

ART SYLLABUS

Upper Secondary Normal (Technical) Course

Implementation starting with
2019 Secondary Three Cohort



Ministry of Education
SINGAPORE

© 2018 Student Development Curriculum Division.

This publication is not for sale. All rights reserved. No part of this publication may be reproduced without the prior permission of the Ministry of Education, Singapore.

CONTENTS

	Page
1. ART EDUCATION IN SINGAPORE	
• Philosophy and Value of Art Education in the 21 st Century	3
• Aims of Art Education in Schools	5
• The Normal (Technical) Art Curriculum	5
2. THE NORMAL (TECHNICAL) ART SYLLABUS	
• Overview of the Normal (Technical) Art Syllabus	7
• Syllabus Objectives	7
• Syllabus Framework	8
• Big Ideas	9
• Learning Domains, Key Competencies and Learning Outcomes	10
3. CONTENT	
• Art Practices: Context, Artistic Processes, Visual Qualities and Media	13
• Scope and Sequence	16
4. PEDAGOGY	
• Pedagogical Practices	18
• Positive Classroom Culture	18
• Lesson Preparation	19
• Lesson Enactment	19
• Assessment and Feedback	19
5. ASSESSMENT	
• Role of Assessment	22
• Planning Balanced Assessment for Art	22
• Approach to Assessment in N(T) Art	23
6. REFERENCES	25
7. ACKNOWLEDGEMENTS	28

SECTION 1:

ART EDUCATION IN SINGAPORE

Philosophy and Value of Art Education in the 21st Century
Aims of Art Education in Schools
The Normal (Technical) Art Curriculum

1. ART EDUCATION IN SINGAPORE

Philosophy and Value of Art Education in the 21st Century

Art is an important and treasured mode of human expression throughout history. Art plays many important roles in our lives. It captures memories, communicates ideas, shapes values and evoke emotions. It exists all around us in different forms; from the colours, shapes and patterns in nature to everyday images and designs on magazines, products and media. As an academic subject in the school curriculum, art is integral to the holistic development of every student.

The value of art in the curriculum is thus threefold:

- *Art fosters students' sense of identity, culture and place in society*
Art constitutes important ways of knowing and learning about self, others and the world around us. It is a form of language through which personal meanings are generated and cultural identities are formed. It provides an avenue for our students to appreciate our unique Singaporean forms of expression that are anchored on national values as well as understand and appreciate cultures and traditions beyond Singapore.
- *Art builds students' capacity to critically discern and process visual information, and communicate effectively in the 21st Century*
Art helps to develop students' 21CC in the areas of communication and information skills. It develops students' confidence and skills to express themselves. Learning art hones students' sensorial perception and critical thinking; provides understanding of visual elements, aesthetics, and art history; and skills in handling various media. Art builds key foundation capacities such as the ability to make meaning, create and communicate through visual media.
- *Art expands imagination and creativity*
Art also helps develop students' 21CC of critical and inventive thinking. It develops thinking dispositions such as tolerance for ambiguity, ability to see things from multiple perspectives¹ and to imagine² and envision³ – values that drive innovation. Through Art, students develop capacity to observe closely, explore, engage and persist, evaluate, reflect, take risks to stretch and go beyond what they currently know and are able to do.

¹ Eisner, E.W. (2002). *The arts and the creation of the mind*. New Haven: Yale University Press.

² Greene, M. (1995). *Releasing the imagination: Essays on education, the arts and social change*. San Francisco: Jossey-Bass Publishers.

³ Hetland, L, Winner, E., Veenema, S. & Sheridan, K. (2013). *Studio Thinking 2: The real benefits of visual arts education*. Teachers College Press. New York.

Through Art, students can develop their 21CC that would better prepare them to face future challenges as well as seize opportunities brought on by forces such as globalisation, changing demographics and technological advancements. Every student can then grow to embody the Desired Outcomes of Education (DOEs) as:

- **a confident person** who has a strong sense of right and wrong, is adaptable and resilient, knows himself/herself, is discerning in judgment, thinks independently and critically, and communicates effectively;
- **a self-directed learner** who questions, reflects, perseveres and takes responsibility for his/her own learning;
- **an active contributor** who is able to work effectively in teams, is innovative, exercises initiative, takes calculated risks and strives for excellence; and
- **a concerned citizen** who is rooted to Singapore, has a strong sense of civic responsibility, is informed about Singapore and the world, and takes an active part in bettering the lives of others around him/her.

(Ministry of Education, 2014)



Figure 1: Framework for 21st Century Competencies and Student Outcomes

Through this syllabus, students will develop the emerging 21st Century Competencies; namely,

- Critical and Inventive Thinking
- Communication, Collaboration and Information Skills and
- Civic Literacy, Global Awareness and Cross-Cultural Skills.

