

III-C. Visual Arts Findings and Recommendations

This section contains findings and recommendations related to the internal quality review, the external referent reviews, and the review of 21st Century Skills and PWR Skills for visual arts. Detailed review criteria can be found in the Methodology section of this report. A brief description of the criteria and guiding questions also are provided here for convenience.

Internal Quality Review

As described in the Methodology section of this report, the Colorado MCS for visual arts were reviewed for their quality according to four criteria: depth; coherence; rigor; and breadth. The scale used for evaluating each criterion was as follows: Fully (F), Partially (P), No (N), or Insufficient information to determine (I). Findings from these analyses are presented below.

Depth

Ratings for depth are assigned based on the questions below.

- Do the benchmarks describe content of sufficient and appropriate depth in the standard *within each grade span*? (For example, is the depth of content of the standard appropriate for a school year?)
- Do the benchmarks describe content of sufficient and appropriate depth in the standard *across the grade spans*?

The table below shows the ratings for depth in the visual arts standards, reported for each standard at each grade span, as well as across the grade spans. The across grade span ratings are holistic ratings of the depth of the standards in K–12.

Table 17. Ratings for Depth in the Visual Arts MCS

Standard	K–4	5–8	9–12	Across Grade Spans
1	P	P	P	P
2	P	F	P	P
3	P	P	P	P
4	F	P	F	F
5	F	F	F	F

(F=Fully; P=Partially; N=No; I=Insufficient Information)

As Table 17 shows, standards 1, 2, and 3 are rated as Partially for depth across the grade spans. Standards 4 and 5 are rated as Fully for depth across the grade spans. The ratings for each standard within the grade spans are discussed below. Areas for improvement are also discussed below.

Standard 1

Standard 1 for visual arts requires students to recognize and use the visual arts as a form of communication. Standard 1 is rated as Partially for depth across and within the grade spans. The rating of Partially across and within grade spans is a result of both the lack of specificity and lack of reference to new technologies, such as digital technology, as a form of art expression to communicate ideas. New media technologies, coupled with visual culture studies and the use of semiotics, are all relevant movements in the 21st century that would provide depth to the content of the standard. In grade span K–4, noting that art is not only a visual language but also a form of literacy would give greater depth to the standard and provide a layer of meaning that would be sufficient for a rating of Fully. For grade span 5–8, the benchmarks are rated Partially due to insufficient depth. Reference to new media and other technologies, as means of communication in the arts, is necessary to achieve a rating of Fully. For grade span 9–12, a reference to new media technologies is necessary to achieve a rating of Fully.

Standard 2

Standard 2 for visual arts requires students to know and apply elements of art, principles of design, and sensory and expressive features of the visual arts. Standard 2 is rated as Partially for depth across the grade spans. The rating of Partially across the grade spans and within grade spans K–4 and 9–12 is a result of the lack of reference to new technologies. New media technologies and the use of semiotics would improve the depth of content of the standard. At the K–4 grade span, the standard states that students should be able to identify and apply the elements of art and principles of design. However, the inclusion of discussion and analysis would provide more depth to the standard. At grade span 5–8, the standard reflects sufficient and appropriate depth, and is rated as Fully. At grade span 9–12, the standard is rated as Partially. It expects students to compare and contrast, create, and evaluate the utilization of the elements of art and principles of design. It does not, however, include analysis and personal reflection, which are also important critical-thinking skills at this grade span.

Standard 3

Standard 3 for visual arts requires students to know and apply visual arts materials, tools, techniques, and processes. Standard 3 is rated as Partially for depth across and within the grade spans. The rating of Partially across and within grade spans is a result of the lack of detail in the standard and the lack of reference to new technologies. Stronger reference to new media technologies and the use of semiotics would give greater depth of content to the standard. For grade span K–4, standard 3 is broadly written for students' experiences with visual arts materials, tools, techniques and processes, but more specificity as to what these processes and techniques, at the various grade spans, are would provide more depth to this standard. For grade span 5–8, processes should be defined to add clarity and specificity. For grade span 9–12, processes should be defined to add clarity and specificity so that the standard can be evaluated for appropriate depth across the grade span. Additionally, self-reflection and analysis of a student's choice and use of materials and processes to convey ideas would add appropriate depth.

Standard 4

Standard 4 for visual arts requires students to relate the visual arts to various historical and cultural traditions. Standard 4 is rated as Fully for depth across the grade spans. The standard is rated as Fully at the K–4 grade span for appropriate depth. It completely articulates the relation of the visual arts to aspects of culture and historical traditions. The standard is rated as Partially for grade span 5–8. It extends the knowledge from grade span K–4 to include skills of comparison. However, the demonstration of how the history and culture of various people influence art needs to be articulated more clearly, so that the depth is fully developed. The standard is rated as Fully at the 9–12 grade span for appropriate depth. At this grade span, it includes skills of describing, evaluating, analyzing, and interpreting. Overall, the skills clearly and logically progress in depth over the K–12 grade spans by building on prior learning as defined in all of the benchmarks of standard 4.

Standard 5

Standard 5 for visual arts requires students to analyze and evaluate the characteristics, merits, and meaning of works of art. Standard 5 is rated as Fully for depth across and within the grade spans. For appropriate depth across the K–4 grade span, the standard meets all of the criteria for the rating of Fully. Critical analysis and aesthetic inquiry as defined in the glossary of terms are appropriately and adequately represented at this grade span. At grade span 5–8, it meets all of the criteria for the rating of Fully. Building on skills learned in grade span K–4, students move from observing and describing to identifying, discussing, and formulating individual responses. The spiraling of these skills merits the rating of Fully. At grade span 9–12, the standard meets all of the criteria for the rating of Fully. Student knowledge is extended to include the ability to “form and defend appropriate judgments” as part of interpretation and evaluation through a critical lens focused on aesthetic inquiry. The depth of the standard is fully represented in the articulation and detail of the benchmarks.

Coherence

Ratings for coherence are assigned based on the questions below.

- Are the benchmarks for each standard sequenced appropriately across the grade spans? (For example, do they scale or spiral appropriately across the grade spans?)
- Do the benchmarks begin and end at appropriate points in the content?

The tables below show the ratings for coherence in the visual arts standards, reported as appropriate sequence across the grade spans, and as appropriate beginning and endpoints for each standard at each grade span, as well as across the grade spans.

Table 18. Ratings for Coherence in the Visual Arts MCS

Standard	Appropriate Sequence Across Grade Spans
1	F
2	F
3	F
4	F
5	F

(F=Fully; P=Partially; N=No; I=Insufficient Information)

Table 19. Ratings for Coherence in the Visual Arts MCS

Standard	Appropriate Beginning and Endpoints			
	K–4	5–8	9–12	Across Grade Spans
1	P	P	F	P
2	P	F	F	F
3	F	F	F	F
4	F	F	F	F
5	P	F	F	F

(F=Fully; P=Partially; N=No; I=Insufficient Information)

As Table 18 shows, all of the standards are rated as Fully for appropriate sequence across the grade spans. As Table 19 shows, standard 1 is rated as Partially for appropriate beginning and endpoints across the grade spans. Standards 2, 3, 4, and 5 are rated as Fully across the grade spans for appropriate beginning and endpoints. The ratings for each standard within the grade spans are discussed below. Areas for improvement are also discussed below.

Standard 1

Standard 1 is rated as Fully for appropriate sequence across the grade spans and is rated as Partially for appropriate beginning and endpoints across the grade spans. For grade span K–4, the standard is rated as Partially. The endpoints should be set so that discussing visual images, themes, and ideas is included at the top end of the grade span. The remainder of the sequence is grade-level appropriate for the benchmarks. The standard is rated as Partially for grade span 5–8 because the endpoints should include interpreting and distinguishing the intended meanings of visual images. In the realm of semiotics, identifying symbols and interpreting their meaning is appropriate across the 5–8 grade span. For grade span 9–12, the beginning and endpoints for standard 1 are appropriate.

Standard 2

Standard 2 is rated as Fully for appropriate sequence across the grade spans and is rated as Fully for beginning and endpoints across the grade spans. For grade span K–4, the standard is rated as Partially for endpoints. The endpoints of the benchmarks for the standard are not appropriately placed. At the top end of the grade span, students should be expected to describe and discuss the elements of art and principles of design. For

grade span 5–8, and grade span 9–12, the standard is rated Fully for appropriate beginning and endpoints because the benchmarks logically spiral across the grade spans.

