

Print vs. Pixels?

Museum Teacher Resources in the Digital Age

National Art Education Association Conference, New York

Thursday, March 1

What do teachers need and how should museums respond? Educators from the Getty Museum, MOCA in Los Angeles, MOMA, and the Philadelphia Museum of Art explore strategies, resources, and guiding research.

Presenters:

Theresa Sotro, The J. Paul Getty Museum (organizer)

Rebecca Mitchell, Philadelphia Museum of Art

Jeanne Hoel, The Museum of Contemporary Art, Los Angeles

Lisa Mazzola, The Museum of Modern Art

Philadelphia Museum of Art

philamuseum.org/education

Rebecca Mitchell, Museum Educator, Coordinator of Teacher Programs
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Project:

Ongoing classroom resources for Pre-K-12 teachers. Recent projects: *Looking to Write, Writing to Look* (2011), *Pennsylvania Art: From Colony to Nation* teaching poster set (2010)

Critical Questions:

- To what extent does the digital divide exist in area classrooms? What are the implications for the format(s) our teacher resources should take?
- How are teachers using printed and digital resources (online, CDs)?
- How can we maximize the accessibility of PMA's collections to our teacher audience?

Method:

Teacher Advisory Committees

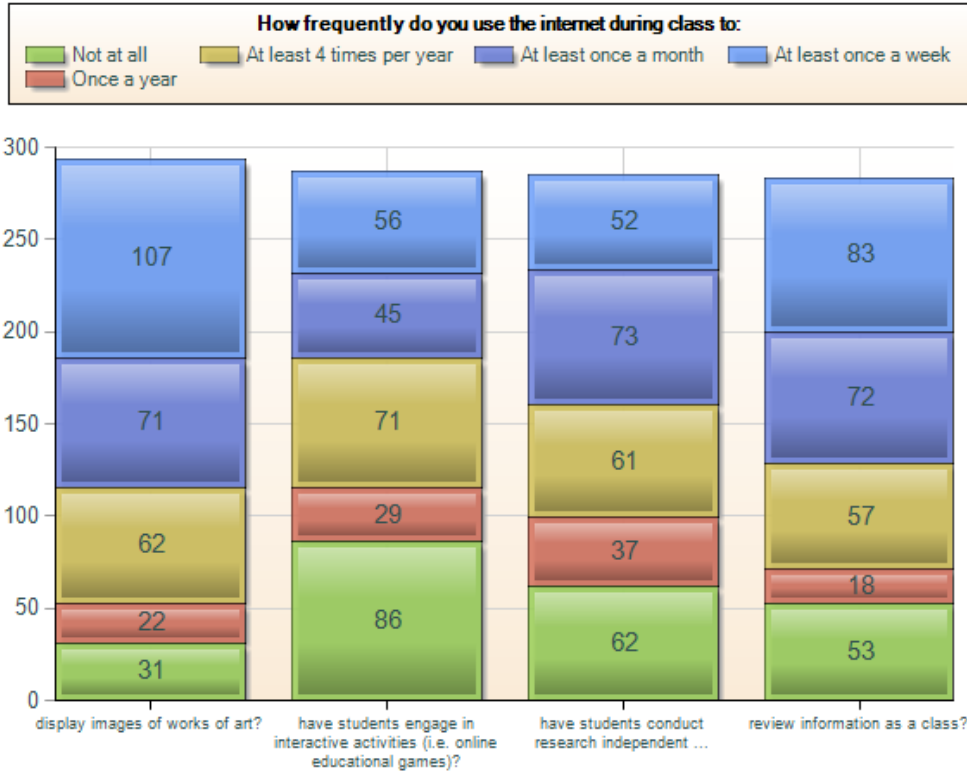
Informal Surveys

Trends in PMA's Education Resource Center

Selected Findings from the Philadelphia Museum of Art's Teacher Resource Survey

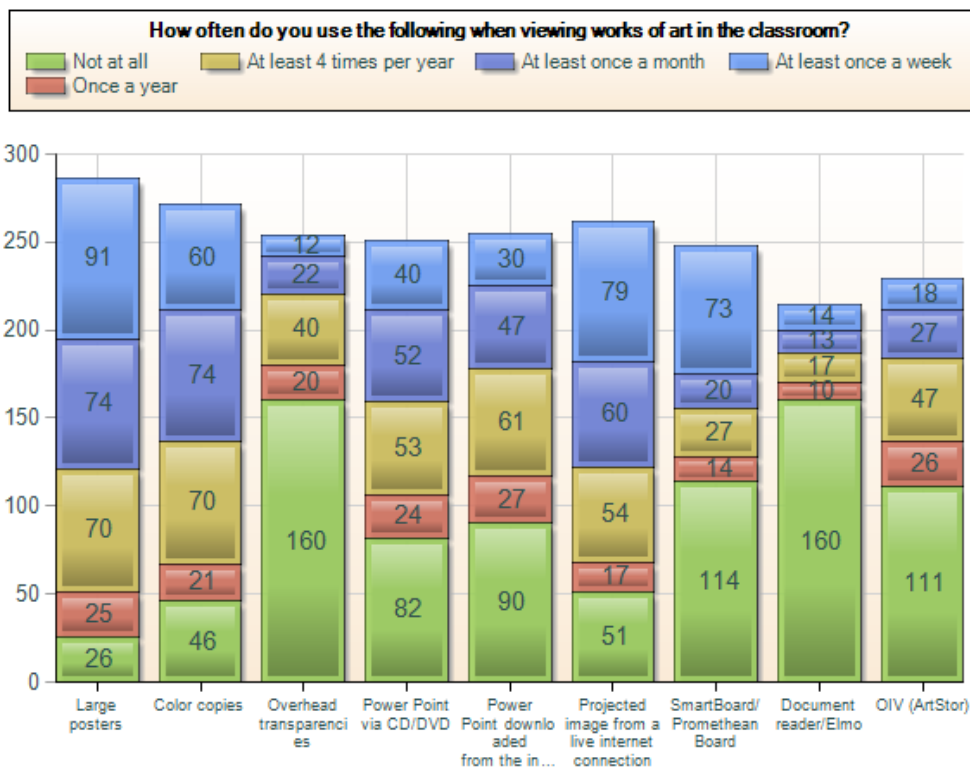
The following findings represent a selection of results from an online survey about how K-12 teachers use museum resources in the classroom. 299 individuals completed the survey.

How Teachers Use the Internet in the Classroom



Teachers use the Internet most often to display images of works of art. This finding remains true across all grade bands (Elementary, Middle, and High School).

How Teachers View Works of Art in the Classroom



The most frequently used methods of viewing works of art in the classroom are as follows:

- Large posters—58% view works of art in this way at least once a month
- Project images from a live internet connection—53% view works of art in this way at least once a month