Aims of Art Education in School

The aims of art education in our schools are to enable every child to

- **enjoy art,**
- **communicate visually, and**
- **make meaning through connecting with society and culture.**

Guided by these aims, the school art curriculum across all levels provides our students with a balanced and well-rounded education in the aesthetic, cognitive and affective dimensions. It presents ample opportunities for creative and innovative self-expression in varied modes. It also contributes to developing a fuller range of our students' interests and talents. The learning of local artworks and artists strengthens the understanding of the individual's national identity by fostering the appreciation of one's cultural heritage. The engagement in art discussions (primary) and discourse/critique (secondary) in the curriculum promotes a lifelong enjoyment for and an appreciation of artistic works; developing visual literacy in our students. The production of artworks encourages imagination and cultivates in students the capacity to innovate and improvise.

The Normal (Technical) Art Curriculum

The Normal (Technical) (N(T)) Art curriculum places emphasis on **engaging students through applied learning of art in a contextualised environment**. The **learning of art is facilitated in the context of artworks, artists and designers** where students learn about practices by artists and designers in relation to the environment and self, including their personal intent and purpose (s). Students **learn by doing** with considerations of the nature and requirements of the relevant creative industries. Through the course of study, students will also **know their strengths and interests** to inform their post-secondary education and/or career options. N(T) students with artistic interest and talent will be able to develop necessary dispositions, knowledge and skills to continue their art education beyond secondary school.

Curriculum Time

For students to enjoy the full extent of the art curriculum, the curriculum time allocated for N(T) art lessons should be minimally three hours per week, which is around six periods, with each period lasting 35 to 40 minutes. A total of 43 weeks over 2 years, inclusive of weeks allocated for national examination, should be provided.

SECTION 2:

THE NORMAL (TECHNICAL) ART SYLLABUS

Overview of the Normal (Technical) Art Syllabus

Syllabus Objectives

Syllabus Framework

Big Ideas

Learning Domains, Key Competencies and Learning Outcomes

3. THE NORMAL (TECHNICAL) ART SYLLABUS

Overview of the Normal (Technical) Art Syllabus

This syllabus is designed to foster creativity in students and encourage students to express through a diverse range of media for art and design. Students learn to connect the knowledge, skills and values with their own experiences as they generate ideas in *authentic contexts*. In the process, students develop visual literacy, aesthetic sense and communication skills, and gain the confidence to respond to their artworks and works of others. Through exposure to real-world applications of the art practices, students recognise the significance of art as an integral aspect of everyday experience and its potential as an educational and professional pursuit.

This syllabus is designed for Secondary Three and Four students in the N(T) course. Students in this course will have completed six years of art education in the primary school and two years at the Lower Secondary level.

Syllabus Objectives

The syllabus places emphasis on developing students' ability to problem-solve and to apply their acquired art knowledge and skills through *contextualised* learning tasks. It aims to enable all N(T) students at the end of Secondary Four to:

- Foster self-confidence and a sense of achievement;
- Nurture a spirit of exploration, inventive thinking and creative expression;
- Cultivate an awareness and appreciation of art to make informed responses to works; and
- Develop a keen interest and build a foundation in art for further educational/professional pursuit.

Syllabus Framework

The overarching framework for art syllabuses at secondary level is presented in **Figure 2**.

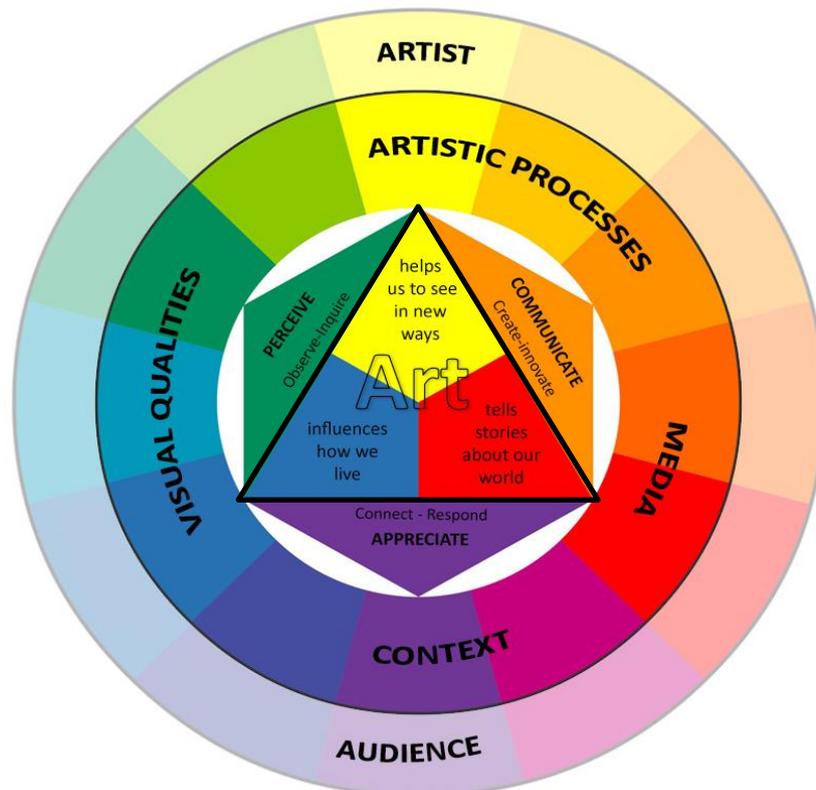


Figure 2: Framework for Art Syllabuses at Secondary Level

The syllabus framework presented in the form of a colour wheel, illustrates the dynamic relationships amongst the various key features of the art syllabus as an integrated concept for the learning of N(T) art to be holistic and enduring. It serves as a compass to guide cohesive and effective teaching and learning of N(T) art across all schools offering the course.

