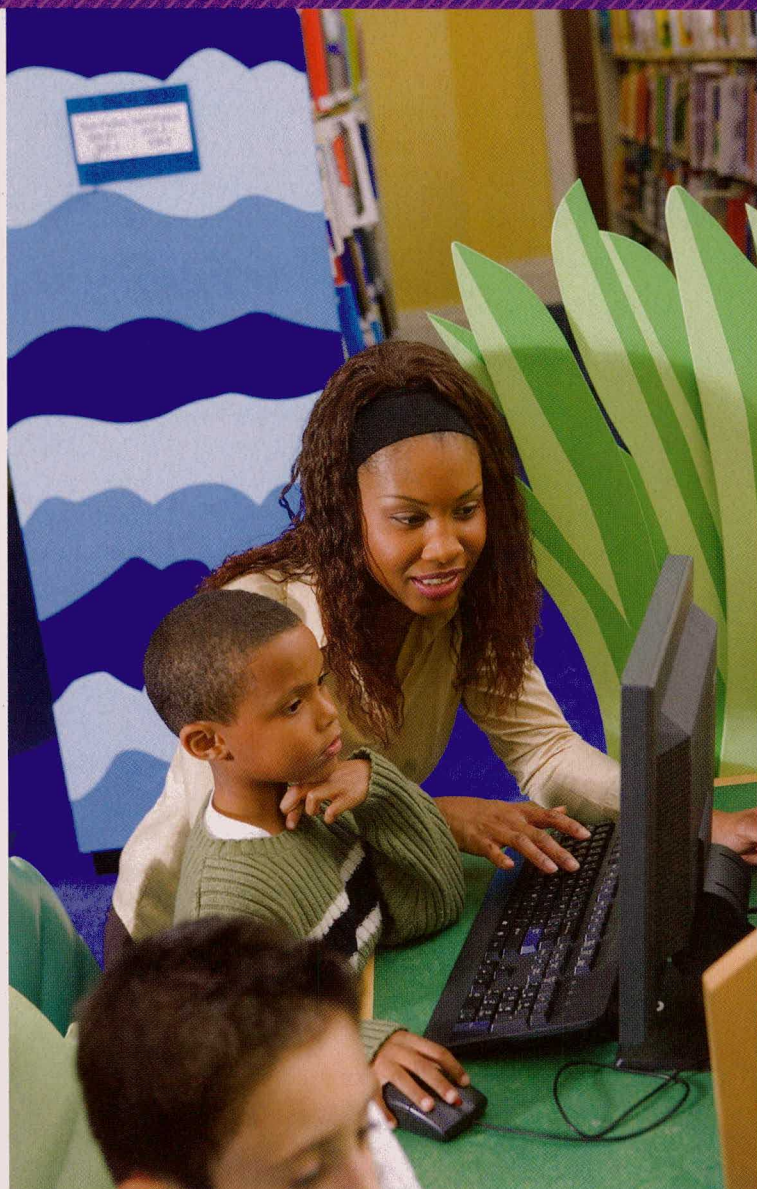
Occasionally teachers wish to use multimedia learning stations as enrichment for what they are teaching. A prime example of this is when my earth science teachers wanted to look at real-world topics, applications, and uses of rocks and minerals. In collaborating with the two teachers, we brainstormed nine different topics and created nine multimedia learning stations. We decided to let the students choose any four of the nine to complete. Each student was the sole decider of which four stations to complete. Some students wanted to research blood diamonds while others were interested in the gold and silver exchange rate, and still others wanted to know about mineral makeup. We had multiple topics and each station had a different type of resource. We included databases, websites, iPad apps, books, videos, and podcasts. The students loved the freedom to choose the topics that interested them, and their level of focus was noticeable.

BENEFITS

Using multimedia learning stations in the library has allowed me to collaborate with more teachers and reach more students. The number of classes I teach has quadrupled since implementing multimedia learning stations. I have seen students become more comfortable using our databases, advanced Google search, video streaming, educational apps, books, encyclopedias, and podcasts because they have had self-guided practice using these sources. With more experience has come more usage of these resources.

Teachers like that learning stations reinforce the curriculum and provide the kids with a different atmosphere and learning experience. They see measurable student growth in curriculum and critical thinking. Students like the movement learning stations allow and the naturally facilitative structure that allows them to work both independently and within collaborative peer groups. They like exploring rather than being directly instructed by me about the resources they should use.

My principal is a strong advocate of facilitative instruction and student engagement. Multimedia learning stations provide both. Through many of his observations in the library, he has become our strongest advocate. He speaks about our program to central office staff, superintendents, parents, colleagues, and anyone who will listen. The benefits of that advocacy and support are immeasurable.



HOW TO BEGIN

Begin by choosing a teacher with whom you have a good relationship. Look through their curriculum standards and pacing guides to see what they will be studying within the next month or two. Develop an idea of a few topics and approach the teacher. Once you and the teacher decide on a topic, select subtopics that match the standards and can provide interesting information. I recommend five subtopics, which translate to five learning stations. Submerge yourself in all the sources you can think of that pertain to the topic. Look at video sources, your subscription databases, websites, podcasts, educational apps, books, and encyclopedias. Look at primary and secondary sources. Don't be afraid to use manipulatives or to cross subjects.

Learning stations operate as a facilitative learning environment, but facilitative doesn't mean hands-off.

