From Mickey Mouse to Marilyn Manson: A Search Experience

or the past four years I have crafted a “search” experience for my students. I have developed the MI (Multiple Intelligence) search based on Ken Macrorie’s “I-Search” and Howard Gardner’s theory of multiple intelligences. Students choose topics based on their own interests, curiosities, and questions and explore these following a step-by-step process. Their investigations culminate in a ten minute multimedia presentation for an audience of their peers. I have taken sixth and ninth graders through the process and have had superb results with both grade levels. ■ This article represents the evolution of a search process. Although the article is written from my perspective, Frank Castner contributed the section “Presearch: In the Library,” which underscores the critical role the librarian plays in research.

We accomplish several goals through the MI search:

- Students understand the process of conducting a search using library resources and technology.
- Students become experts on topics and issues they are passionate about.
- Students create a professional presentation.
- Students explore topics through multiple intelligences (verbal, visual, logical, kinesthetic, musical, interpersonal, intrapersonal).

In “Multiple Intelligences as a Catalyst” Gardner discusses the advantages of approaching learning in this way:

Not only does this approach increase the likelihood that more youngsters will be served and served well; it also raises the probability that the precious treasures contained in texts and the invaluable activities of reading and composing will thrive in an increasingly diverse and multimedia environment. (17–18)

I introduce Gardner’s theory to my students to encourage them to think consciously about their own learning processes and to suggest that learning in multiple ways strengthens understanding. I emphasize this idea by reading the book Seven Blind Mice by Ed Young. This striking picture book translates the ancient tale of the seven blind men who come upon an elephant. Each man touches a part of the elephant—the tail, an ear, the trunk—and is confident he knows what he has in his hands. It is the last man who, by exploring the whole elephant, discovers what it truly is. Through the MI search, students come to understand the moral of this story: “Knowing in part may make a fine tale, but wisdom comes from seeing the whole” (35).

Presearch: In the Classroom

After reading and discussing Seven Blind Mice, I model a multimedia presentation (the end product of the MI search), using information I have gathered on Amelia Earhart. I include several intelligences in my presentation, especially visuals (map with last flight charted, photos, model plane, and text set). Wearing a flight jacket and cap similar to Earhart’s, I read “High Flight” by John Gillespie Magee to begin the presentation and then lead stu-
dents through a mental visualization, using words from the famed aviator’s journal. I give highlights of her life, emphasizing important dates and records she set, and I end by reading a poem Earhart wrote, “Courage.”

Wearing a flight jacket and cap similar to Earhart’s, I read “High Flight” by John Gillespie Magee to begin the presentation and then lead students through a mental visualization, using words from the famed aviator’s own journal.

Modeling like this has been a great motivational tool for my students. They begin to think of ways they can craft presentations. Modeling also allows students to see me as a researcher—I am willing to engage in the same process I ask them to experience. My enthusiasm about research certainly must spill over to my students at this point, making even the most apprehensive participants at least willing to give this research stuff a try. (I do indeed love to research and call the library my second classroom. In fact, after several years of using my discoveries about Amelia Earhart in my demonstration, I will dig in again this year and present a different topic—didgeridoos!)

After these hooks, the work begins. I give students a few days to choose topics. They will, after all, be spending a few weeks on this assignment, so they need to choose topics about which they are passionate. They can pick anything: a hobby; an interest; the extension of something discussed in social studies, science, math, language, literature, P.E., health, art, drama, or music; or something they have always wondered about. With a topic in mind, each student completes two webs or clusters: “What I know about the topic” and “What I want to know about the topic.” The ideas generated at this point become the material used to form explorable questions. Here I lend a few words of wisdom as I work with each student to develop four or five questions, which are neither too broad nor too specific. A student’s task needs to be challenging but manageable and not frustrating.

The final step in the presearch stage is for students to plan how they will investigate and present their topics. For this I have designed a matrix that lists the multiple intelligences and suggests various ways that each intelligence can be used for exploring or presenting. Under this I have an empty matrix, where students can brainstorm and plan. My requirement is that all students will explore and present using verbal intelligence—that is, they will read and write (this is, after all, an English class)—and they will explore and present using at least one other intelligence. My demonstration on Amelia Earhart includes illustrations of these requirements. The model plane shows my kinesthetic learning process—to understand Earhart’s plane, I built one—and my visual presentation technique. Once this planning is complete, students migrate to the library, their new home for a few weeks, and the search begins.