- The three **Big Ideas** at the heart of the syllabus framework form the enduring understandings that provide focus for teaching and learning of N(T) art.
- The big ideas frame the three Learning Domains of **perceive**, **communicate** and **appreciate** that present learning opportunities for students within the N(T) art curriculum to develop the Key Competencies of **observe-inquire**, **create-innovate**, and **connect-respond**.
- Students learn to perceive, communicate and appreciate through the four key Learning Components of art practices – **context**, **artistic processes**, **media** and **visual qualities**. These are elaborated in Section 3 of the syllabus.
- In the process, students acquire knowledge, skills and values that equip them to be active **artists** and informed **audiences**.

Big Ideas

The 3 big ideas to anchor students' learning and experiences of art are:

- **Art helps us to see in new ways**

Art is a visual language that represents and communicates about the world around us and provides alternate ways to understand the world and our experiences in it. In N(T) art, students learn by experimenting with and using different media, tools and visual qualities, with reference to how artists use these in their work. This equips students to communicate in innovative visual ways so as to bring attention to their ideas or change how people see things.

- **Art tells stories about our world**

Throughout history, art documents how we live and the experiences and events that affect us. Learning about artworks and why artists create art enable students to understand and connect the experiences and concerns of people and communities in the past and present. Learning to visually and verbally express their own ideas and communities' concerns deepen students' understanding about themselves, and build bonds with Singapore and the wider world.

- **Art influences how we live**

Artistic thinking and visual elements and principles are used in many areas of our lives. The images we see, the things we use and the spaces we live in all require art in their construction and design. It affects how we view and understand things and the world around us, the decisions we make and the activities we do. For example, organisations use advertisements and graphics to convey information to persuade us to make certain decisions or buy products. The design of tools and objects affect what we do and how we carry out daily activities. The layout and design of rooms and spaces also affect our moods and how we interact with other people. Learning of art through authentic art tasks enable students to see the relevance and applied nature of art in daily life, heightens students' critical awareness and equips them with knowledge and skills to communicate effectively.

Learning Domains, Key Competencies and Learning Outcomes

The three big ideas form the focuses of the teaching and learning of the N(T) Art Syllabus through three learning domains: **Perceive**, **Communicate** and **Appreciate**. These domains encapsulate the cognitive, affective and psychomotor dimensions of students' engagement in art (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956 and Anderson, Krathwohl, Airasian, Cruikshan, Mayer, Pintrich, P.R., Raths, & Wittrock, 2001). The domains connect, intersect and operate in a dynamic whole as students develop key competencies of **observe-inquire**, **create-innovate**, and **connect-respond**.

Domain: Perceive

Competencies: Observe-Inquire

The ability to perceive begins by paying attention to and analysing visual stimuli in nature, the man-made environment and works of art and design. In perceiving, students develop visual acuity and sensitivities that stimulate the imagination. They learn to gather, organise and record visual information, and use that information to generate and present their ideas. This in turn feeds the students' minds as they, experiment with materials, techniques and technologies to translate their ideas into visual forms and expressions.

Domain: Communicate

Competencies: Create-Innovate

Art is essentially about the communication of ideas and emotions. Through investigating problems and exploring ideas, students discover creative ways to express themselves and find ways to problem-solve. Students acquire knowledge of materials and develop basic competency in practical and process skills to express their thoughts, ideas and solutions in visual and tactile forms. They learn to apply their understanding of art elements and design principles to create art or design solutions in authentic tasks to express intent and purpose.

Domain: Appreciate

Competencies: Connect-Respond

Students learn to value art as a means of expression and recognise the possibilities that a lifelong pursuit of art has to offer. Not only do they learn to reflect on and evaluate their own practice and identify their strengths and inclinations, they also develop the confidence to discuss and respond to their art and art making. In the process, they learn to make connections between visual expressions, ideas and their lived experiences. As they see the relevance of art to their lives, they will better appreciate its significance in the world they live in.

An overview of the learning domains, key competencies and learning outcomes students are expected to achieve upon successful completion of the course are detailed in [Table 1](#).