Standard 3

Standard 3 is rated as Fully for appropriate sequence across the grade spans and is rated as Fully for beginning and endpoints across the grade spans. For grade spans K–4, 5–8 and 9–12, the standard, which includes the exploration and application of materials, techniques and processes in concert with concepts and ideas to produce works of art, has appropriately placed beginning and endpoints that allow the skills and learning to spiral across the spans in a logical sequence.

Standard 4

Standard 4 is rated as Fully for appropriate sequence across the grade spans and is rated as Fully for beginning and endpoints across the grade spans. For grade spans K–4, 5–8, and 9–12, the standard is appropriate in the sequence in which students relate the visual arts to various historical and cultural traditions. A range of critical-thinking skills spirals across the grade spans as students identify, create, compare, interpret, demonstrate, describe, and analyze works of art based on their intersection with culture and history.

Standard 5

Standard 5 is rated as Fully for appropriate sequence across the grade spans and is rated as Fully for beginning and endpoints across the grade spans. For grade spans K–4, 5–8 and 9–12, standard 5 is rated as Fully for the scope and sequence of skills that the students demonstrate to meet the benchmarks at each span. Students are expected to engage in critical analysis and aesthetic inquiry as defined in the glossary of terms. The understandings associated with learning to evaluate the characteristics, merits, and meanings of art follow a logical sequence with appropriate beginning and endpoints for the bulleted benchmarks at each grade span. However, the standard at grade span K–4 is rated as Partially for appropriate beginning and endpoints. The endpoint should be set so that “identifying and discussing” reasons for creating art is included at the top of the grade span. The beginning and endpoints for grade spans 5–8 and 9–12 are appropriately placed and provide a seamless transition of skills from one grade span to another.

Rigor

Ratings for rigor are assigned based on the questions below.

- Do the benchmarks describe content and skill expectations of a reasonable and appropriate level for this grade span?
- Do the standards and benchmarks communicate an appropriate level of rigor?

The table below shows the ratings for rigor in the visual arts standards, reported for each standard at each grade span, as well as across the grade spans.

Table 20. Ratings for Rigor in the Visual Arts MCS

Standard	K–4	5–8	9–12	Across Grade Spans
1	F	F	F	F
2	P	P	F	P
3	P	F	P	P
4	F	F	F	F
5	F	F	P	F

(F=Fully; P=Partially; N=No; I=Insufficient Information)

As Table 20 shows, standards 1, 4, and 5 are rated as Fully for rigor across the grade spans. Standards 2 and 3 are rated as Partially for rigor across the grade spans. The ratings for each standard within the grade spans are discussed below. Areas for improvement are also discussed below.

Standard 1

Standard 1 is rated as Fully for rigor across and within the grade spans. The content and skill expectations associated with students' ability to recognize and use art as a form of communication demonstrate an appropriate level of rigor at all of the grade spans.

Standard 2

Standard 2 is rated as Partially for rigor across the grade spans. For grade span K–4, the standard is rated as Partially because the skills of discussing and demonstrating elements of art and principles of design in art are not included. Students should be expected to develop these cognitive skills at this grade span. For grade span 5–8, standard 2 is rated as Partially for the rigor of the listed benchmarks. At this grade span, the standard only requires students to describe and discuss characteristics of elements of art, use elements of art to communicate ideas and experience, and analyze or evaluate the use of elements of art to express ideas and experiences. However, in grades 7 and 8, students should also be able to create solutions to visual problems by using the elements of art and principles of design. At grade span 9–12, standard 2 is rated Fully for representing an appropriate level of rigor.

Standard 3

Standard 3 is rated as Partially for rigor across the grade spans. For grade span 5–8, the standard is rated as Fully. For grade spans K–4 and 9–12, the standard is rated as Partially because there is an inadequate amount of rigor. At grade spans K–4 and 9–12, the standard lacks experimenting and exploring as specific processes for the application of arts materials, tools, techniques, and processes. Grade span 9–12 should also include the skill of combining processes, which would increase the rigor of the standard to an appropriate level for this grade span.

Standard 4

Standard 4 is rated as Fully for rigor across and within the grade spans. The content and skill expectations are appropriate at each grade span. The benchmarks communicate the appropriate level of rigor at each grade span.

Standard 5

Standard 5 is rated as Fully for rigor across the grade spans. The standard is rated as Fully at grade spans K–4 and 5–8. The content expectations, which include the constructs of critical analysis and aesthetic inquiry, are reasonable and appropriate for each span. For grade span 9–12, the standard is rated as Partially. At this grade span, the standard does not refer to personal analysis and critique in the benchmarks. The skill of reflective practice is an important facet of making informed critical judgments and would increase the rigor of the standard to an appropriate level for this grade span.

Breadth

Ratings for breadth are assigned based on the questions below, each of which is reported in a separate table.

- Do the benchmarks describe sufficient and appropriate breadth of content across standards *within each grade span*?
- Do the benchmarks contain the essential content for this subject *within and across grade spans*?
- Are the benchmarks free from extraneous content *within and across grade spans*? If not, what content is extraneous?

Each of the three aspects of breadth examined is reported in a separate table in order to distinguish between essential and extraneous content.

Breadth represents the sufficiency of content across the standards. The table below shows the ratings for overall breadth *across* the visual arts standards within each grade span and across the grade spans.

Table 21. Ratings for Overall Breadth in the Visual Arts MCS

Grade Span	Across Standards
K–4	F
5–8	F
9–12	F
Across Grade Spans	F

(F=Fully; P=Partially; N=No; I=Insufficient Information)

As Table 21 shows, grade spans K–4, 5–8, and 9–12 are rated as Fully for overall breadth across the standards. For grade spans K–4, 5–8 and 9–12 there is sufficient content to meet the expectations and criteria set forth in the standards and benchmarks. The standards are broadly written and include a variety of techniques, processes, mediums and critical-thinking skills.

The table below shows the breadth ratings for essential content in the visual arts standards, reported for each standard at each grade span, as well as across the grade spans.

Table 22. Ratings for Breadth—Essential Content in the Visual Arts MCS

Grade Span	1	2	3	4	5	Across Standards
K–4	F	P	P	P	P	P
5–8	F	P	P	P	P	P
9–12	F	F	P	P	F	P
Across Grade Spans	F	P	P	P	P	P

(F=Fully; P=Partially; N=No; I=Insufficient Information)

As Table 22 shows, together grade spans K–4, 5–8, and 9–12 are rated as Fully for breadth—essential content—at standard 1, and as Partially at standards 2, 3, 4, and 5. Individually, grade span K–4 is rated as Partially for essential content across the standards; grade span 5–8 is rated as Partially across the standards for essential content; and grade span 9–12 is rated as Partially across the standards for essential content. Each grade span is discussed below. Areas for improvement are discussed below.

Grade Span K–4

Grade span K–4 is rated as Partially for essential content across the standards. Grade span K–4 is rated as Fully at standard 1 for having breadth in the content of this standard. The grade span is rated as Partially at standards 2, 3, 4, and 5 to indicate a lack of breadth of essential content across the grade span. At standard 2, the inclusion of describing the use of the elements and principles would make the content sufficient at this level. At standard 3, the grade span lacks reference to new media technologies, which would make the essential content more relevant. At standard 4, the grade span lacks reference to current art education methodologies, such as visual culture studies, and comparisons between contemporary cultures. As a result, it is difficult to provide relevant context for historical and diverse cultures. At standard 5, the grade span does not include judgment as a form of critical analysis, which would be appropriate for the grade span and provide breadth to the essential content.

Grade Span 5–8

Grade span 5–8 is rated as Partially for essential content across the standards. At standard 1, it is rated as Fully for having breadth in the essential content concerning art as a form of communication. At standards 2, 3, 4, and 5, the grade span is rated as Partially for missing some key elements. The grade span does not include as an essential skill any evaluation of the elements and principles at each standard. For instance, at standard 2, the grade span does not include a comparison of works of art. At standard 3, it does not specify the use of new media technologies as a tool and process. At standard 4, the grade span does not include visual culture studies. At standard 5, it does not include aesthetic inquiry and discussion.

Grade Span 9–12

Grade span 9–12 is rated as Partially for essential content across the standards. At standards 1, 2 and 5, the grade span is rated as Fully for containing essential breadth. At standards 3 and 4, the grade span is rated as Partially. At standard 3, the grade span does not include new media technologies as tools, techniques, and processes. At standard 4, the grade span does not address culture as it relates to the individual and to understanding one’s place in one’s own culture. At standard 5, the grade span does not include self-reflection of one’s own artwork. Being able to reflect on one’s own work is a natural part of developing into a mature artist, although this content is not enough to lower the rating for this standard.