- Color copies—49% view works of art in this way at least once a month

The least used method of viewing works of art is via Document reader and overhead transparencies (equal number) and the second least method is via Smart Board.

Other notable findings:

Teachers of different grade levels use technology differently.

- Of the 123 respondents who teach elementary school, 91% use posters at least 4 times per year (or more frequently), compared with 64% who use the internet to project an image at least 4 times per year (or more frequently), or a Smart Board (54%) or a Power Point (56%)
- Of the 108 high school teachers, 70% used posters at least 4 times/year or more, compared with 87% who use the internet to project images, a Smart Board (48%), or Power Point (59%)

Technology differs depending on the type of school.

- Of the teachers who teach in an urban public school, half (49%) have access to a computer with internet and projector in the classroom, compared with 76% of suburban public school teachers and 72% of private school teachers

Teachers who have access to a computer/digital projector continue to use both printed and digital resources.

- 55% of our respondents (165 of 299 respondents) use posters at least once a week or once a month. 62% of these teachers also project live images from an internet connection at least once a week or once a month
- Of the 251 people who reported that they “regularly” use either a computer/projector or computer/internet/projector, or a Smart Board, 55% of them use posters at least once/month or once/week to display art images.

The J. Paul Getty Museum

getty.edu/education/teachers

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Project: Re-thinking K–12 Teacher Resources on www.getty.edu

Over the past ten years, the J. Paul Getty Museum has published on www.getty.edu over 220 lesson plans for the classroom and over 75 activities for use in the galleries. In recent years we have experimented with new formats such as instructional videos, illustrated art activities, and guides developed for student exploration of interactive media.