Table 1: Overview of the Learning Domains, Key Competencies and Learning Outcomes

Learning Domains	Key Competencies	Learning Outcomes	
Perceive	Observe - Inquire	LO1.	Gather and record information from observation and personal experiences
		LO2.	Generate and present ideas using visual images
		LO3.	Explore materials, techniques and technologies in art
Communicate	Create – Innovate	LO4.	Select appropriate means to express their ideas
		LO5.	Apply art elements and design principles in their artworks from the study of the works of others
Appreciate	Connect – Respond	LO6.	Respond to their art and art making verbally
		LO7.	Recognise their strengths in art and take responsibility for their own learning
		LO8.	Demonstrate awareness of educational and career pathways in art-related fields

SECTION 3: CONTENT

Art Practices: Context, Artistic Processes, Visual Qualities and Media
Scope and Sequence

3. CONTENT

Art Practices: Context, Artistic Processes, Visual Qualities and Media

This syllabus focuses on equipping students with fundamental knowledge, skills and values that will lay the foundation for their post-secondary pursuits and for lifelong learning. In their course of study, students will focus on learning about:

- **Context** of artworks - the defining circumstances which lead to considerations that artists and designers have, in the selection of appropriate art elements and design principles, materials, techniques and processes for different purposes;
- **Artistic Processes** - methods and strategies artists and designers adopt to gather, develop and decide on ideas for their artworks,
- **Visual Qualities** - use of elements of art and principles of design to create desired outcomes, and
- **Media** - Drawing and Digital Media as essential media and at least one other two and/or three dimensional media – use of materials, tools and techniques to present and communicate ideas.

Context

The context surrounding artworks sets the stage for students to understand art making at a deeper level. Students will learn that decisions which artists and designers make in the selection of materials, techniques, and arrangement of art elements according to design principles are informed by their intentions and specific purposes.

The narratives in artworks are powerful entry points to learning art. Artworks are selected in this syllabus based on relevance to the big ideas, suitability for the profile of students as well as a spread of local, regional and world artworks created using different media. Students will study a range of art practices of artists and designers through the recommended list of artworks which will help them understand the big ideas.

Artistic Processes

When artists and designers make art, they go through the processes of **observe and analyse, explore and develop, make and present** as well as **review and reflect**. These processes are not linear and may not have equal weightage in the making of every artwork. Like artists, students should experience and engage in the artistic processes in their art lessons to allow them to develop and express their ideas into art forms based on their intentions and purposes.

It is vital for students to experience and engage in the artistic processes to make visible their development and progress. Students should experience a balanced emphasis on process and product in art making. Learning about these processes not only deepens students' understanding of art making and artworks, but also equips them with skills and competencies to be inventive and innovative. When students engage in artistic processes, they should also develop good studio habits encompassing a set of values, safety precautionary measures and a sense of responsibility to care for themselves, others, the equipment, tools, materials they use and the organisation and cleanliness of the work space they share.

Visual Qualities

The visual qualities of an artwork refer to the **elements of art which the artist has chosen to use, arrange and present in a certain manner, often according to the principles of design**, to bring about a visually harmonious artwork. These visual qualities enable students to express their ideas in art making and engage with artworks meaningfully (Ocvirk, Stinson, Wigg, Bone, & Clayton, 2012).

It is important to note that the study of visual qualities must be in context of artworks and art practices, not simply as an end in itself. Students will need to understand the characteristics of the visual qualities and apply the visual qualities as they make informed decisions in their art making processes. This allows students to deepen their appreciation of artworks, and make visually effective artworks that communicate ideas and intentions.

Elements of art and principles of design include but are not limited to the following:

Elements of Art	Principles of Design
Line, shape, form, space, value, texture, colour	Balance, emphasis, harmony, movement, proportion, rhythm, unity and variety

Media

The exposure and study of different media allow for understanding of the characteristics, potential and limitations of media. Learning about media includes knowing the commonly used materials, becoming familiar with the tools required and understanding the technical processes involved. **Drawing and Digital media are identified as fundamental content knowledge and skills** in N(T) art required to support students in expressing and communicating their ideas to their audience. Exposure to at least one other two or three dimensional media will further build on these fundamentals and expand students' repertoire and understanding of media knowledge and skills.

- *Drawing*

Drawing is central to the art making process regardless of the final medium or technique of production as a principal means for recording, visualising, developing and communicating ideas (Ching & Juroszek, 2010).

Students learn and understand the visual elements that constitute the vocabulary of drawing - lines and edges, shapes and spaces, and tone and values. Through these, they also develop an understanding of positive and negative spaces; spatial and proportional relationships; light, shadow and colours. They will learn to use these knowledge and skills to perceive and represent (Ching & Juroszek, 2010) and acquire the critical ability to think and visualise in three dimensions (Edwards, 1999).

- *Digital Media*

With the growing prevalence of digital technology, and as devices that combine computing and connectivity become increasingly accessible to students, the way students learn and interact with others is being transformed (Ministry of Education, 2010).

Students learn and understand the practical issues in connection to the use of digital media – target audiences and context of different images; why, when and how images and digital media are being used in communication. They also develop an understanding on how to select images; structure a design; compose images; use colour; maximise image potential and production. (Marshall and Meachem, 2010)

Such learning may include, but is not limited to, gathering and citing information from internet, audio and visual recording of information using digital devices, and editing, manipulating and creating images with digital imaging software. These skills allow students to present their research and ideas with digital media, regardless of the medium and technique chosen for their artworks.