The table below shows the breadth ratings for freedom from extraneous content in the visual arts standards, reported for each standard at each grade span, as well as across grade spans.

Table 23. Ratings for Breadth—Free of Extraneous Content in the Visual Arts MCS

Grade Span	1	2	3	4	5	Across Standards
K–4	F	F	F	F	F	F
5–8	F	F	F	F	F	F
9–12	F	F	F	F	F	F
Across Grade Spans	F	F	F	F	F	F

(F=Fully; P=Partially; N=No; I=Insufficient Information)

As Table 23 shows, together the grade spans K–4, 5–8, and 9–12 are rated as Fully for breadth—free of extraneous content—across the standards. Individually, grade span K–4 is rated as Fully for being free of extraneous content across and within the standards; grade span 5–8 is rated as Fully for being free of extraneous content across and within the standards; and grade span 9–12 is rated as Fully for being free of extraneous content across and within the standards. The standards across the grade spans are concisely written and do not contain extraneous content.

External Referent Review

As described in the Methodology section of this report, analysts reviewed four sets of content standards to serve as an external referent comparison with Colorado’s MCS for visual arts. The following documents were used as external referent standards for the visual arts review:

- Massachusetts Arts Curriculum Framework (November 1999)
- New Jersey Core Curriculum Content Standards for Visual and Performing Arts (2004)
- Finland
 - National Core Curriculum for Basic Education 2004, Visual Arts (Finland)
 - National Core Curriculum for Upper Secondary Schools 2003, Visual Arts (Finland)
- Art Syllabus Primary & Lower Secondary 2008 (Singapore)

These external referent standards were reviewed for two broad criteria, organization/structure and content. Each criterion contained several subcategories about which analysts recorded observations before determining a final overall holistic rating of mostly similar (Similar) or mostly different (Different). Findings from these analyses are presented below, first with a summary of findings across the external referents. This is followed by four sections detailing the findings of the review for each referent.

The table below summarizes the holistic external referent standards in comparison with Colorado’s MCS.

Table 24. Holistic Comparison Ratings for Visual Arts External Referents

Rating Category	Massachusetts	New Jersey	Finland	Singapore
Organization/ Structure	Different	Different	Different	Different
Content	Similar	Similar	Similar	Similar

The holistic ratings above reflect the analyst’s judgment that in all four external referent standards, there were differences with Colorado’s MCS in organization and structure. With all four of the referent standards, there were more differences than similarities. In content, the holistic ratings above show that in all four of the external referents there were more similarities than differences overall with Colorado’s MCS. The analyses below highlight various similarities and differences between the MCS and pertinent categories in each referent’s documents. It is important to note that the referents have similarities and differences among one another, as well as with Colorado’s MCS. However, no one approach is intended to be presented as necessarily more or less effective than another. Differences in structure or content of a state or country’s standards may be qualitative, but may also be attributable to differences in history, purpose, and/or context. Thus, the implication is that a variety of approaches and combinations of approaches may be considered, should they be determined to be appropriate for Colorado.

Organization and Structure

As indicated in Table 24, the organization and structure of the Colorado MCS for visual arts differs significantly from the organization and structure all four of the external referents, based on the categories of grade articulation, hierarchy of standards, number of standards, and the design/format of the document. The referents also differ from each other in these categories as well.

Grade Articulation

The Colorado MCS for visual arts articulates its standards across three grade spans: K–4, 5–8, and 9–12. Its standards are presented spirally to provide vertical continuity throughout the K–12 grades. Three of the referents also articulate their standards by grade span. The grade span articulation of the Colorado MCS is most similar to Finland’s *National Core Curriculum*, which has three grade spans. However, Finland’s *National Core Curriculum* does not include Kindergarten. The *New Jersey Core Curriculum Content Standards for Visual and Performing Arts* has 5 two-year grade spans. The *Massachusetts Arts Curriculum Framework* is similar to the Colorado MCS in that the three grade spans are similarly articulated at K–4, 5–8, and 9–12. The *Singapore Art Syllabus* is different from the Colorado MCS and the other referents in its standards articulation. It organizes standards at the Primary and Lower Secondary stages, and does not include standards for the pre-university level.

Hierarchy of Standards

The Colorado MCS organizes its curriculum hierarchically. There are broad standards, which are spirally presented across the grades spans. The standards are supported by benchmarks at each grade span. The *Singapore Art Syllabus* has a similar hierarchy of standards to the Colorado MCS, organizing its curriculum by objectives, learning outcomes, and learning outcome bullets. The *Massachusetts Arts Curriculum* is similar, organizing its curriculum by standards and learning standards. Finland’s *National Core Curriculum* is also similar. Although it does not have a formal hierarchy of standards, its objectives are similar to the standards of the Colorado MCS and are supported by core content sections and descriptions of good performance sections. The *New Jersey Core Curriculum* is different from the Colorado MCS. It integrates four arts disciplines music, theater, dance, and visual arts, into its structure. The curriculum applies to all four disciplines and the visual arts curriculum is only one strand. Below the strand level, the curriculum is further divided into indicators that support the strands.

Number of Standards

The Colorado MCS has fewer standards than three of the external referents. It has five standards with two to three benchmarks at each grade span, for a total of 41 benchmarks. Finland’s *National Core Curriculum* has seven to eight objectives and four core content bullets at each of the lower grade spans. At the upper secondary grade span, there are five courses, each with four to five objectives and four to five core content standards. The *New Jersey Core Curriculum* has five standards. Below those are two to four strands per standard and two to four indicators per strand. The *Massachusetts Arts Curriculum* is similar to the Colorado MCS with five standards. However, it also has 20 learning standards at the Pre-K–4 grade span, 21 learning standards at the 5–8 grade span, and 22

learning standards for the Basic Study strand of the 9–12 grade span. It also has five additional standards about understanding art that have 40 learning standards. The *Singapore Art Syllabus* has three objectives, seven sub-objectives, and three learning outcomes.

Design/Format

The Colorado MCS and the four external referents have similarities and differences in the design and format of their standards documents. The Colorado MCS spirally presents its standards across grade spans. In addition, it has an introduction that addresses learning and philosophical objectives for an arts education, a glossary of terms, visual arts reference list, an index, and a matrix of cross-disciplinary connections among all subject areas. It is 16 pages. Finland’s *National Core Curriculum* uses an introductory philosophical narrative that speaks to the importance of the arts in the education of children similar to the Colorado MCS. It is part of a much larger national core curriculum document. The *National Core Curriculum* for basic education is five pages, and it is four pages for the upper secondary education. The *New Jersey Core Curriculum* has an introductory narrative that addresses what an arts education provides for students. Along with the standards for the four art disciplines, it also includes references. It is 19 pages. The *Massachusetts Arts Curriculum* has the longest and most descriptive document, which is 161 pages and includes all four of the arts disciplines. It has an extensive overview that explains the structure of the framework with its standards, benchmark statements, and learning scenarios. It also includes a section on guiding principles that are similar to the Colorado MCS. It also has a set of appendices. It is the most comprehensive of the documents. The *Singapore Art Syllabus* is 29 pages and includes art-planning instructional programme sections and appendices.

Content

Table 8 shows that the content of the Colorado MCS for visual arts has more similarities than differences with the content in the standards of all four of the external referents. The larger concepts in art and design are present in varying forms across the different sets of standards. Expectations of skill mastery at different grade spans account for notable differences amongst the referents. The Colorado MCS is similar in most of its content with the external referents. What is different between the Colorado MCS and the external referents is how general art concepts, which are germane to all art disciplines, are translated into the visual arts.

Standard 1

The Colorado MCS and four external referents are mainly similar in their emphasis that visual arts are a form of communication. The Colorado MCS looks holistically at concepts of visual images creating meaning. The critique or discussion of art as a means of reflection and reinforcement of understanding art is common to the Colorado MCS and the four referents. The *New Jersey Core Curriculum* requires students to be able to “apply arts language to communicate personal responses.” The *Massachusetts Arts Curriculum* specifically references that art is a form of communication and literacy. Finland’s *National Core Curriculum* regards art as a form of communication in the context of media and visual communication, in which visual narration and the use of text and image,

such as film, television, comics, computer images, are expressed. The *Singapore Art Syllabus* indicates that art-making is a process of creating images that communicate ideas. There are a few minor differences between the Colorado MCS and the external referents. The Colorado MCS has more breadth and depth than the *New Jersey Core Curriculum*, explicitly addressing critical thinking processes to view art as a form of communication. The *Singapore Art Syllabus* also addresses aesthetics and considers aspects of learning that not art specific for understanding visual art as a form of communication. Unlike Finland's *National Core Curriculum*, the Colorado MCS does not focus on media and digital art as a form of communication.

