

Recommended Materials, Instructional Guidelines, and Facilities for Learning—Media Arts

The charts below represent suggested materials, space requirements, and environmental needs to successfully implement and maintain a Media Arts program in your school or district. The chart is broken down in to Basic, Suggested, and Advanced. The three columns represent the minimum requirements, the suggested requirements, and advanced requirements for each category.

Please note: The information and website links in this document were accurate at the time of publication.

Curriculum and Scheduling

	Basic	Intermediate	Advanced
Curriculum	The curriculum includes experience in creating, performing, and responding to media arts using whatever tools and technologies available to the particular school.	The curriculum includes experience in creating, performing, and responding to media arts using shared computers and whatever basic or built-in technologies are available.	The curriculum includes experience in creating, performing, and responding to media arts using digital and analog technologies, as well as innovative and experimental uses of broad and emerging technologies.
Scheduling	<p>-Classes should be kept to short blocks and meet at least once a week for at least one semester/academic half year.</p> <p>-The class size of media arts classes does not exceed the average for other academic classes in the school.</p>	<p>-Classes should be a mix of long and short blocks and meet at least once a week for at least one semester/academic half year.</p> <p>-The class size of media arts classes does not exceed twelve students per class except in classes where more students may be beneficial to the curriculum.</p>	<p>-Classes should kept to long blocks and meet at least twice a week for a full academic year.</p> <p>-The class size of media arts classes does not exceed eight students per class except in classes where more students may be beneficial to the curriculum.</p>

Staffing and Professional Development

	Basic	Intermediate	Advanced
Teacher Qualification and Load	-Instruction is provided by Highly Qualified/Certified teachers who have received formal training (including in-service training) in media arts.	-Instruction is provided by Highly Qualified/Certified teachers who have received formal training (including in-service training) in media arts. Teachers with graduate degrees are preferred.	-Instruction is provided by Highly Qualified/Certified teachers who have received formal training (including in-service training) in media arts. Teachers with graduate degrees and real-life experience are preferred.
Professional Development and Evaluation	-Teachers should keep up with various interdisciplinary practice with particular interest/aptitude to combine their specialty with other disciplines, and should be evaluated on their ability to mix media and teach in a combinatory way.	-Teachers should have experience with general computer skills and be able to combine their specialty with some kind of digital technology, and should be evaluated on their ability to connect the creative process to basic digital tools.	-Teachers should have regular access to online tutorials, conferences, and professional journals in media arts and emerging technologies, and should be evaluated on their ability to add and incorporate new digital hardware, software, and techniques into their curriculum.

Equipment and Accessories

	Basic	Intermediate	Advanced
Equipment	-There are a sufficient number of equipment materials such that all students can be simultaneously engaged in the creating process.	-There are a sufficient number of equipment materials such that all students each have their own piece of equipment to use in order to be engaged in the creating process.	-There are sufficient number of equipment materials so that all students each have their own piece of equipment to use as well as additional pieces of equipment in order to

			<p>differentiate in the creating process.</p> <p>-Students have access to both Macintosh and Windows operating systems.</p>
<p>Accessories</p>	<p>-Pieces of equipment or software that help students facilitate in the artistic processes. Such equipment can be tablet computers, video/audio capture devices, applications, textbooks, games, etc. There should be a sufficient amount in a classroom that students can all access an accessory during a lesson.</p>	<p>-The following are provided in sufficient quantity: visual and audio recording devices.</p> <p>-Tablet computers such as an iPad, -- Microsoft Surface, Samsung Galaxy Tablet, etc.</p> <p>-iPad/iPod or equivalent loaded with apps, games, textbooks, etc.</p> <p>-Digital inputting equipment for a computer.</p> <p>-There should be a sufficient amount in a classroom that students can all access an accessory during a lesson.</p>	<p>-The following are provided in sufficient quantity: visual and audio recording devices.</p> <p>-Tablet computers such as an iPad, Microsoft Surface, Samsung Galaxy Tablet, etc.</p> <p>-iPad/iPod or equivalent loaded with apps, games, textbooks, etc.</p> <p>-Digital inputting equipment for a computer and/or tablet.</p> <p>-There should be a sufficient amount in a classroom that students each have their own accessory.</p>