Our strategy for publishing online resources for K–12 teachers thus far has primarily been to make available to a wider public the lessons we create through professional development programs and for print publications. We’ve also approached the development of online content opportunistically, for example, by taking advantage of rich media developed for exhibitions. Now that the “K–12 Teachers and Students” section of www.getty.edu includes a solid foundation of lessons and activities, Getty staff members have been developing a more robust strategy for online content development—one that better utilizes web technologies, that aims to meet teachers’

needs in the digital age, and that reflects strategic thinking about online content development.

Driving Questions

- How can we better utilize web technologies rather than simply convert print publications?
- When developing teacher resources, how do we balance future trends (e.g., use of tablets in the classroom) with current needs?
- Since it is impossible to meet all of teachers’ diverse needs, how should we go about targeting specific audiences in specific ways?
- How can we develop content that reflects our institution’s unique strengths within the ever-expanding Internet?
- We have articulated our goals for our onsite programs, but what are our strategic goals for online resources?

Methods

In November 2011, 374 individuals (predominantly from southern California) completed an online survey in order to help inform the following questions:

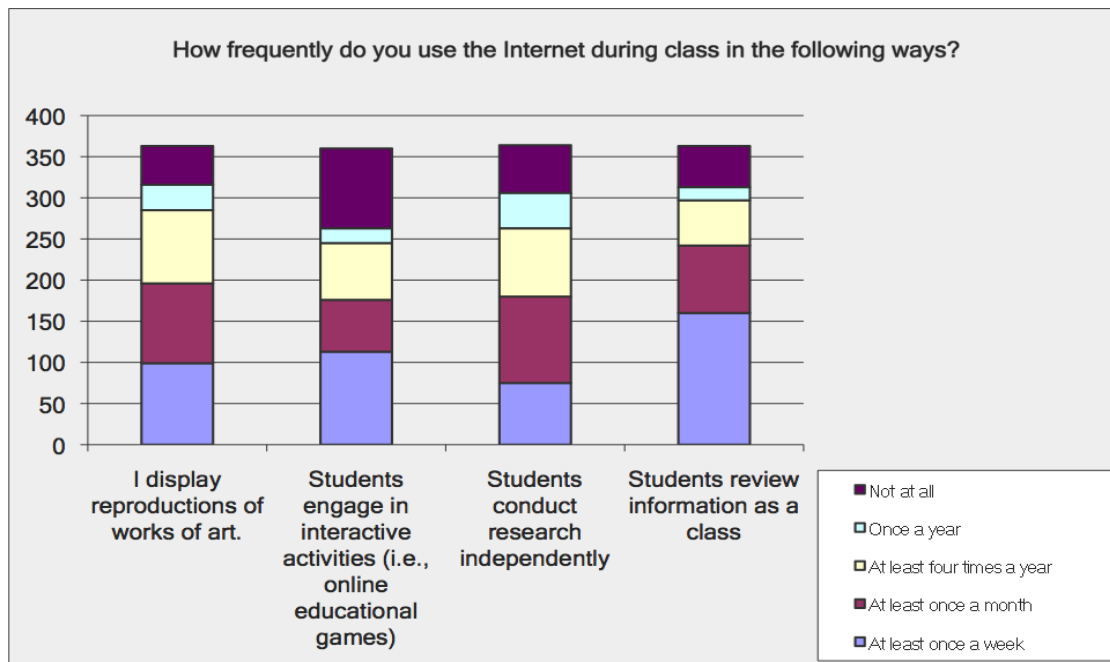
- To what extent are we meeting teachers’ needs with our current online offerings?
- How are teachers currently using the Internet and other technologies to view and teach art?

Based on the results of our survey and information gathered from Google Analytics, teacher advisors, visits to classrooms, and findings from the field (email for bibliography), we are creating a strategic plan for the development of teacher resources over the next five years.