Standard 2

The Colorado MCS has similarities and differences in emphasis with the four external referents. Each document addresses the use of the elements of art and principles of design in the creation of art. The Colorado MCS and the external referents universally recognize the creation of art using the elements and principles at all levels. The critique, examination, and interpretation across the grade spans vary among the documents, but the differences are not significant. The *Massachusetts Arts Curriculum* and the *New Jersey Core Curriculum* connect the use of elements and principles in all of the art disciplines. Finland's *National Core Curriculum* refers to the elements and principles as the fundamentals of visual composition and lists them as part of visual expression and thinking in the core content standards. The main differences between the Colorado MCS and the external referents are that the *Singapore Art Syllabus* is more holistic in its approach in understanding the use of elements and principles in the creation of art than the Colorado MCS, which is more methodical. Unlike the Colorado MCS, the *New Jersey Core Curriculum* includes the use of various media for providing a work of art that contains elements and principles of art and design. The *Massachusetts Arts Curriculum* focuses on how elements and principles of art are specifically used in works of art. The Colorado MCS emphasizes how they are used to communicate ideas and solve visual problems.

Standard 3

In addition to the elements and principles of art, the hands-on articulation of ideas to artistic objects is universal in the visual arts. The use of a variety of artistic media, tools, processes, and techniques is addressed in the Colorado MCS and all the external referents. The Colorado MCS identifies use, experimentation, demonstrated skill or proficiency, and evaluation of the use of the processes as benchmarks at different grade spans. The *Singapore Art Syllabus* indicates developing skills with materials, tools, and process as a defined objective. Finland's *National Core Curriculum* is different in its explicit reference to digital technologies and new media as art tools. The *Massachusetts Arts Curriculum* lists numerous artistic media in its K–12 standard 1: Methods, Materials and Techniques, and gives examples of the uses of various media in specific context in the Learning. It is different from the Colorado MCS in being more literal in its formation of tools, techniques, and processes. The *New Jersey Core Curriculum* is most different from the Colorado MCS. It lacks the breadth and depth of the Colorado MCS at this standard. It is less descriptive in its citation of the tools of art production, only citing the “active participation in the creation of art” using a variety of media.

Standard 4

The Colorado MCS and the external referents all address the importance of an historical understanding of art and art movements as well as art as an expression of culture. Standard 4 of the Colorado MCS extends to students understanding their own culture and the role of the visual arts in shaping cultures and civilizations. Like the Colorado MCS, the *New Jersey Core Curriculum* and the *Massachusetts Arts Curriculum* have specific standards for history and culture that address the role of the arts in relation to world cultures, history, and society. Art is a reflection of the history of the time and expression of culture. Therefore, it is an integral part and key component of the Colorado MCS and the external referents. Unlike the Colorado MCS, Finland's *National Core Curriculum* specifically mentions visual culture study, as does the *Massachusetts Arts Curriculum*. Unlike the other referents, Finland's *National Core Curriculum* has a nationalized approach to art history where the integration of Finnish artistic and cultural traditions in the arts is a separate course of study. The *Massachusetts Arts Curriculum* is different in that it has comprehensive historical references in its Appendix A: Arts in World and United States History. Moreover, throughout the document, there are art historical references in the learning standards. The *Singapore Art Syllabus* is different from the Colorado MCS in that cultural and historical understandings of art expression are embedded throughout the objectives of the syllabus.

Standard 5

As outlined in Colorado MCS standard 5, making informed and critical judgments about art is fundamental to the study of art. Students are expected to use critical thinking skills such as analysis, observation, evaluation, interpretation, self-reflection in the critical discussion and analysis and aesthetic inquiry of works of art. The Colorado MCS concisely spirals skills across the grade spans where students move from observation to critical analysis over a 12-year span. The *Massachusetts Arts Curriculum* and the *New Jersey Core Curriculum* similarly scaffold their expectations through the articulation of their standards and benchmarks. The *New Jersey Core Curriculum* expects its students to be able to orally communicate opinion on the arts based on observation at the end of grade 2. By the end of grade 12 students should be able to develop criteria for evaluating works of art. The *Massachusetts Arts Curriculum* is similar to the Colorado MCS. It addresses critical response and the students' ability to critically analyze artwork by using visual arts vocabulary. It also has five Pre-K–12 interdisciplinary art “connections” standards that address the ability to make critical judgments about art, artists, and the art world. Finland's *National Core Curriculum* has a more holistic approach than the Colorado MCS that includes behavioral responses to the environment and a discussion of physical issues, such as ethics and aesthetics as they relate to the mind, body, and environment. The *Singapore Art Syllabus* is the most different to the Colorado MCS. It articulates critical thinking through its Learning Outcome: Expressing, and in its Content Standards: Research.

Grade Spans

The Colorado MCS and the external referents mainly address similar content and skills at the same grade spans. The *Singapore Art Syllabus*, however, does not have a 9–12 grade span. The *Massachusetts Arts Curriculum* is more comprehensive and includes a wider range of concepts than the Colorado MCS across the grade spans.

Wording/Specificity

The Colorado MCS is mostly different from the external referents in the wording and specificity of its standards. The Colorado MCS benchmarks are very broadly written and encompass a wide range of content across the grade spans. In contrast, the external referents have a high degree of specificity in their standards and in the descriptions of their objectives.

The sections that follow provide detailed discussions of the similarities and differences between each external referent and the Colorado MCS, elaborating on the overview in the preceding section.

Massachusetts

Organization and Structure

The organization and structure of the Colorado MCS and the *Massachusetts Arts Curriculum Framework* are mostly different.

Grade Articulation

Both the Colorado MCS and the *Massachusetts Arts Curriculum* articulate their standards over three grade spans. The *Massachusetts Arts Curriculum* has similar grade spans as the Colorado MCS: Pre-K–4, 5–8, and 9–12. The notable difference is the inclusion of preschool at the earliest grade span. The 9–12 grade span is also divided into strands of Basic Study and Extended Study. It uses endpoints for its learning standards at the end of grades 4, 8, and the end of the Basic and Extended courses in grade span 9–12 to determine that the curriculum appropriately spirals across the grade spans.

Hierarchy of Standards

Both the Colorado MCS and the *Massachusetts Arts Curriculum* have similar hierarchies in standards. Instead of standards and benchmarks, the *Massachusetts Arts Curriculum* has standards and learning standards. Similar to the Colorado MCS it uses its learning standards to explain the intent of the standards for each grade spans. It is significantly different from the Colorado MCS in that it is incorporated with other art disciplines, such as music, dance, and theatre, into a larger curriculum document. As a result, in addition to standards that are specific to visual arts, the document has “connections” standards that apply to all art disciplines. These standards provide information and judgment-based standards, which address development of opinion and analysis of art and the art world. Because its Basic and Extended Study courses are separate, they also have their own standards and learning standards.

Number of Standards

The Colorado MCS and the *Massachusetts Arts Curriculum* are mostly differently in their number of standards. The latter has twice as many standards as the former. The *Massachusetts Arts Curriculum* has five standards at each grade span with 20 to 21 supporting learning standards at the lower grade spans, and between 7 and 22 supporting learning standards in the 9–12 grade span courses. Moreover, it has an additional 5 interdisciplinary “connections” standards. As a result, it has twice as many standards and learning standards (10 standards and 112 learning standards) as the Colorado MCS does standards and benchmarks.

Design/Format

The design and format of the Colorado MCS document differs significantly from the *Massachusetts Arts Curriculum*. The Colorado MCS has a two-page narrative overview of the visual arts, a list of cross-curricular applications, glossary of terms and reference list. The *Massachusetts Arts Curriculum* combines all of the arts disciplines into one comprehensive document. It is similar to the Colorado MCS in the articulation of its five visual arts standards. However, it has an additional section of interdisciplinary art standards. Whereas the Colorado MCS organizes benchmarks by grade span, the *Massachusetts Arts Curriculum* uses learning standards with endpoint indicators of

achievement at grades 4, 8 and 12. It has six appendices that offer supporting information. They address arts in world and United States history, assessment development, research on the arts on learning, opportunities to learn the arts, improving arts education, and technology literacy competencies and the arts. As a result, it is 161 pages.