Content and Technology

	Basic	Intermediate	Advanced
Content	<p>-A library of software is provided that is sufficient to provide a license for each student in the class. The library contains software for each subject that pertains to media arts: music technology, visual art, digital art, etc.</p> <p>-At least two titles for each class should be updated/renewed/replaced or added each year.</p> <p>-The library contains both free and/or paid licenses.</p>	<p>-A library of software is provided that is sufficient to provide a license for each student in the class. The library contains software for each subject that pertains to media arts: music technology, visual art, digital art, etc.</p> <p>At least four titles for each class should be updated, renewed, replaced, or added each year.</p> <p>-The library contains both free and paid licenses.</p>	<p>-A library of software is provided that is sufficient to provide a license for each student in the class. The library contains software for each subject that pertains to media arts: music technology, visual art, digital art, etc.</p> <p>-Five or more titles for each class should be updated/renewed/replaced or added each year.</p> <p>-The library contains both free and paid licenses.</p>
Technology	<p>-In every school the following are available for use in media arts instruction: computers and appropriate software, including creation and editing software; printers, etc.</p> <p>-Access is provided to a building laptop cart or iPad cart.</p>	<p>-In every school the following are available for use in media arts instruction: computers and appropriate software, including creation and editing software; printers, audio and video input and output devices, etc.</p> <p>-Each student has their own device such as a Chromebook, iPad, or laptop.</p>	<p>-In every school the following are available for use in media arts instruction: computers and appropriate software, including creation and editing software; printers, audio and video input and output devices, etc.</p> <p>-Each student has their own device such as a Chromebook, iPad, or laptop.</p> <p>-Access is provided to a building cart that contains other 1:1 devices that students can use to help</p>

			aid in their learning.
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Classroom and Facilities

	Basic	Intermediate	Advanced
Classroom and Facilities	<p>-Students have access to spaces with the equipment necessary to help them learn the curriculum of a particular media arts class.</p> <p>-Students present their work to the public at least once per year.</p>	<p>-There is a designated space or room for media arts classes.</p> <p>-Students have access to spaces with the equipment necessary to help them learn the curriculum of a particular media arts class.</p> <p>-Students have access to spaces with appropriate sound reproduction equipment on a regular basis to enable them to present their accomplishments.</p> <p>-Students present their work to the public at least once per year.</p> <p>-Students present their work online at least once per year.</p>	<p>-There is a designated space or room for media arts classes.</p> <p>-Students have access to spaces with the equipment necessary to help them learn the curriculum of a particular media arts class.</p> <p>-Students have access to spaces with appropriate sound reproduction equipment on a regular basis to enable them to present their accomplishments.</p> <p>-Students take field trips to outside facilities that demonstrate how particular equipment is used in a real-life setting.</p> <p>-Students also experiment with the equipment with respect to the outside facilities' policies.</p> <p>-Students present their work to the public at least once per year.</p> <p>-Students present their work online at least once per year.</p>

Media Arts Recommended Instructional Resources

Below is a list of various recommended instructional resources for Media Arts courses. The list includes equipment and resources from well known companies and are also used by professionals. Media Arts classes include topics such as:

- Music Production
- Music Composition
- Film Scoring
- Acoustics
- Audio Production
- Audio Recording
- Video Production
- Digital Imaging & Photography
- Graphic Design & Illustration
- Animation & Special Effects
- Web Art
- Web & Interactive Design
- Processing & Coding
- Installation & Site Specificity
- Studio Lighting

Example careers in a Media Arts related field are the following:

- Sound Engineer
- Music Composer
- Acoustician
- Acoustical Engineer
- Film Scorer
- Music Producer
- Broadcast Technician
- Monitor Engineer
- Studio Manager
- Artist
- Studio/Production Assistant
- Art Handler/Preparator/Curator
- Graphic Designer
- Web/Application/Software/Interactive Designer
- Animator/Illustrator
- Video Editor
- Social Media Marketer/Manager/Analyst

Hardware

- Apple iMac with 3.7 GHz quad-core Intel Core i7 processor, 8 GB RAM and 1 TB Fusion Drive
- or Windows computer with comparable specifications
- Apple iPad
- Microsoft Surface
- Google Chromebook
- Yamaha Arius YDP-181 digital pianos
- Behringer, PreSonus, or Allen & Heath Console Mixer
- Various microphones, cables, and stands
- Reed Instruments R8050-NIST Sound Level Meter
- Korg nanoPAD2
- Sony MDR7502 Professional Studio Headphones
- Professional level DSLR Cameras
- Audio Recorders
- Movable Video Projectors (various sizes & lumin counts)
- Flat screen HD TV Monitors (various sizes)
- External Hard Drives (various capacities)
- Media Players (ie: Micca Speck 1080p HD Digital)
- Epson Inkjet Photo Printers (& paper of various finish)

Software

- GarageBand (included with iMac)
- Logic
- Pro Tools
- Audacity
- Noteflight
- Finale
- Soundtrap
- FL Studio
- Ableton
- Mixcraft (for Windows)
- Adobe Audition
- GarageBand for iOS
- Launchpad for iOS
- iMovie
- Final Cut Pro
- Avid Media Composer
- Adobe Premiere Pro
- Adobe Photoshop
- Adobe InDesign
- Adobe Illustrator
- Adobe Lightroom
- Processing

- Rhino (3D modeler)
- Arduino (3D coding & automation)

Device Management Software

- Apple Remote Desktop Software
- Comparable Windows alternative

Room

In order to provide the best environment for optimal function in a Media Arts classroom, the space should use the following recommendations:

- Individual room specific to Media Arts.
- Individual student stations with software licenses for each student.
- Access to the internet.
- Student or school provided headphones to work individually.
- Speakers & monitors for playback in a group setting or for class instruction.
- Projector and teacher station for demonstrations and lectures.
- Access to above mentioned Media Arts equipment.
- Open or separate space (from lab) for viewing/performing/experiencing/installing projects.

Faculty

In order to provide the best instructional experience for students, the following recommendations should be considered:

- Faculty member with a graduate degree, preferably in music education, music technology, media arts, design, computer science, and/or other fine arts experience.
- Highly qualified.
- Experience in the field preferred.
- Access to continuing professional development and aptitude for collaboration with other teachers who teach a similar subject.
- Teacher should teach no more than five classes.
- Potential for teacher to also manage auditorium/computer lab/maker space/art gallery or other public art facility.

Instructional Time

Please consider the following recommendations in regards to instructional time:

- Should vary depending on the age group focus of the course.
- Grades K-1 students should have access to digital media at least once per week for thirty minutes for the entire school year, OR multiple times per week for a quarter or half-year.
- Grades 2-8 students should have access to digital media at least once per week for forty-five minutes for the entire school year, OR multiple times per week for a quarter or half-year.
- High school students should have class once every day for forty-five minutes for one half year.

- A more serious high school program should have advanced level and more specialized courses for students who wish to pursue Media Arts further.

Curriculum and Equipment Updates

Please see the following recommendations for curriculum and equipment:

- The curriculum for Media Arts should be updated once every five years in order to stay up-to-date with emerging technologies.
- The computer equipment should be updated once every five to eight years.
- Other equipment should be updated as needed, but should not exceed ten years unless in special circumstances.
- Software should be updated to new X.0 versions every five to eight years.
- If software is on a per-year license, it should be renewed every year unless it is being replaced.
- Software and operating systems should be maintained in accordance with the information technology procedures of each school or district.