Selected Findings from the Getty Museum’s Teacher Resource Survey

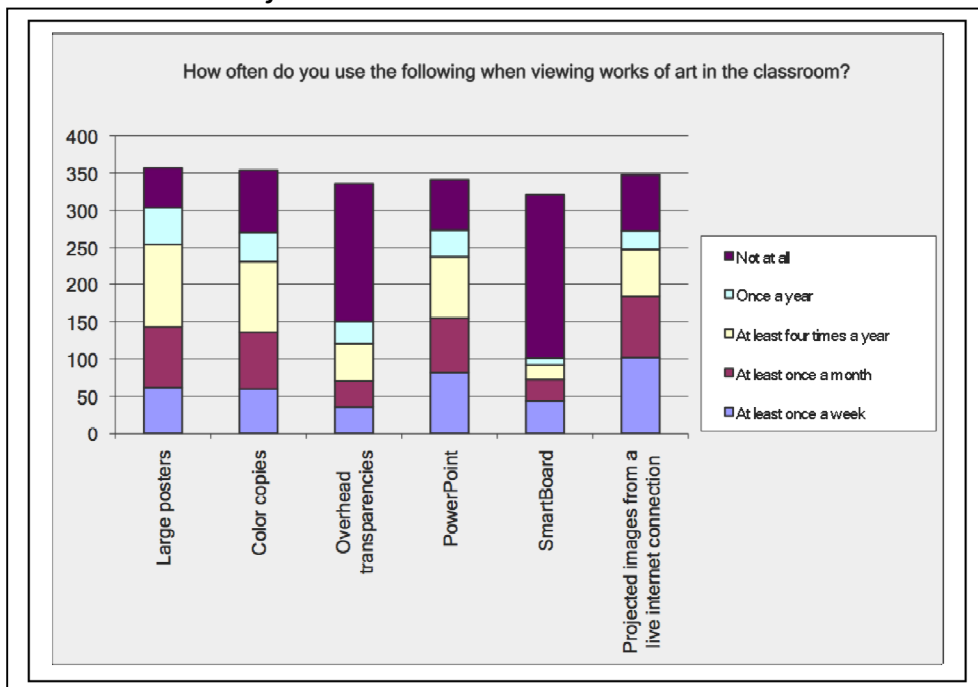
The following findings represent a selection of results from an online survey about the resources the Getty Museum provides for K–12 teachers on www.getty.edu. 374 individuals completed the survey.

How Teachers Use the Internet in the Classroom



Teachers use the Internet most often to review information as a class. This finding remains true across all grade bands (Pre-K–3, 4–8, and 9–12).

How Teachers View Works of Art in the Classroom



The most frequently used methods of viewing works of art in the classroom are as follows:

- Project images from a live internet connection—52.9% view works of art in this way at least once a month
- PowerPoint—45.4% view works of art in this way at least once a month
- Large posters—40.1% view works of art in this way at least once a month

The least used method of viewing works of art is via SmartBoard and the second least method is via overhead transparencies. 68.5% of survey respondents do not the SmartBoard to view works of art at all; and 55.4% do not use overhead transparencies to view works of art at all.

Online Features that Teachers Consider to Be Important

Survey respondents were asked to consider the importance of 16 online features. The majority of survey respondents rated every single category as “very important.” For each feature in the list below, the percentages indicate how many rated the feature as very important *or* essential.

- information about works of art and artists (90.8%)
- printable images (80.7%)
- downloadable images for use in a PowerPoint (80.1%)
- activities to use before or after a visit to the Getty (79.9%)
- zoom features to see details of images (78.9%)
- discussion questions for teaching with works of art (78.7%)

The Museum of Contemporary Art, Los Angeles

moca.org/education/teachers

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Project goals (completed 11/2011):

- Get the Contemporary Art Start Curriculum Guide, currently a 450-page printed resource, online in order to:
 - increase the variety of format options for teachers
 - make resources of CAS available to more teachers
 - create an online home for workshop docs, video and photo documentation, teacher discussions—a virtual home for the program that has only from 10-45 hours of face-time each year
- Create new landing pages for all Education programs to increase visibility and program attendance
- Create museum-wide calendar

Driving Questions:

- How do you develop new web-based resources when you need to move faster than your institution can?
- How do you create a resource that can grow well alongside future museum website initiatives?
- How do you enlist museum-wide awareness and support for your project?
- Will this web initiative actually save us money?
- How do you complete a project like this when museum web staff is extremely overloaded?
- How will the resource be managed and maintained once it's up?
- How do you get teachers to transition over to this new resource?
- Because this is such a resource-intensive process, how can museums draw upon each other's work more?