Content

The content of the Colorado MCS for visual arts and the *Massachusetts Arts Curriculum* is more similar than different. Almost all content included in the Colorado MCS is addressed in the *Massachusetts Arts Curriculum*, though the latter is much more specific, detailed, and comprehensive. It focuses on a multi-disciplinary approach to arts learning. It also makes understanding visual art contextual, and represents what students are experiencing in their daily lives. Not only does it make connections between the visual arts and language arts, history, economics, math, and the sciences, it also brings relevancy to the study of art through the comparisons between and among the arts disciplines.

Standard 1

Both the Colorado MCS and the *Massachusetts Arts Curriculum* address that students will recognize the use of the visual arts as a form of communication. The Colorado MCS is more theoretical than the *Massachusetts Arts Curriculum* and recognizes the cognitive processes necessary to make good judgments. It addresses communication as a way of making meaning through identifying, manipulating, and synthesizing images, themes, and ideas. The *Massachusetts Arts Curriculum* views art as literacy in the connections strand and recognizes all the arts as forms of expressions. Its standards are project- and activity-specific and not as conceptual as the Colorado MCS. It is more straightforward, and sets objectives for students to understand how art is used as a form of communication.

Standard 2

Both the Colorado MCS and the *Massachusetts Arts Curriculum* have standards that specifically address the elements of art and principles of design. Each includes knowing and expressing understanding of elements and principles of art through critical analysis, as well as applying the elements and principles in art making. As such, each recognizes the elements of art and principles of design as the building blocks for developing an artist. The Colorado MCS addresses how the elements and principles are used in art to communicate ideas and solve visual problems. The *Massachusetts Arts Curriculum* is different in how it lists the elements and principles. It gives a very detailed description of each of the elements and principles, and provides examples for how each one can be used and applied at each grade span. It focuses on how the elements and principles are used specifically in artwork by defining the concepts and citing techniques, materials, and process that could be used to demonstrate the concepts. It also cites exploration and experimentation as objectives for gaining an understanding of the concepts.

Standard 3

Both the Colorado MCS and the *Massachusetts Arts Curriculum* address the use of materials, methods, and techniques in the creation of visual art. The *Massachusetts Arts Curriculum*, however, has greater breadth and depth than the Colorado MCS at this standard. The use of materials, processes, tools, and techniques is widely referenced throughout the former. The artistic process, from the sketch and creation of the object to the exhibition of the artwork, is outlined specifically in the standard “Drafting, Revising, and Exhibiting.” The Colorado MCS, on the other hand, emphasizes the art making segment of the artistic process. It details how students will know about and use the materials (media) to create works of art at each grade span. It is more conceptual in its formulation of tools, techniques, and processes than the *Massachusetts Arts Curriculum*. The latter is more detailed, listing specific media and suggesting how they can be used to create two-dimensional and three-dimensional artwork. It lists different types of tools that are used to produce art (e.g., pens, brushes, cameras, printmaking, sculpture, and computers). Finally, the *Massachusetts Arts Curriculum* also creates relevancy through the Learning Scenarios that suggest actual projects. For example, in the 9–12 Extended Learning Scenario students create portraits using “a variety of materials and media.”

Standard 4

Both the Colorado MCS and the *Massachusetts Arts Curriculum* address the importance of understanding the historical foundations of art and the relationship of culture and art. Although presented differently, the concepts are similar in the two documents. The *Massachusetts Arts Curriculum* gives more detail in its learning standards. It indicates that students “interpret meanings of artistic works by explaining how the subject matter and form reflect the events, ideas, religions, and customs of people living at a particular time in history.” As such, it gives specific examples of artists to illustrate how different item periods express art. It also addresses to a greater degree than the Colorado MCS the importance of analyzing and interpreting the meaning of artistic works. The Colorado MCS standard is not as specific as the *Massachusetts Arts Curriculum*, but it is more realistic in its expectations of objectives for the grade spans. It is more theoretical and is not written as a “how to create art” text. It should also be noted that neither document addresses 21st century concepts of visual culture in their standards (e.g., electronic media).

Standard 5

The articulation of the use of critical thinking skills including analysis, judgment and opinion is embedded at all grade spans and in all suggested projects in both the Colorado MCS and the *Massachusetts Arts Curriculum*. The Colorado MCS broadly addresses the use of critical thinking skills in creating, interpreting, and evaluating art. The *Massachusetts Arts Curriculum*, on the other hand, gives specific ways and scenarios for using critical thinking skills. It also makes connections between the visual arts and other art disciplines. Neither document presents aesthetics as an important area of study.

Grade Span

Both the Colorado MCS and the *Massachusetts Arts Curriculum* use similar language and have similar expectations for students at specified grade spans. The content taught in the *Massachusetts Arts Curriculum* grade spans is similar to that of the corresponding Colorado MCS grade spans. They have similar standards and benchmarks at each grade span. The major difference is that the Colorado MCS is more succinct and theoretical in its treatment of the standards at the grade spans, and shows spiraling of skills and thinking across the grade spans.

Wording/Specificity

In most cases, the wording and specificity in the *Massachusetts Arts Curriculum* standards is similar to the Colorado MCS. They both address cognitive and critical-thinking skills throughout the standards, using similar language and concepts. However, the *Massachusetts Arts Curriculum* is more specific in suggesting types of media that should be considered for certain outcomes. Because it is very detailed and comprehensive, it tends to lack coherent focus.

New Jersey

Organization and Structure

The organization and structure of the Colorado MCS and the *New Jersey Core Curriculum Content Standards for Visual and Performing Arts* are mostly different.

The *New Jersey Core Curriculum* presents the arts disciplines together under the rationale that music, theater, dance, and the visual arts share a common theme as aesthetic disciplines and experiences in creation and performance. The *New Jersey Core Curriculum* represents a holistic understanding of the importance of the arts in the understanding of culture. Its standards include essential technical skills significant to life and work and they reflect critical cognitive skills necessary to make students critical consumers of knowledge. They show consistent spiraling of skills across grade spans and disciplines and reflect the characteristics of an arts experience including creativity, innovation, and invention.

Grade Articulation

Like the Colorado MCS, the *New Jersey Core Curriculum* presents its standards by grade spans, not grade levels. Instead of three grade spans, it has five, and uses Curriculum Progress Indicators (CPIs) to delineate student progress at grades 2, 4, 6, 8, and 12. Like the Colorado MCS, it spirally organizes its standards across the K–12 grade span, increasing the cognitive complexity at each new grade span.

Hierarchy of Standards

The hierarchy of standards between the Colorado MCS and the *New Jersey Core Curriculum* are mostly different. The *New Jersey Core Curriculum* has five standards: (1.1) aesthetics, (1.2) creation and performance, (1.3) elements and principles of the arts, (1.4) critique, and (1.5) world cultures, history and society. Visual arts, however, is part of a larger arts curriculum document that includes the other art disciplines of music, theatre, and dance. Each discipline is treated as a strand that is subordinated within each standard. Each strand has objectives measures called Cumulative Progress Indicators (CPIs) that target progress every two years through grade eight and again at the end of the 9–12 grade span. The (1.1) aesthetics, (1.4) critique, and (1.5) world cultures, history, and society standards have strands, A. knowledge, and B. skills, which apply to all of the disciplines and are not specific to visual arts.

Number of Standards

Both the Colorado MCS and the *New Jersey Core Curriculum* have five standards. The Colorado MCS, however, has 41 benchmarks defining the standards across 3 grade spans. The *New Jersey Core Curriculum* has 30 indicators specific to the visual arts and 75 indicators written for all the arts disciplines.

Design/Format

The design and format of the Colorado MCS and the *New Jersey Core Curriculum* are mostly different. Because the *New Jersey Core Curriculum* is an interdisciplinary art curriculum, it provides an introduction that broadly discusses its vision and philosophy of arts education and its importance in the education of children. It takes an advocacy

position that make broad claims about the benefits of the arts to peoples and cultures. In that spirit, the art disciplines are integrated within each standard and not presented separately. The document, however, is only 19 pages, including an art reference section.