- *Other Two- and/or Three- Dimensional Media*

Besides **drawing** and **digital media**, students will engage in the study of at least one other **two- or three-dimensional art media**. They will experiment and explore the possibilities of different materials, techniques and processes and learn from artists and designers, and their works. Using relevant knowledge and skills acquired in drawing and digital media, students will engage in the artistic processes of the chosen art media.

Scope and Sequence

In scoping and sequencing students' learning in the N(T) art course, teachers should organise the learning content based on the syllabus learning outcomes and adopt a modular approach⁴ in the design of the N(T) art curriculum. This will ensure learning content is organised in manageable and appropriately-sized tasks, linked to real-world contexts and themes to make learning accessible for the N(T) student profile.

Over the two years, students should be exposed to a range of artworks that will inspire them and help them understand the purpose and impact of art in their lives, and make meaningful connections with their personal art practices. Looking at art and design beyond the classroom (such as works in public spaces, online, in print) arouses the students' curiosity, widens their perceptual knowledge and sensitises them to the visual, tactile, spatial and temporal elements of their environments. Learning journeys to institutions (such as Singapore Art Museum, National Gallery, Singapore, Institute of Technical Education School of Design and Media, Red Dot Design Museum, Singapore Tyler Print Institute, National Design Centre, artists' studios), studio-based master classes with practitioners and sharing sessions by artists and designers could be built into the instructional programme to inspire, motivate and broaden students' exposure to possibilities of art making and raise their awareness of the educational and career pathways in art- and design-related fields.

⁴ Report C2015 N(T) Curriculum Framework, Nov 2009

SECTION 4:

PEDAGOGY

Pedagogical Practices:
Positive Classroom Culture
Lesson Preparation
Lesson Enactment
Assessment and Feedback

4. PEDAGOGY

Pedagogical Practices

Pedagogy refers to the set of strategies teachers use to manage their instructions so that students are able to learn and understand the concepts, skills and values being taught. An effective set of pedagogical practices combines a repertoire of teaching actions to cater to the students' readiness to learn, learning profiles, preferences, and existing knowledge.

Art teachers can should be guided by the Singapore Curriculum Philosophy (SCP) that describes our beliefs about teaching, learning, and assessment, as well as apply the four teaching processes spelt out in the Singapore Teaching Practice (STP)⁵ to facilitate effective instruction and support students' engaged learning in this course. *Figure 4* presents the four core teaching processes that make explicit what a teacher puts into practice and reflect on before, during and after every interaction with students in all learning contexts. The on-going iterative application and reflection of the teaching processes help teachers deepen their professional competencies to become reflective and competent practitioners.

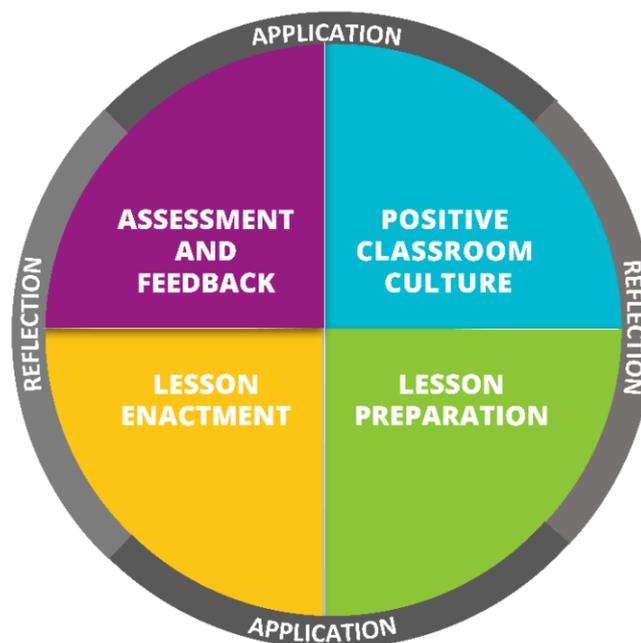


Figure 4: The Four Teaching Processes

This section highlights how the Teaching Processes are applied to learning of Art in the N(T) Art course.

1. Positive Classroom Culture

The utilisation of space and the condition in which the learning environment is set up impacts students' learning. A conducive physical environment for art learning is one that stimulates and supports self-directed as well as collaborative learning. It should also allow for a variety of art activities and the introduction of a variety of media.

⁵ Singapore Teaching Practice: <https://opal.moe.edu.sg/stp>

Besides the physical learning environment in which the students learn art, taking care of the students' psychological, social and emotional states of mind is critical in ensuring that optimal learning takes place. Establishing interaction and rapport with students and building trust between teacher and student will provide a safe and inclusive environment where diverse viewpoints and perspectives are respected and embraced.

2. Lesson Preparation

In planning for art learning, it is important to consider the design of the curriculum in relation to the aims, objectives and intended learning outcomes of the syllabus. It is equally important to customise the instructional programme and design lessons based on a good understanding of the students' abilities and learning needs, their interests and aspirations as well as their learning profiles and motivations.