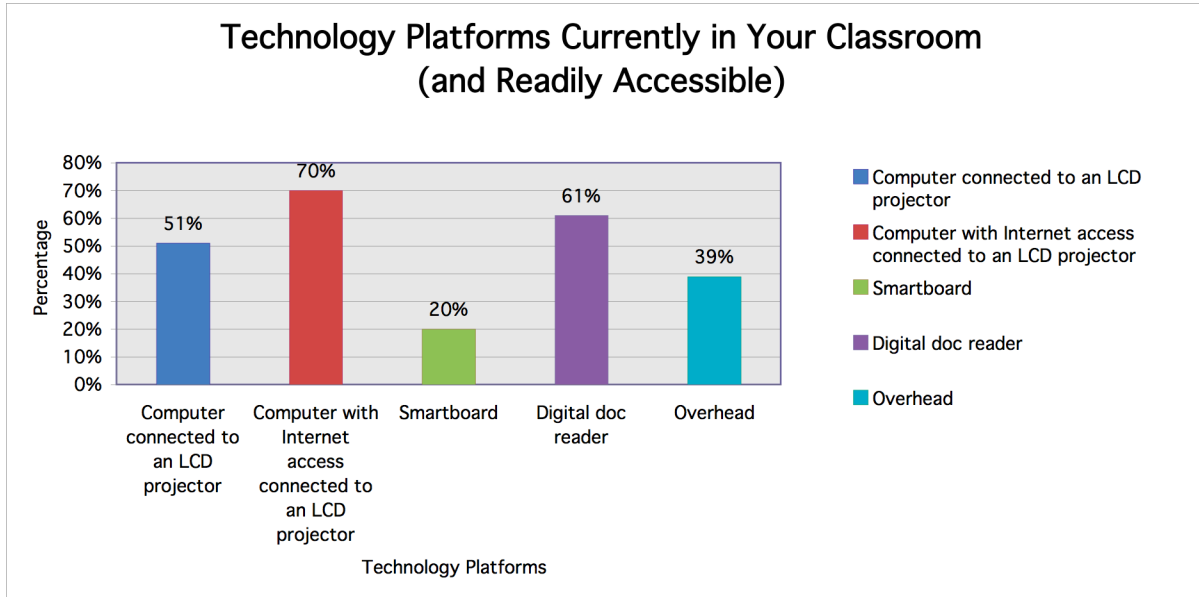
Research Methods:

- focus groups
- surveys
- user testing [by contracted web firm]
- ongoing: classroom observations; more surveys as teachers become more familiar with the resource

Selected Findings from Teacher Survey (June 2011; ~50 new program participants; latest in recurrent survey)

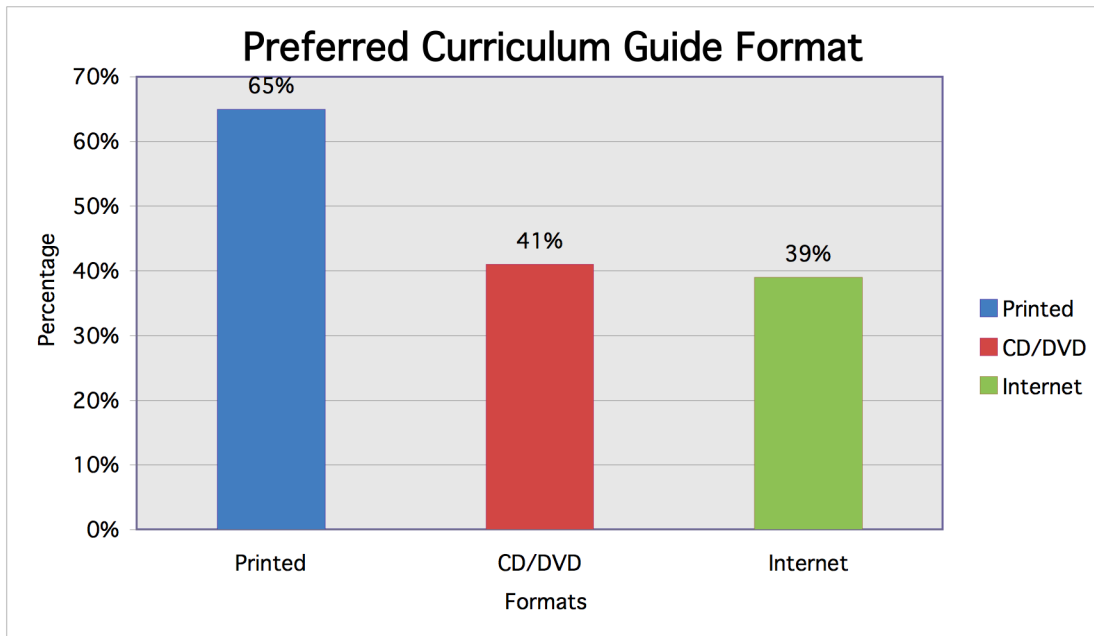
- There's a difference between what teachers have and what they USE because it's readily available.
- Over the course of several surveys and discussions, we learned we needed to separate out curriculum delivery platforms from image delivery platforms. Teachers mix and match these resources.