Content

The content of the Colorado MCS and the *New Jersey Core Curriculum Content Standards for Visual and Performing Arts* are more similar than different. The documents are similar in their philosophic belief that all students should have art as part of their educational experience. The *New Jersey Core Curriculum* states that students should be proficient in one of the arts by graduation and should have an in-depth sense of aesthetics and understandings about art appreciation.

Standard 1

Both the Colorado MCS and the *New Jersey Core Curriculum* address the concept that art is a form of communication. The Colorado MCS indicates that students should understand the universal language of visual imagery and be able to apply critical analysis to the image. The *New Jersey Core Curriculum* includes this concept in the knowledge and skills strands, but in the context that visual images communicate cultural beliefs and values. Unlike the Colorado MCS, the *New Jersey Core Curriculum* includes aesthetic theory and studies as one of its standards, which supports its objectives to have all students engage in the arts for the sake of the arts. Nevertheless, the Colorado MCS has more breadth and depth in this standard. Unlike the *New Jersey Core Curriculum*, it addresses evaluating meaning and communication in works of art and critical-thinking processes specific to viewing art as a form of communication.

Standard 2

Both the Colorado MCS and the *New Jersey Core Curriculum* have the elements and principles of art and design as a specific standard. Citing the elements of design and principles of art as the building blocks of the visual artist is common to both the *New Jersey Core Curriculum* and the Colorado MCS. The Colorado MCS sets objectives that students will be able to recognize, use, critique, observe, and discuss the elements and principles as consumers of knowledge. The *New Jersey Core Curriculum* aligns with this approach and discusses how the interdisciplinary approach to the elements and principles gives context and connection to all the arts. It also includes the use of various media for producing artwork that contains the elements and principles of design.

Standard 3

The Colorado MCS and the *New Jersey Core Curriculum* are similar in their standards on the use of material and processes to create works of art. The Colorado MCS sets objectives for student understanding about how things are constructed. The *New Jersey Core Curriculum*, in its creation standard, emphasizes more conceptual understanding and less hands-on acquisition of skills. Unlike the *New Jersey Core Curriculum*, the Colorado MCS indicates that physical knowledge is necessary and that thinking critically about art-making is one aspect of the process. It broadly refers to the use of materials and processes. The *New Jersey Core Curriculum* includes the use of specific art media in the production of works of art. Unlike the Colorado MCS, it does not acknowledge the

scaffolding of skills as they relate to materials and processes. As a result, Colorado MCS shows greater breadth and depth. It should be noted that neither document addresses new media as a form of artistic expression.

Standard 4

The understanding of the role of art history and cultural studies is a standard in both the Colorado MCS and the *New Jersey Core Curriculum*. The content of the standard is similar. Both the Colorado MCS and the *New Jersey Core Curriculum* address the importance of the knowledge and study about the historical aspects of art and cultures. Each expects the study of art from different cultures and historical periods to influence how students evaluate, analyze, and make their own art.

Standard 5

Both the Colorado MCS and the *New Jersey Core Curriculum* address critical analysis as an important part of the visual arts. Each document has one of its five standards dedicated to analysis, evaluation, critique, interpretation, and judgment of the visual arts. Additionally, their other standards have elements of critical analysis embedded in each learning strand. The *New Jersey Core Curriculum* embeds characteristics of critical analysis across its standards, and the Colorado MCS addresses the characteristics as they specifically relate to the visual arts. The notable difference between the two documents is that the *New Jersey Core Curriculum* treats aesthetics as a skill and not as a branch of philosophy.

Grade Spans

The *New Jersey Core Curriculum* and the Colorado MCS address similar aspects of visual arts across the grade spans, including skills, knowledge, and critical thinking. Each encourages exploration and imagination in visual art at the K–4 grade span. Each also addresses similar content at the 5–8 and 9–12 grade spans. The *New Jersey Core Curriculum* looks at the holistic benefit of arts education. It is also different from the Colorado MCS in that it has an expectation for the production an original body of work by students at the end of grade 12.

Wording/Specificity

Conceptually, both the *New Jersey Core Curriculum* and the Colorado MCS have similar content in their standards, though it is presented differently. The wording of the *New Jersey Core Curriculum* is not always specific to the visual arts, because it includes other art disciplines. For example, in the strands and CPIs for the *New Jersey Core Curriculum* standard 1.2 Creation and Performance, students will “perform” various methods and techniques and interpret themes using symbolism, allegory, and irony, which reflect multi-disciplinary connections.

Finland

Organization and Structure

The organization and structure of the Colorado MCS and Finland's *National Core Curriculum* are more different than similar.

Grade articulation

Similar to the Colorado MCS, the *National Core Curriculum* articulates its standards across three grade spans: 1–4, 5–9, and upper secondary. Though the Colorado MCS includes Kindergarten and the *National Core Curriculum* starts at grade 1, the endpoints for the grade spans of the two documents are similar at grades 4, 8, and 12. A significant difference between the two documents is that the *National Core Curriculum* has two compulsory courses and three elective specialization courses at the upper secondary grade span. Both the *National Core Curriculum* and the Colorado MCS show a spiraling of skills as each grade span progresses. The cognitive complexity of the standards becomes more rigorous over the grade spans.

Hierarchy of Standards

The hierarchy of standards is similar between the two documents. The *National Core Curriculum* has objectives at each grade span that are similar to the standards of the Colorado MCS. It also has core content sections that include activities and projects related to the objectives at each grade span. Both the objectives and the core content sections have bullets subordinate to them. Unlike the Colorado MCS, the *National Core Curriculum* also includes a description of good performance section at the end of each grade span. As a result, the two documents are similar in their expectations for artistic growth and skill development as articulated in the hierarchy of the standards and objectives.

Number of Standards

The *National Core Curriculum* has more standards than the Colorado MCS. It has seven objectives and four core content bullets for the 1–4 grade span, and eight objectives and four core content bullets at 5–8 grade span. It has nine objectives and 11 core content bullets for upper secondary compulsory course and 12 objectives and 13 core content bullets for upper secondary specialization courses.

Design/Format

The design and format of the Colorado MCS and the *National Core Curriculum* are mostly different. The Colorado MCS includes five standards, each with a supporting explanatory paragraph and bulleted benchmarks. The *National Core Curriculum* prefaces its objectives and core content with a narrative overview of the arts as a subject and means of knowing. It includes a description of good performance or projected learning outcomes at the end of grades 4 and 8. The Colorado MCS includes expectations for learning in the benchmarks. The *National Core Curriculum* is also much shorter than the Colorado MCS. The Finnish visual art standards are also part of a larger *National Core Curriculum* document. The visual arts section of the *National Core Curriculum* for basic education is five pages; it is four pages for the upper secondary.

Content

The content of the Colorado MCS and the *National Core Curriculum* is more similar than different. The *National Core Curriculum* takes a more specialized approach to content than the Colorado MCS. However, the content emphasis is similar across the grade spans. Unlike the Colorado MCS, the content of the *National Core Curriculum* has more depth than breadth. It also emphasizes a national vision of visual arts. It stresses a rich design heritage, particularly in the areas of functional industrial design, architecture, and environmental design. The *National Core Curriculum* is organized around a philosophy of art as a way to foster imagination, enjoyment, the artistic process, and fundamental skills in the visual arts.

Standard 1

Both the Colorado MCS and the *National Core Curriculum* address art as a form of communication where students are expected to articulate how art is communication through critical analysis, judgment, and demonstration. The *National Core Curriculum* acknowledges that the “basic content of the instruction encompasses fundamental skills in visual expression and understanding of visual phenomena in society and environment and their meanings.” Unlike the Colorado MCS, the *National Core Curriculum* addresses media texts and other forms of digital representation as forms of communication. It lists visual narration, comic strips, television, computer games, films, advertising, and other forms of new media as artistic forms of expression.

Standard 2

The Colorado MCS and the *National Core Curriculum* include knowledge and application of elements and principles of design as fundamental to the creation of artwork and the basis of analysis for artwork. Each addresses the importance of students understanding the elements and principles from the perspective of the creator, critic, aesthetician, and historian, where context and connections are at the intersection of learning and knowing. The *National Core Curriculum* articulates the expression of the elements and principles through different media in ways that encourage understanding of the concepts while being engaged in art making.

Standard 3

Both the Colorado MCS and the *National Core Curriculum* have parallel standards regarding the use of the materials, processes, tools, and techniques in the visual arts. The *National Core Curriculum*, however, has more breadth at the standard. It also addresses the use of media and digital technologies specifically and includes materials and processes for creating architectural and environmental models and projections.