Presearch: In the Library

As long ago as 1991, Carol-Ann Haycock in “Resource Based Learning: A Shift in the Roles of Teacher, Learner” described a changing relationship between the classroom teacher and the librarian:

The media specialist works collaboratively with classroom teachers as a teaching partner. Together, they work to structure resource-based learning environments where students have access to a wide range of “suitable” resources. Information literacy must be integrated, placed within a relevant subject context, within the context of an overall process, and linked with the processes of thinking, writing, discussing, problem solving, and decision making.

Library orientations at the high school level are not new, and certainly the need is greater now than ever for a program that introduces our users to both the traditional and the technological elements of the library. The need to personalize the process is now just as important. Students are increasingly mindful of the relevance and application of what they learn. We should never rely on the tired “it’s for your own good” logic to motivate students. They will
be well motivated once they understand the connection between the work we ask them to do and the resources we expect them to use from the library.

The key element of any library orientation is that students understand the benefit of such a project. They will make this connection if the tasks assigned are relevant. Too often we expect students to accept our assurances of the value of research without a positive, functional, real-time correlation. Motivation comes from the self-realized desire for success and the confidence to use tested techniques to achieve that success. Searches are not unsuccessful because they produce no information; searches are unsuccessful because the process frustrates the searcher—the searcher cannot manipulate the tools needed to succeed.

I offer students the option of writing short stories, scripts, or journals rather than a traditional “report.”

In this context, we present our freshmen with an opportunity to complete a three to five day library orientation program. Phase one consists of a basic diagram and location exercise where students are asked to match numbered items throughout the library with the appropriate description. As they do this, students are encouraged to be on the lookout for areas of interest to them and for specific items in the collection or those research tools that will be of use in their personal “search experience.” Guiding this phase is the tenet, “If you can’t find it, you can’t use it.” Confidence comes with the ability to function comfortably among the many tools our library offers. That comfort is enhanced by experiences that allow students to discover the riches of a library in a relaxed atmosphere. This “treasure hunt” approach also allows them to help each other and at the same time remove some of the coldness and stiffness often associated with libraries by those who have not had positive experiences (or any experience at all). We allow students to develop a mind-set that enables them to think of the library as a natural extension of their classroom in which they can function with security and confidence.

This need for security and confidence is one of the strongest arguments for libraries to be student centers for other activities besides research. A librarian can create a student centered environment by doing such things as handling all textbooks, producing and distributing ID cards, and coordinating the evaluation of scholarship applications. Providing these kinds of services draws students to the library, which enhances our opportunity to build their confidence and comfort level.

Phase two of the library orientation is a two-pronged effort designed to (1) confirm students’ learning regarding location, where they answer basic questions about the arrangement and use of certain reference tools such as Newsbank, Reader’s Guide, the automated card catalog, etc.; and (2) examine in depth the use of key reference tools by answering specific questions. Keep in mind here that as many of these questions as possible should deal with the students’ efforts to find information based on their personal search topic. For example, we ask them to find ten periodical and newspaper items on their topics. If a topic is one they can use later to complete an English assignment (such as the MI search), their learning becomes more relevant. We take a similar approach with research questions regarding the use of dictionaries, atlases, CD-ROM programs, the Internet, etc. While the discussion here is based on a search experience in English, we have experienced equal success with classes using science topics (the elements and the periodic table) or social science (European life in the Middle Ages).

Whatever we can do to make the discovery of new tools for learning meaningful to each individual will help ensure success. The old approach by which the same questions are used repeatedly year after year so that the reference books fall open to the right page or the answer is underlined in each source is neither valid nor helpful. Understanding is the key to learning, and learning is the key to success. Our duty is to help our students achieve as much of both as possible.

Search

The library orientations described above precede the search stage of the MI project. Once students are familiar with the library in a general way, they can begin to use specific resources and library tech-
technologies to assist them in answering the questions about their topics.

I have designed note-taking sheets for students to use as they search, each one used for one research question generated in the presearch stage. There is space to write the question, brainstorm key words to help in finding answers to the question, and take notes from a resource, including bibliographical information. For beginning researchers, the note-taking sheet is a constructive way to keep their ideas, questions, answers, and responses organized. Near the end of our library time, I spend a day instructing them in how to put together a bibliography. I distribute a sample bibliography page and then have students practice crafting the bibliographical information for their specific resources.