Building on the inquiry-based learning culture and support in the primary and lower secondary art classrooms, **Problem-based learning (PBL)** is recommended as the main instructional strategy to engage students in the N(T) art classroom so as to strengthen their engagement and develop independent and self-directed learners (Costantino, 2002). PBL introduces concepts to students by challenging them to solve real-world problems. Students are encouraged to probe into issues, search for connections, tackle complexity, use appropriate knowledge and skills to make decisions and present solutions.

3. Lesson Enactment

While lesson preparation enables the teacher to be well-equipped for delivery of the lesson, there are often many aspects of lesson enactment that cannot be formally planned but require flexible, contextual response and appropriate pacing during the lessons. These aspects continue to play a critical part in the effectiveness of lesson enactment.

4. Assessment and Feedback

Assessment and feedback is an integral part of the learning process and is carried out during the art instructional process for formative and summative purposes. Teachers should regularly check for students' understanding and provide timely verbal and/or written feedback to students to communicate students' efforts and achievements, learning progress, or specific gaps to work on. Teachers should design a range of assessment modes and tasks based on objectives and learning outcomes of their lessons to provide effective and timely feedback to students. In this process, the emphasis is on developing students to be capable thinkers and self-directed learners who monitor, assess and improve their learning.

Self-directed learning (SDL) encourages students to take the initiative and responsibility for their own learning; which includes understanding their learning needs, planning their learning goals and targets, identifying the resources they need for learning, choosing and using appropriate learning strategies, and evaluating their learning outcomes (Knowles, 1975).

Teachers can work towards supporting students' SDL by the design of the learning environment and improving how they learn by adopting the *gradual release of responsibility model* presented as Figure 5 below. The model promotes the shifting of responsibilities in relation to art learning from the teacher to the students over a period of time (Fisher & Frey, 2013) and encourages greater student ownership of their own learning.

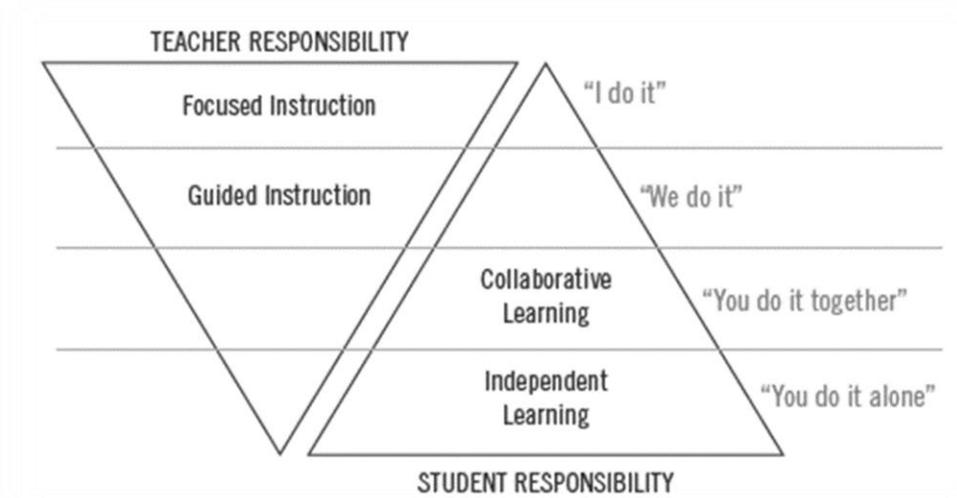


Figure 5: Gradual Release of Responsibility for learning model, Fisher & Frey (2013)

Section 5 on Assessment provides further elaboration on assessment and feedback within the context of formative and summative assessment and provides suggestions to achieve the aims, objectives and learning outcomes of the syllabus.

SECTION 5: ASSESSMENT

Role of Assessment in Art
Planning Balanced Assessment for Art
Approach to Assessment in N(T) Art

5. ASSESSMENT

Role of Assessment

Assessment is an ongoing and iterative process integral to learning and teaching, and must be closely aligned with curricular objectives, content and pedagogy (MOE, 2012). Assessment goes beyond setting assessment tasks and grading students' work. Assessment is used to check that learning takes place as intended by gathering evidences about what students have learnt using performance tasks or modes (MOE, 2012). Assessment plays an important role in shaping how students learn, their motivation to learn, and how teachers teach.

Planning Balanced Assessment for Art

A balanced assessment system should have both Assessment for Learning as well as Assessment of Learning. Whether implemented in the classroom as formative assessment to support teaching and learning or at the national examinations as summative assessment to evaluate students' performance at the end of the course, assessment should lead to meaningful and developmentally appropriate learning. What we assess and how we go about assessing should be anchored on the clarity of purpose (why).

An effective art assessment plan makes use of the evidences gathered to

- give students feedback on their art making processes and progress so that they can reflect on their artistic choices and build on their strengths and improve on their weaknesses;
- heighten students' interest and motivation in Art and to see success in their artistic learning journey;
- provide the Art teacher with on-going feedback on students' progress to improve studio-based instruction; and
- inform the Art teacher on plans for future art teaching, learning and performance tasks.