Standard 4

The Colorado MCS and the *National Core Curriculum* are more different than similar in emphasis at standard 4. In each document, there is an understanding of and emphasis on understanding the historical and cultural nature of the arts. The Colorado MCS and the *National Core Curriculum* acknowledge the importance of relating the visual arts to “historical and cultural traditions.” However, the *National Core Curriculum* approaches

its course of study through the lens of a national perspective. It emphasizes that its students learn about Finnish artists, architects, and the design traditions. It focuses on recognizing the differences in cultural and historical traditions from the context of Finnish art traditions.

Standard 5

Both the Colorado MCS and the *National Core Curriculum* address the use of critical thinking skills to evaluate the characteristics and merits of works of arts for appreciating, discussing, and creating works of art. The *National Core Curriculum* includes critical thinking in its core content “visual expression and thinking,” in which the thinking behind creating is a part of the creative process and includes critique and self-analysis. The Colorado MCS focuses on the critique of other people’s art. The *National Core Curriculum*, on the other hand, includes a self-reflective component of analysis of one’s own art. It is different, as well, in its attention to environmental aesthetics and the evaluation of environments from ethical and environmental perspectives.

Grade Spans

Both the Colorado MCS and the *National Core Curriculum*, articulate their standards across similar grade spans. Therefore, the attained skills at the endpoints of the grade spans are similar. Both the Colorado MCS and the *National Core Curriculum* purposefully spiral their standards to reflect progressive growth and realistic expectations of student achievement across the grade spans. The *National Core Curriculum* places greater emphasis at grade span K–4 for student understanding of its Finnish cultural and artistic traditions than the Colorado MCS does for a corresponding student understanding of United States cultural and artistic traditions. It also stresses environmental aesthetics at each grade span, which is not significantly addressed as a concept at any grade span of the Colorado MCS.

Wording/Specificity

In both the Colorado MCS and the *National Core Curriculum* there is similar wording in the definition of broad objectives. The thematic approach to an art education from a national standpoint is unique to the *National Core Curriculum* and not replicated in the other referents.

Singapore

Organization and Structure

The organization and structure of the Colorado MCS and the *Singapore Art Syllabus* are more different than similar. The general organization of the *Singapore Art Syllabus* is reflected in its overview, which includes a narrative about the importance of an arts experience for aesthetic awareness, and creativity visual literacy, as well as an understanding of one's own culture and history as well as those of others. Two goals of the *Singapore Arts Syllabus* are "well-planned instruction and positive learning experiences," which express the holistic aims of the art program.

Grade Span Articulation

The *Singapore Art Syllabus* presents a different grade articulation than the Colorado MCS. Although both documents articulate their standards by grade spans, the *Singapore Art Syllabus* uses two grade spans: Primary and Lower Secondary. The *Singapore Art Syllabus* divides its Primary grade span into three two-year grade spans, where cognitive and artistic development is expected at the end of grades 2, 4, and 6. It does not include standards for the Upper Secondary or the pre-university grade levels.

Hierarchy of Standards

The Colorado MCS and the *Singapore Art Syllabus* have similarities and differences in hierarchy of standards. Unlike the Colorado MCS, the *Singapore Art Syllabus* uses behavioral objectives: seeing, expressing, and appreciating. These objectives provide a broad framework for the curriculum. The *Singapore Art Syllabus* supports the objectives with learning outcome objectives that identify skills, values, and knowledge in concert with the behavioral objectives. Nevertheless, both documents spiral the skills and concepts across the grade spans, and both documents recognize artistic growth as a process that is reflected in the hierarchical design of the standards.

Number of Standards

The *Singapore Art Syllabus* has fewer standards than the Colorado MCS. It has three behavioral objectives, with seven sub-objectives, and three objectives articulated as learning outcomes rather than objectives within the standards.

Design/Format

The design and format of the *Singapore Art Syllabus* are different from those of the Colorado MCS. It has an aims of art education section that describes the goals of the syllabus. Both of its Primary and Lower Secondary sections have art instructional programme sections that are student-focused. These are not objectives *per se* but guiding principles for what is considered to be good instructional practice. The *Singapore Art Syllabus* also has three appendices that indicate achievement levels for student performance at the Primary and Secondary grade spans. The document is 29 pages.

Content

The content of the Colorado MCS and the *Singapore Art Syllabus* are more similar than different. Though the structure and organization of the *Singapore Art Syllabus* differ from the Colorado MCS, the content within the document has many similarities. The *Singapore Art Syllabus* indicates that art education should be a part of a holistic education.

Standard 1

Both the Colorado MCS and the *Singapore Art Syllabus* consider visual art to be a form of communication and literacy. Each document recognizes the expression of visual ideas as unique to each student and as a form of communication of thought and emotion through the use of images and objects. Each also utilizes discussion, analysis, and interpretation of art as communication. Though the Colorado MCS benchmarks are more direct and explicit, the *Singapore Art Syllabus* embeds its concept that images and objects as expressions of thought and emotion are a form of communication. It also addresses aesthetics as a characteristic of discussion.

Standard 2

Both the Colorado MCS and the *Singapore Art Syllabus* use the elements of art and principles of design as the critical framework for the discussion of works of art. Each document treats the elements of art and principles of design as building blocks for the artist. The *Singapore Art Syllabus* uses a more holistic approach to the application of elements and principles in all forms of visual art. It also defines multiple media that can be used to express the elements and principles of art. The Colorado MCS is neither project- nor media-specific. However, it is more methodical in its spiral presentation of the use of elements and principles across each grade span. Nevertheless, each document treats the understanding of the elements and principles as grade-span-specific and sets expectations that are appropriate to each grade span.

Standard 3

Both the Colorado MCS and the *Singapore Art Syllabus* address the application of materials, tools, techniques, and processes to visual arts. The Colorado MCS defines the use of materials, techniques, and processes as a standard for the creation of art. The *Singapore Art Syllabus* regards this body of knowledge as a part of a subset of skills that include visual inquiry, research and processing, and communication. The act of creating art requires the use of materials and occurs through a variety of media, which is implied in the creation aspect of the benchmarks. Each document also emphasizes exploration as an important element of working with materials and processes. Unlike the *Singapore Art Syllabus*, the Colorado MCS also notes that the safe and responsible use of tools is a part of the artistic process and an objective of the standard.

Standard 4

Both the *Singapore Art Syllabus* and the Colorado MCS emphasize understanding the historical and cultural importance of art movements and artists. Each treats art as an expression of culture. Looking at the artist's intent and the cultural context of artwork are goals in both the *Singapore Art Syllabus* and the Colorado MCS. The only substantive difference between the two documents for this standard is that the *Singapore Art Syllabus* encourages art experiences outside of the art classroom, such as visiting museums and galleries, as important opportunities for students learning about visual art.

Standard 5

Both the Colorado MCS and the Singapore Art Syllabus are similar in their treatment of the standard. Each document addresses the application of critical-thinking to the discussion of art. Each also encourages an understanding of critical analysis from the perspective of the artist and the critic. The Colorado MCS has a more concise description of critical thinking skills that spiral across the grade spans. The *Singapore Art Syllabus*, however, embeds these skills in its learning outcomes that include seeing, expressing, and appreciating as objectives for both Primary 1 and Secondary 2.

Grade Spans

The learner expectations across the grade spans are similar in both the Colorado MCS and the *Singapore Art Syllabus*. The spiraling of skills and vertical growth is common to both programs and is articulated through the Colorado MCS grade span benchmarks and the *Singapore Art Syllabus* Learning Outcomes from Primary 1 to Secondary 2. The notable difference is that the *Singapore Art Syllabus* does not include standards for the 9–12 grade span.

Wording/Specificity

The *Singapore Art Syllabus* regards the goals of the behavioral domain to be as important as the content and knowledge acquisition aims of the total syllabus. The assessment rubrics for the *Singapore Art Syllabus* are specific with regard to the learning outcomes, and what is considered to be novice, emergent, proficient, and expert. The Colorado MCS addresses the cross-disciplinary connections between the arts and other subjects.

Review of Colorado’s Visual Arts Standards for 21st Century Skills and Abilities and Postsecondary and Workforce Readiness

As described in the Methodology section of this report, analysts analyzed Colorado’s draft 21st Century Skills and Abilities (21st Century Skills) and definition of Postsecondary and Workforce Readiness (PWR Skills) to determine the degree to which Colorado’s MCS contain the skills described in those draft documents. Findings from those analyses are presented below.