Technology Platforms Currently Available in your Classroom that are Readily Accessible



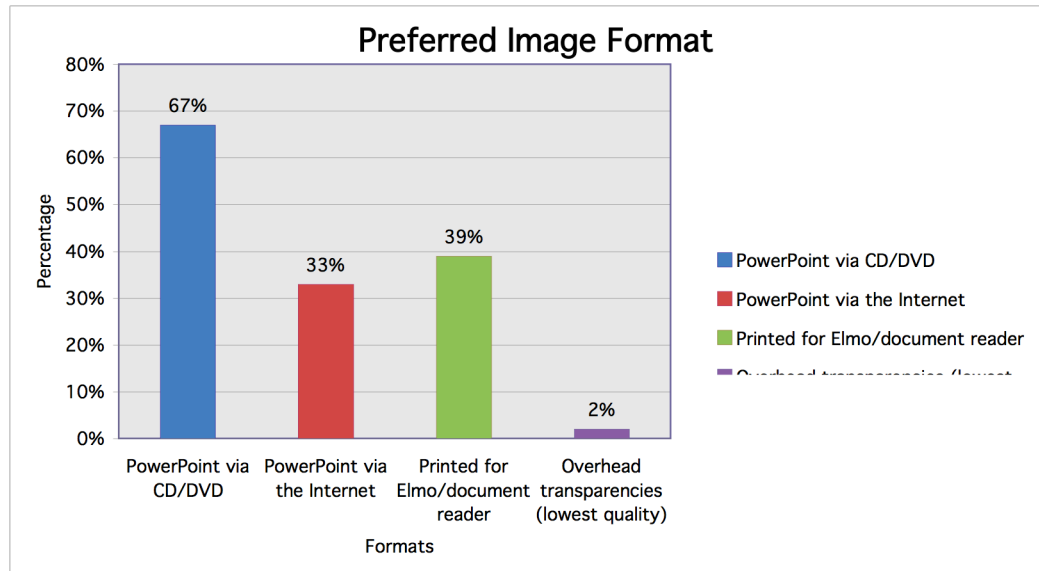
Most teachers (70%) indicate Internet access and image projection capability supporting the decision to create an extensive online resource. Digital document readers a close second; a resource we don't currently provide but hope to soon. Overheads still have a presence in classrooms; they're easy to use quickly but in a separate question, teachers predict this resource will be vanishing from classrooms shortly. Largest predicted addition to classrooms in the next 1-3 years is Smartboards, followed by digital document readers.

Preferred Curriculum Guide Format:



Surprisingly to us, despite clamor for web-based resources, 65% of teachers say they still prefer printed materials to teach from. This helped us realize that a move toward the web should automatically represent a move away from print. Also interesting to learn how many teachers want to access teaching materials via CD/DVD rather than depending on the Internet.

Preferred Image Format:



Again, interesting to learn that most teachers prefer to depend on digital images through a CD/DVD rather than via the Internet. This shaped our decision to continue issuing PowerPoints, PDFs, orientation video, and individual jpegs on CD/DVD in addition to web. Nearly 40% prefer to use a digital document reader, a resource that will become more prevalent in classrooms in the coming years, though currently, this is not a resource we offer. Showing images via the Internet, one of the key priorities of our project, came in third. However, teachers predict that generational transitions and increased Internet access (and ability to easily use it in the classroom) will continue to increase. Though overheads are still in approximately 40% of classrooms, only 2% of teachers prefer to use it to show images.