Assessment at different junctures of student's learning should take different forms and serve different purposes. The table (adapted from Wiggins & McTighe, 2003) below gives a summary of the different functions of assessment:

Table 2: Summary of different functions of Assessment

	Assessment <i>for</i> Learning		Assessment <i>of</i> Learning
	Diagnostic	Formative	Summative
Why?	Assessment that precedes instruction to check on students' prior knowledge and experience, misconceptions, interests, and/or learning style preferences.	Ongoing assessment that provides information to guide teaching and learning for improving learning and performance.	Culminating assessment conducted at the end of a unit, module or course, to determine the degree of mastery or proficiency according to identified achievement targets.

	Assessment <i>for</i> Learning		Assessment <i>of</i> Learning
	Diagnostic	Formative	Summative
How?	Diagnostic assessment provides information to assist teacher planning and guides differentiated instruction.	Formative assessment includes both formal and informal methods.	Summative assessment is evaluative in nature, generally resulting in a score or a grade.
What?	Examples: survey, skills check, Know-Want-Learned (K-W-L)	Examples: questioning, observation, process work, consultations, process portfolio	Examples: performance task, graded assignments, culminating projects, best works portfolio

Approach to Assessment in N(T) Art

The syllabus recommends that schools plan and implement two types of assessment for N(T) art course in complementary manner in order to motivate and help students achieve the learning outcomes delineated in the syllabus.

- **School-based Assessments**

School-based Assessments are designed and implemented based on the N(T) art teaching and learning syllabus. These should be carried out during instructional process in alignment with respective school's assessment objectives and identified learning areas of focus. The priority of school-based assessment, as part of the teaching and learning process, are to provide quality and timely feedback to students that will feed forward to improve their learning.

Teachers should use different assessment modes to evaluate students' learning in their N(T) Art classroom to determine how best to support their progress. These can include:

- Critique
- Peer Reviews
- Presentation
- Projects
- Portfolios
- Visual/ process documentation
- Final artworks

Teachers could consider leveraging technological tools and platforms such as mobile devices, digital tablets, Student Learning Space (SLS), social media, and other collaborative learning applications or portfolio-building websites to engage students and gather evidences of students' learning.

- **National Examination**

In the final year of secondary education, students will be required to offer two compulsory papers based on the Examination Syllabus, managed by Singapore Examinations and Assessment Board (SEAB). The examination syllabus are published and available for download at www.seab.gov.sg.

SECTION 6: REFERENCES

6. REFERENCES

1. Anderson, L.W., Krathwohl, D.R., Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, & Wittrock, M.C. (Ed.). (2001). *A Taxonomy for Learning, Teaching and Assessment: A Revision of Bloom's Taxonomy of Educational Objectives (Complete Edition)*. New York: Longman.
2. Arnheim, R. (1969). *Visual Thinking*. Berkeley and Los Angeles, California, USA: University of California Press.
3. Arnheim, R. (1974). *Art and Visual Perception: A Psychology of the Creative Eye (The New Version)*. Berkeley and Los Angeles, California, USA: University of California Press.
4. Beattie, D. (1997). *Assessment in Art Education*. Worcester, Mass.: Davis Publications.
5. Bloom, B., Engelhart, M., Furst, E., Hill, W., & Krathwohl, D. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals*. New York: McKay.
6. Ching, F., & Juroszek, S. (2010). *Design Drawing (2nd Edition)*. New York, USA: John Wiley & Sons.
7. Constantino, T. E. (2002). *Problem-Based Learning: A Concrete Approach to Teaching Aesthetics*. *Studies in Art Education: A Journal of Issues and Research*, 43(3), 219-231.
8. Dorn, C. M., Madeja, S. S. and Sabol, F. R. (2004). *Assessing Expressive Learning: A Practical Guide for Teacher-Directed Authentic Assessment in K-12 Visual Arts Education*. New York and London: Routledge, Taylor & Francis Group.
9. Duke & Pearson, 2002.
10. Edwards, B. (1999). *The New Drawing on the Right Side of the Brain (2nd Ed.)*. New York, USA: Jeremy P. Tarcher/Putnam.
11. Efland, A. (1990). *A History of Art Education: Intellectual and Social Currents in Teaching Art*. New York: Teachers College Press.
12. Gude, O. (2007). *Principles of Possibility: Considerations for a 21st-Century Art & Culture Curriculum*. *Art Education: The Journal of the National Art Education Association*, 60(1), 6-17.
13. Gude, O. (2013). *New School Art Styles: The Project of Art Education*. *Art Education: The Journal of the National Art Education Association*, 66(1), 6-15.
14. Hong Kong Educational Bureau. (2003). *Visual Arts Curriculum Guide (P1 - S3)*. Hong Kong. Retrieved Jan 10, 2015 from http://www.edb.gov.hk/attachment/en/curriculum-development/kl/arts-edu/references/va_guide_p1_s3_e.pdf.
15. Hong Kong Educational Bureau. (2007). *Visual Arts Curriculum and Assessment Guide (Secondary 4-6)*. (With updates on Jan 2014). Hong Kong. Retrieved Jan 10, 2015 from http://www.edb.gov.hk/attachment/en/curriculum-development/kl/arts-edu/references/VA%20C&A%20Guide_updated_e.pdf.
16. Klebesadel, H., and Kornetsky, L. (2009). *Critique as Signature Pedagogy in the Arts*. In Gurung, R.A.R., Chick, N.L., and Haynie, A. (Ed). (2009). *Exploring Signature Pedagogies: Approaches to Teaching Disciplinary Habits of Mind*. Sterling, Virginia, USA: Stylus Publishing. 99 - 117.
17. Knowles, M. S. (1975). *Self-Directed Learning: A Guide for Learners and Teachers*. New York: Association Press.
18. Marshall, L. and Meachem, L. (2010). *How To Use Images*. London, UK: Laurence King Publishing Ltd.
19. Meban, M. (2002). *The Postmodern Artists in the School: Implications for Arts Partnership Programs*. *International Journal of Education & the Arts*, 3(1). Retrieved March 16, 2015 from <http://www.ijea.org/v3n1/>.