Visual Arts Model Content Standards and the 21st Century Skills and Abilities

Critical thinking and reasoning

Critical thinking is rated Fully at every standard across the grade spans. Artistic problems require critical analysis, logic, invention, creativity, critique, and judgment to help shape and find solutions. Specifically, art uses skills of interpreting, distinguishing, researching, synthesizing, and evaluating in the creation of imagery and images that communicate intended meanings as stated in the Colorado MCS.

Information literacy

Information literacy is rated Partially at every standard across the grade spans. Art is a form of literacy, and aspects of knowledge acquisition, source discernment, and systems management are present in all of the Colorado MCS. However, technology and new media skills are tools of information literacy and are present in art classrooms nationwide. The MCS should address information literacy in the context of such new technologies.

Collaboration

Collaboration is rated Fully at every standard across the grade spans. Group critique, discussion, and analysis are excellent examples of the construct of collaboration in the Colorado MCS standards, and examples of what actually happens in the art classroom. Though the art production process can be a solitary event, collaborative practice exists in art classrooms where students form learning communities and work together to solve visual and design problems. Leaders emerge, social skills are developed, and design teams are created when the art experience is embraced as group problem solving.

Self-direction

Self-direction is rated Fully at every standard across the grade spans. Adaptability, initiative, personal responsibility, work ethic, and self-advocacy are facets of what it takes to create a work of art. Colorado MCS articulates these skills in the benchmarks, but it should consider adjusting some of the written language to highlight this specific 21st Century Skills.

Invention

Invention is rated as Fully at every standard across the grade spans. Invention defined as creativity, innovation, and integration of ideas are constructs and skills that one experiences in a visual arts education. In an art classroom, students are given a forum for creativity, a venue for innovation, and a context for the integration of ideas. All of these skills are fully represented in the standards and benchmarks of the Colorado MCS.

Visual Arts Model Content Standards and the Postsecondary and Workforce Readiness Skills

Application of reading, writing, and computing skills with minimal remediation or training

Application of reading, writing, and computing skills with minimal remediation is rated Fully at standards 1, 3, 4, and 5. It is rated Partially at standard 2. These skills are represented by implication though not specifically referenced in the standards. By including reading, writing, and technology in the standards particularly in standards 1, 3 and 5, they would be explicitly represented.

Logical reasoning and argumentation abilities

Logical reasoning and argumentation are rated Fully at every standard. The skill of argumentation is overtly present in standard 1 in the benchmark that requires evaluating and defending; however, the students have to “identify a reasoned viewpoint and communicate it” as they discuss, evaluate, compare, critique, and synthesize, which are objectives in all five standards.

Identification and solving of problems

Identification and solving of problem skills are rated Fully at every standard. Problem solving is embedded in all aspects of artistic practice.

Information management skills

Information management skills are not fully represented in the Colorado MCS. It is rated Partially at standards 1, 3, 4, and 5. It is rated No at standard 2. The characteristic of adapting to new information is implied in standards 1 and 3. To comply with PWR objectives, a reference to adaptation to new technologies would strengthen the standards. Financial awareness as an objective could fit into standard 4, but only where students could comprehend the context. Increasing productivity could be included as a behavioral objective of the process of art making in standard 3. Much of the artistic process involves systems thinking, but this skill is truly contextual and worth mentioning in the application of the artistic process in all of the standards.

Human relation skills

Human relation skills are rated as Fully at standards 1, 4, and 5. They are rated as Partially at standards 2 and 3. The Colorado MCS does not have a list of behavioral objectives for its standards, which is a recommendation for improvement of the standards. The affective domain merits attention in the context of learning, particularly in the arts.

Analysis and interpretation skills

Analysis and interpretation skills are rated Fully at every standard.

Recommendations

This section contains specific recommendations from the WestEd reviews, organized by the components of the analysis.

Internal Quality Review of Colorado's Visual Arts Model Content Standards

The CDE may want to consider implementing the following recommendations, where appropriate:

- Provide more clarification and depth to the standards. For example, in standard 4, the examination of one's own culture is mentioned in the narrative but should be included more clearly at each grade span, particularly in the context of visual culture. Experimentation is mentioned at grade span 5–8 of standard 3 but warrants additional comment in other areas of the standards and across all the grade spans.
- Provide greater depth and breadth in the benchmarks by focusing on particularly rich areas of the content, such as processes (standard 3).
 - Specify the processes in the standard. Processes in this standard reference the glossary, but a more detailed inclusive list of the standard would provide greater depth to the meaning of processes.
 - Include technology and new media as tools and processes for creating art. A separate standard or benchmark could be crafted to address the rapidly changing digital environment. Because of the changes in the past decade, the standards should reflect a paradigm to address the rapid change in technology.
 - See additional recommendation relating to processes in the recommendations based on the external referent review.
- Include appropriate starting and endpoints particularly at the top ends (grades 4 and 8) of the grade spans. There are only subtle differences in some of the objectives between grade spans 5–8 and 9–12. The CDE should consider further defining the expectations of some of their benchmarks, such as in standards 2, 4, and 5.
- Improve the rigor of the visual arts standards by supplementing or replacing some of the broad statements with more specific statements that would communicate clear expectations.
- Include cross-disciplinary and multi-disciplinary connections across the arts and other disciplines to offer greater breadth to the standards.

External Referent Review for Visual Arts

The CDE may want to consider implementing the following recommendations, where appropriate:

- Add multi-disciplinary strands: For increased rigor and relevance, multi-, inter- or cross-disciplinary connections should be added to the existing benchmarks. The external referents contain detailed benchmarks and acknowledgement of the

importance of cross-disciplinary curricula across the grade spans. Though the Colorado MCS represents this construct in its program narrative, it could include it in the content of the standards. The *Massachusetts Arts Curriculum Framework* and *New Jersey Core Curriculum Content Standards for Visual and Performing Arts* provide examples.

- As part of processes (standard 3), include a benchmark on environmental design and awareness, as well as eco/green processes in the arts. Finland's *National Core Curriculum* provides an example of such a benchmark.
- Add behavioral objectives. Particularly strong benchmarks and objectives in the external referents include behavioral objectives in addition to learning goals. Some of these include work ethic, craftsmanship, collaboration, productivity, self-direction, initiation, empathy, and self-reflection, which are all vitally important in the creation of art, as well as in the arena of character development. The *Singapore Art Syllabus* provides an example.
- Include aesthetic inquiry and study in the benchmarks. The *New Jersey Core Curriculum Content Standards for Visual and Performing Arts* provides an example. It addresses aesthetics as a skill.
- Update reference resources. The current document does not reflect current literature, including books and articles. Documents from the Arts Education Partnership, for example, would be valuable supplemental information to support the narrative and programmatic information in the Colorado MCS.

Suggestions for consideration of additional external referents

Wisconsin's *Model Academic Standards for Art and Design Education* provides another layer of reference to the review process. This document replaced Wisconsin's *Model Academic Standards for Visual Arts* in 2000 to include the traditional fine arts and design arts, media arts, visual learning skills, and an understanding of art and society. Students study the influences of visual media in society through forms such as billboards, television commercials, magazine advertisements, styles of clothing, automobile designs, and home pages on the World Wide Web. Students also learn visual skills for nonart purposes, such as making and reading maps, charts, diagrams, plans, and models. Included in Wisconsin's articulation of its standards are two methodological paths that reflect understandings of current art trends in both visual culture studies and semiotics.

Wisconsin's *Model Academic Standards for Art and Design Education* include:

- Content standards that refer to what students should know and be able to do.
- Performance standards that indicate how students will show that they are meeting a standard.
- Proficiency standards that indicate how well students must perform.

Wisconsin's standards and benchmarks include the following:

- Knowing
 - A. Visual memory and knowledge
 - B. Art and design history, citizenship, and environment
- Doing
 - C. Visual design and production
 - D. Practical application
- Communicating
 - E. Visual communication and expression
 - F. Visual media and technology
- Thinking
 - G. Art and design criticism
 - H. Visual thinking
- Understanding
 - I. Personal and social development
 - J. Cultural and aesthetic understanding
- Creating
 - K. Making connections
 - L. Visual imagination

Recommendations from the Review of 21st Century Skills and Abilities and Postsecondary and Workforce Readiness

Because of the interconnectedness of the findings and recommendations related to the 21st Century Skills and Abilities and Postsecondary and Workforce Readiness definition, recommendations related to the 21st Century and PWR skills are presented together in the Findings section of this report.