The Museum of Modern Art

moma.org/learn/teachers/online

Lisa Mazzola, Assistant Director, School and Teacher Programs
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Project:

MoMA Learning: A digital destination for teachers, students and informal learners

Critical Questions:

- How should we update Modern Teachers Online, a legacy teacher site that is based largely on printed teacher guides?
- Could we make the teacher materials useful for informal learners too?
- Now that more and more teachers have access to technology in their classroom, are their needs different?
- What would informal learners be looking for in a site and how would that be different from teachers?

Method:

Action Research, User Testing

More information available in context of session

TECHNOLOGY SURVEY QUESTIONS used for research

Feel free to use/adapt

Where do you teach?

- New England
- Mid-Atlantic
- Southeast
- Midwest
- West Coast
- Outside of the United States

Do you teach in a suburban, urban, or rural school district?

- Suburban
- Urban
- Rural

What type of school do you teach in?

- Public
- Private
- Charter
- Parochial
- Homeschool
- Other, please specify

What grade level do you teach?

- Elementary School
- Middle School
- High School
- I teach K-12
- Pre-School

What technology platforms do you use regularly in your classroom (at least twice per month)? Check all that apply.

- computer connected to an LCD projector
- computer with internet access connected to an LCD projector
- SmartBoard/Promethean Board
- Digital document reader
- Overhead projector
- Other, please specify

What technology platforms do you expect to use regularly in your classroom (at least twice per month) in the next 1-3 years? Check all that apply.

- Computer connected to an LCD projector
- Computer with internet access connected to an LCD projector
- SmartBoard/Promethean Board
- Digital document reader
- Overhead projector
- Other, please specify

How do you utilize art museum art websites in your teaching? Check all that apply.

- to enhance my own knowledge in preparation for a lesson I'm going to teach
- for images of works of art that I can project in the classroom
- to get lesson plan ideas
- for student research
- to find out about programs for teachers and students
- I rarely visit art museum websites for reasons related to teaching.
- Other, please specify

What challenges do you face in using the internet to access art images and information for classroom use? Check all that apply.

- Blocks on certain websites
- There is a limit on how much I can print
- Difficulty printing in color
- Inability to project images in the classroom
- Unreliable internet connection
- Finding images that are high resolution
- I don't have challenges using the internet to access art and information for classroom use.
- Other, please specify

What is your preferred curriculum guide format (authored by an art museum)? Select up to 2 answers.

- Printed
- Printed with CD/DVD
- Online only (information to print or view online, but not downloadable)
- I like having curriculum guide text available in multiple formats (digital, online, print)
- Downloadable Word document from the internet
- Downloadable PDF document from the internet

How often do you use the following when viewing works of art in the classroom?

	Not at all	Once a year	At least 4 times per year	At least once a month	At least once a week
Large posters	m 1	m 2	m 3	m 4	m 5
Color copies	m 1	m 2	m 3	m 4	m 5
Overhead transparencies	m 1	m 2	m 3	m 4	m 5
Power Point via CD/DVD	m 1	m 2	m 3	m 4	m 5
Power Point downloaded from the internet	m 1	m 2	m 3	m 4	m 5
Projected image from a live internet connection	m 1	m 2	m 3	m 4	m 5
SmartBoard/Pro methean Board	m 1	m 2	m 3	m 4	m 5
Document reader/Elmo	m 1	m 2	m 3	m 4	m 5
OIV (ArtStor)	m 1	m 2	m 3	m 4	m 5

How frequently do you use the internet during class to:

	Not at all	Once a year	At least 4 times per year	At least once a month	At least once a week
display images of works of art?	m 1	m 2	m 3	m 4	m 5
have students engage in interactive activities (i.e. online educational games)?	m 1	m 2	m 3	m 4	m 5
have students conduct research independently?	m 1	m 2	m 3	m 4	m 5
review information as a class?	m 1	m 2	m 3	m 4	m 5

What are the pros and cons of using printed versus digital images and information about works of art in your classroom?