20. Ministry of Education. (2006). Secondary Mathematics Syllabuses. Retrieved Jan 20, 2015 from <http://www.moe.gov.sg/education/syllabuses/sciences/files/maths-secondary.pdf>.
21. Ministry of Education. (2009). *Report on Proposed Curriculum Framework for Normal (Technical) Course*. Singapore: Ministry of Education.
22. Ministry of Education. (2010). English Language Syllabus 2010. Retrieved Jan 20, 2015 from <http://www.moe.gov.sg/education/syllabuses/english-language-and-literature/files/english-primary-secondary-express-normal-academic.pdf>.
23. Ministry of Education (2010). *Report of the Secondary Education Review and Implementation (SERI) Committee*. Singapore: Ministry of Education.
24. Ministry of Education. (2011). *MOE Assessment Philosophy*. Singapore: Ministry of Education.
25. Ministry of Education. (2015). *Curriculum Handbook*. Singapore: Ministry of Education.
26. Ministry of Education. (2014). 2014 Lower Secondary Geography Teaching Syllabuses. Retrieved Jan 20, 2015 from <http://www.moe.gov.sg/education/syllabuses/humanities/files/geography-lower-secondary-2014.pdf>.
27. Ministry of Education. (2014). *Standards and Benchmarks for Emerging 21CC*. Singapore: Ministry of Education.
28. Ministry of Education. (2015). *School Safety Handbook: Chapter 4 - Safety in Special Rooms*. Singapore: Ministry of Education.
29. Ministry of Education. (2016). *Inquiry In and Through Art: A Lesson Design Toolkit*. Singapore Teachers' Academy for the aRts, Singapore: Ministry of Education.
30. Ocvirk, O., Stinson, R., Wigg, P., Bone, R., and Clayton, D. (2012). *Art Fundamentals: Theory and Practice. 12th Ed.* New York, USA: McGraw-Hill.
31. Ritchhart, R. Church, M., Morrison, K. (2011). *Making Thinking Visible: How to Promote Engagement, Understanding, and Independence for All Learners*. San Francisco, CA: Jossey-Bass.
32. Rayment, T (Eds.). (2007). *The Problem of Assessment in Art and Design*. Chicago, USA: The University of Chicago Press.
33. Review of Planning Norms for Syllabus Planning and Design (CPO; EDUN N 07-14-516-V2 10 March 2014)
34. Ross, M. (1986). *Assessment in Arts Education*. Oxford, England: Pergamon Press
35. Sims, E. and Shreeve, A. (2012). *Signature Pedagogies in Art and Design*. In Chick, N. L., Haynie, A., and Gurung, R.A.R. (2012). *Exploring More Signature Pedagogies: Approaches to Teaching Disciplinary Habits of Mind*. Sterling, Virginia, USA: Stylus Publishing. 55 - 67.
36. Tomlinson, C. (2003). *Fulfilling the Promise of the Differentiated Classroom: Strategies and Tools for Responsive Teaching*. Alexandria, Va.: Association for Supervision and Curriculum Development.
37. Wiggins, G., and McTighe, J. (2003). *Understanding by Design*. New Jersey: Pearson Merrill Prentice Hall.
38. Winner, E., & Goldstein, T.R., & Vincent-Lancrin, S. (2013). *Art for Art's Sake? The Impact of Arts Education*, Educational Research and Innovation, OECD Publishing.

SECTION 7: ACKNOWLEDGEMENTS

7. ACKNOWLEDGEMENTS

The Student Development Curriculum Division, Ministry of Education, wishes to acknowledge the contributions of the teachers, lecturers and institutions that participated in the process of the development of the Revised Teaching and Learning Syllabus for Normal(Technical) Art 2017.

We would like to record our special thanks to the following:

- Assumption English School
- (Formerly) Bedok Town Secondary School
- Guangyang Secondary School
- Naval Base Secondary School
- North Vista Secondary School
- (Formerly) Siglap Secondary School
- School of Design and Media, Institute of Education (Central)
- Singapore Examinations and Assessment Board
- Singapore Teachers' Academy for the aRts (STAR)
- Visual and Performing Arts Academic Group, National Institute of Education