Students are required
to use visuals during their presentations, including overhead transparencies, videos, maps, pictures, photos, models, demonstrations, and costumes.

Throughout the search stage, I start each day with a mini-lesson, modeling a step or piece of a step on which they are currently working. Once students begin working, I visit each student, answering questions and monitoring progress. As I circulate, I ask students where they are in their searches and where they are going next. On my grade/attendance roster I assign points to indicate each student’s on-task behavior and progress.

Write-Up

After four or five days spent searching for the answers to topic questions, the focus shifts to synthesizing the gathered information. (Some students are not quite finished with the search stage at this point and keep searching, but most are ready to move on.) I ask students to freewrite about their topics for about ten minutes without using any notes or resources. This not only generates material that they will use in their write-ups and presentations, but also builds confidence. Students start to see themselves as experts on the topics they have been exploring; they have things to say without using books or notes.

Next students use their freewrites and notes to create outlines. They divide what they have learned into subtopics; each subtopic becomes a paragraph, or section, of the write-up, and, in turn, a portion of their presentations.

The write-up in its final form is to be publishable (my term for revised, edited, and proofread). Since my emphasis is on the process of searching, not a single end product, I allow for both flexibility and creativity in the verbal (written) requirement. I offer students the option of writing short stories, scripts, or journals rather than a traditional “report.” Referring to my Amelia Earhart information, I model several ways to craft a write-up (see sidebar). Most students choose the report format, but some have fun being creative—such as Rachel, who takes on a persona to deliver her information:

Hello! My name is Professor Jones. I am the head archaeologist of a dig in Victoria, a shore-line city in North Carolina. Our site was discovered by a group of kids who reported finding pottery shards and clam shells scattered on the ground. There are five archaeologists and myself on our team. We have been digging for about two weeks now and have made some very exciting discoveries. We have concluded that the site is one of a small colonial house that is from around the 1700s. I have included in this notebook some of the diagrams, a day’s worth of field notes, and a top plan of the site. I’ve also included a list of archaeological terms with their definitions and a list of the most commonly used excavation tools. I hope you enjoy reading it and find it very interesting.

Presentation

The culminating and most exciting portion of the MI search experience is the two to three weeks during which I am an audience member along with my students. Each day four or five students deliver multimedia presentations. As we near this stage (near the end of the search stage), students sign up for the day they will present. I take time to brainstorm types of media and multiple intelligences to
include in presentations by reviewing my model presentation on Amelia Earhart. I assign each student eight minutes to present with an extra two minutes to set up and answer questions. Some students have to stretch to eight minutes, but most go over. I have several students each year who could probably talk about their topics for an hour.

After each presentation I have the audience members write a response to the presenter, including what they liked about and learned from the presentation. (I have students at the beginning of each period fold a notebook paper in fourths and then tear carefully; each fourth becomes a response sheet.) I collect the responses, look them over, and then give them to the presenter. Students are eager to receive the feedback from their peers: “I liked the drawings. Impressive information.” “Lots of information, amazing facts.” “Way to go!” Although I have “graded” students throughout the process, my final and formal evaluation occurs during the presentations. I use a grade sheet to assign points and write comments and questions concerning each student’s process, learning, and presentation.

I am amazed each year at the sophisticated level of expertise the students attain and the passion with which they express their knowledge. Jack lectured on the engine parts of the Ferrari, then took us on a ride in his uncle’s car (on video); Michelle danced the tango; Missy wore an authentic Malaysian dress as she shared information and stories about her family’s homeland; Laramie demonstrated how to draw cartoon figures; Alexis choreographed and danced a movement of a ballet; Janine sang an original song about the history of the sax and then played a tune on her own instrument. These teens were the experts as well as the teachers.

### Multimedia

Students are required to use visuals during their presentations, including overhead transparencies, videos, maps, pictures, photos, models, demonstrations, and costumes. The best illustration of the power and impact of using visuals to create a multimedia presentation comes from my first year teaching at Palm Springs High School. When Adam came up to the front of the class, I held my breath for a moment wondering how the class would react to his occasional verbal stuttering. He had always participated in class discussions, but it was difficult; now he would be the center of attention. Well, I shouldn’t have worried. His presentation was about the American Red Cross, and he brought signs, uniforms, and First Aid boxes and spoke beyond the allotted time about his own experiences and achievements as a volunteer. His peers were awed and amazed by his incredible stories. What especially caught my attention was that every time Adam came to a word or letter combination that might stall his speech, he drew the audience’s attention to one of the visuals. Because he had a way to redirect the attention, he felt less self-conscious and more relaxed; he was able to continue speaking with barely noticeable pauses.