BUILDING THE STATIONS

Once you have a thorough understanding of your sources, begin creating the learning stations. Determine which source(s) to use for each subtopic. Design a document with clear instructions and questions for each station. Each station should keep the same format but have a different subtopic and resource. I often use a graphic organizer to help me keep my ideas together. When ready to move from organization into forming the document students will use, I begin by labeling the station number, including the subtopic title, and listing the type of source (i.e., database, podcast, educational app, etc.). Then I list the instructions and follow up with questions. Remember to use your Bloom's Taxonomy Questioning Wheel. I also recommend beginning with the toughest-to-find resource. Podcasts are the toughest to find. NPR has phenomenal podcasts as do some of the Gale subscription databases. Websites are the easiest for you to find, so I usually search for those last when a subtopic is harder to find.

ROTATING

At the end of the amount of time you expect students to spend at a station, play music to get students to rotate to the next station. I choose music that is appropriate for the topic. For the Vietnam War, I use Vietnam War protest songs, for fractions I use Mr. Duey's Fractions song, and for civil rights I use songs from the civil rights movement. The students like the music and become easily conditioned to it. Music adds to the culture of the topic they are exploring.

The other option for rotating is for students to go from station to station at their own pace. This works well with advanced groups and special education groups. Advanced kids do well because they tend to manage their time well, and they like the challenge of setting their own pace. Special education students do well because they don't feel pressured and stressed when a particular station is hard for them and they need extra time. They can stay until they've mastered it and then move on.

If you give students this option, I recommend telling them they have to go from station to station in order. The students like to go at their own pace, but it can become problematic when they don't manage their time well or the stations become overcrowded.

FACILITATIVE ENVIRONMENT

Learning stations operate as a facilitative learning environment, but facilitative doesn't mean hands-off. It is important to go from group to group and explain things that students are confused about. It is important to continually encourage students and stress to them that the process they use when researching is just as important as the information they find.

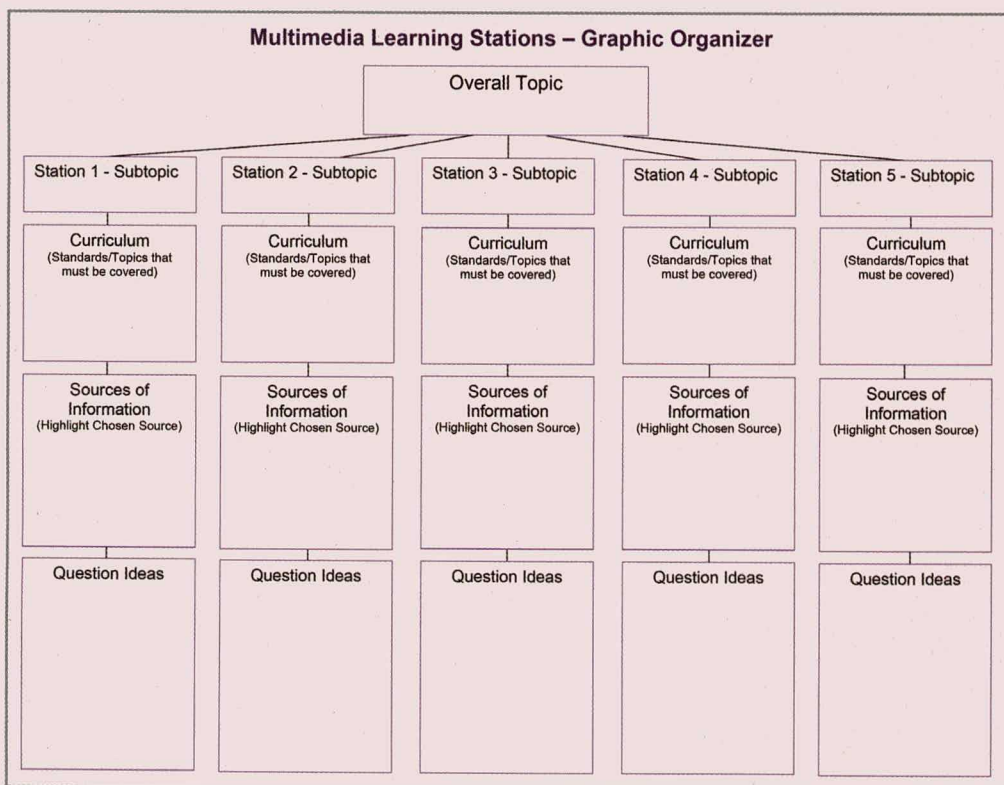
EFFECTIVENESS

At the end of a set of multimedia learning stations, I conduct a post student self-assessment. They answer content questions, research process questions, and identify the stations they liked and didn't like. Students are also offered the opportunity to give me constructive feedback. Through this data, I have learned which stations are effective and which need to be changed for the next year. I have learned where the library has been instructive and useful and where I need more work. These post assessments have also given me important data to promote our program to teachers, administration, and school board members.

CONCLUSION

Through the use of the multimedia learning stations, I have found that student engagement has greatly increased, positive dispositions are being built, collaboration with teachers has increased, more curriculum is being taught and learned, and our overall library program has improved. I am still meeting my library goals, but now it is through a facilitative backdoor approach that involves collaborating with teachers to enhance their curriculum.

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