### Amelia Earhart

**Essay or Report**

If courage defines heroes, Amelia Earhart is a hero. Admiration is her courage to step into an arena defined by men and not only became the first woman to achieve her goals, but the first person, in many cases. She set height and speed records as a female pilot, she was the first person to fly across the Atlantic, and she was the first to cross the ocean twice. She was also the first to fly across the Pacific, making her the first person to cross both oceans by air.

She was courageous to attempt what had never been done before—to fly around the world . . .

**Story**

I stood by the Electra on the hot June morning. This was the day. The route was set—East this time (the west route had failed). First stop . . . South America. I felt the same excitement as I had as a child, making that roller coaster in the backyard. I guess that’s where my love for flying and speed was born . . .

**Interview**

We are here today with one of the most famous pilots of all time, famous not only for the records that she set, but also for the pioneering effort she made for female pilots. Let’s find out how she grew interested in flying . . .

Tell us about your plane—how is it different from modern aircraft?

What are some of the records you broke?
Self-Reflection

To bring a sense of closure to the weeks we have spent searching, students complete a processing exercise, which I consider to be part of intrapersonal intelligence. I discuss the idea of metacognition throughout the year—especially at the end of a unit—and this unit is no exception. I want students to understand the process in which they have participated. I also use their reflections as a way to modify the MI search experience. What follows are the four questions I ask the students and some of their responses:

What did you learn about the topic?
- I learned things about Hank Aaron that I never knew.
- I learned that dreams are important.
- I learned that the space program was driven by President Kennedy.
- I learned many things about that unforgettable December morning (attack on Pearl Harbor).
- I learned things from my interview that were not in the books.

What did you learn about research?
- I learned how to use the computer to look up specific topics.
- I learned you should take advantage of the time you're given.
- I found that it was actually easier to do a report with multiple intelligences and a little bit more fun.
- I learned that research can be a large and tedious task.
- I learned that research takes hard work but can be fun if you pick a topic you truly like.
- I learned how to expand my collection of research about a topic by using many different sources (microfiche, periodicals, the Internet, personal interview).
- A lot has to be done in order to come up with a decent presentation.
- Research takes a lot of time and concentration. When you can't find what you're looking for, don't give up.
- I learned that you have to work at what you want. You can't just go into a library and go to a desk and say, "I want ______." You have to search.

What did you like about this assignment?
- I like that we had the freedom to choose any topic.
- I like the fact that we explored our topics in more than one way.
- I enjoyed presenting. It was kinda like an adrenaline rush.
- I like the fact that I had a good excuse to read up on a favorite topic of mine.
- I like this assignment because it gave me a chance to learn about elephants without taking time away from my other homework because it was my homework.
- I like learning about other topics. It was fun to watch other people present.
- I like how we went through a process and slowly went step by step.
- I like finding out the history and culture of my homeland.
- It was great to be able to be heard. That's really all anybody wants.

What would you do differently next time?
- Next time I would probably try to use more than just one other multiple intelligence.
- I felt my presentation could have used more visuals.
- I would organize my presentation better.
- I wouldn't goof off so much in the library, and I would choose a topic to start with that I really liked.
- I would practice my presentation more.
- I would add more detail.
- I would start earlier.

Topics

Allowing students to choose their own topics has been the key to the success of the MI search. Students are enthusiastic and ask genuine questions. The diversity of topics keeps the presentations interesting for the audience. (See Appendix.) Students seem to feel a sense of pride to share their expertise about original topics.
**Modifications**

Each year I have modified the MI search experience. I focus on refining the timing of each stage and the organization of materials. I’ve allowed for more time at each stage as needed and for fewer presentations each day—to give students time to present without feeling rushed. Each year I am more precise in modeling each step of the process and providing a visual example or outline. In fact, next year I plan to make a booklet of all the instructions, worksheets, and models to help students stay organized.

Some modifications happen serendipitously. The personal response from the audience members after each presentation was a new twist this past year—after years of having students take notes on each other’s presentations and then collecting the notes. Now I have less to grade, and the notes being taken have a relevant and satisfying purpose.

**Conclusions**

As a result of repeating and refining the MI search experience over the past four years, I can conclude that this method of research is both engaging and relevant to students. As Peter Smagorinsky states in “Multiple Intelligences in the English Class: An Overview”:

> My rationale for emphasizing multiple forms of compositions was that the students were, almost without exception, highly engaged in the projects they would undertake, often far more so than they were when being evaluated through conventional writing. In particular, students who were low achievers were often among the most enthusiastic and productive workers on these projects. Students who were loath to turn in simple homework assignments would spend all weekend producing elaborate video productions dramatizing their interpretations of literary relationships. Above all, the students, besides being engaged, were clearly demonstrating an understanding of literature in ways not accessible through their writing. Not only were they active, they were learning in the process. (19)

From the start I knew that the MI search was an inspirational method of researching for students. In a note to myself in 1995 I reflected:

> Incredible presentations! Students are up for about 10–12 minutes sharing, expertly, about topics they enjoy—horses, archaeology, limericks, golf, skateboarding, the saxophone . . . They designed posters and videos, performed skits and songs, demonstrated and modeled . . . Sophisticated show and tell! Successful! Let’s do it again next year!

**Note**

As with most creative works, the MI search project is not the creation of only one imagination. I acknowledge Alex Sanchez and my colleagues at Esperero Canyon Middle School in Tucson, Arizona.

**Works Cited**


HEIDI A. WILSON teaches English and reading at Palm Springs High School, Palm Springs, California, where FRANK L. CASTNER is the librarian.

APPENDIX:
TOPICS FROM MI SEARCH PRESENTATIONS 1995–1998

Mickey Mouse
1919 Black Sox Scandal
abortion
acting
Aerosmith
airplanes
Al Capone
Alfred Hitchcock
Apollo (missions)
archeology
Asian art
atomic bomb
bales folkloricos
ballet
ballroom dancing
baseball
basketball
bells
Bermuda Triangle
biking
biochemical weapons
black holes
Bobs (famous men named Bob)
boxing
Bruce Lee
Cal Ripken Jr.
cars—hydraulics, models
castles
cats
cave art
cheerleading
cheese
cheetahs
Cinderella
cockatoos
comic drawing
cooking
cosmetology
crocodile hunters
custer's last stand
Dali
dan marino
dinosaurs
directing/producing disco
disneyland
dogs
Donald Trump
Dr. Seuss
dragons
Edgar Allan Poe
electric guitars
England
ernest hemingway
FDR
Ferraris
firemen
gettyburg
giraffes
gold mining
golf
Great Wall of China
Greek mythology
green iguanas
gulf war planes
gymnastics
hank aaron
Harley Davidson
Harriet Tubman
Hawaii
Hindenburg
Holocaust
horoscopes/astrology
horse riding
horses
hunting
Jackie Robinson
James Lovell
(Apollo 13)
Japanimation
jazz/drums
JKF
Jimi Hendrix
Joe Satriani
jonestown cult
kevin smith
(Chasing Amy)
kurt cobain
Lakers
Led Zeppelin
Leonardo DiCaprio
limericks
Loch Ness Monster
Mafia
Magic Johnson
Magic: the Gathering
(make-up and fashion
Malaysia
Marilyn Monroe
marine life
Mario Lemeux
(hockey player)
martial arts
Martin Luther King
Marvel Comics
Mel Brooks
Metallica
Mexico
Michael Jordan
model making
motorcycle racing
Muhammad Ali
Nepal
Nike
Nirvana
Notorious BIG
off-road vehicles
orthodontics
paint ball
Pancho Villa
Parrots
Pearl Harbor
Pele
Peter Pan
Philippines
pigs
planes and jets
Princess Diana
punk rock
rabbits
rain forest
Rap/Hip Hop
Red Cross
Reggae
Riverdance—Michael Flatley
rock climbing
rock music
roller blading
Rolling Stones
saxophone
Scotopic Syndrome
Shakespeare
Shannon Miller
Shaq
Shirley Temple
Shoeless Joe and Pete Rose
singing
SKA
skateboarding
slavery
Smashing Pumpkins
snowboarding
soccer
Star wars (movie)
stellar evolution
Superman
surgery
swimming
Sylvia Plath
tango
teenage suicide
tennis
tigers
Titanic
Topac
UFOs and aliens
Vince Lombardi
Vincent Bugliosi
volleyball
Walt Disney
Warner Brothers
Winnie-the-Pooh
writing a book
Zepata
Marilyn Manson