ART INTEGRATION - TOWARDS EXPERIENTIAL LEARNING

PRESENTED BY
BAL BHARATI PUBLIC SCHOOL, NOIDA
“Your students can learn the arts as well as learn through the arts.”

- Andrew Miller, Educator
Art Integrated Learning is an NCERT initiative based on the recommendation of NCF-2005 of which the position paper clearly mentions:

“Education through the arts, where learning takes place using different art forms as tools in teaching learning process”.

This model is designed to promote experiential learning where every learner is provided opportunities to go through the art experience (in visual and performing arts) to understand and learn different subjects.
“Art Integration is a cross curricular pedagogical approach that utilizes various aspects and forms of **ART & CULTURE** on the basis of experiencing the learning of concepts across subjects.”
As part of the thrust on Experiential Learning, **ART INTEGRATED EDUCATION** has to be embedded in classroom transactions not only for creating joyful classrooms, but also for imbibing the Indian ethos through integration of Indian Art and Culture in teaching and learning process at every level.
Why Integrate ART?

- Makes learning joyful
- Helps visualisation
- A shift from rote methods
- Connects with the world outside
- Develops multi-disciplinary links
- Develops art-based enquiry
- Inculcates respect for culture & heritage
ART CULTURA MODEL

When learning becomes fun: classroom activity

Learning shapes: Outdoor activity

Teacher as facilitators: A lively classroom

Enjoying visual art

Learning resources - Children doing art with coconut tree leaves

Using clay as learning resource

All based assembly formation

Learning concepts of Mathematics

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Learning shapes: Outdoor activity

Teacher as facilitators: A lively classroom

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Using clay as learning resource

All based assembly formation

Learning concepts of Mathematics
For an educationist, Art and Culture should always be the way to understand the world. Art and culture illuminates our inner lives and enriches our emotional world. It should be taught that art and culture needs to be valued; It’s a national resource. The teaching faculty (in School’s, Collegas, at University level should mandatorily be trained ) to give insight on the art and culture infrastructure of the country.
The role of an Art Teacher is that of a facilitator.
The Art teachers are to be trained and must understand the use of A I L as a pedagogy of learning.
The Art teacher(s) of the school should be able to differentiate between “Art as a subject” and “Art as a tool” of teaching and learning different subjects.
The Art teachers of the school should participate in planning of AIL activities for different subjects and for the whole school readily and happily be a part of team teaching.

(It is often difficult to fully integrate the ART with Traditional class room due to disconnect between Art Teachers and Teachers of other subjects who are not given time or ability to coordinate or interweave lesson plans that applies Art Education to core subjects.)
Every school shall compulsorily reserve a minimum of two periods per week per class for Art Education.

Arts must be integrated with the teaching and learning of all academic subjects for Grades I to XII.

Through the Arts curriculum students will be introduced to the rich and varied artistic traditions of the country.

AIL should cover music, dance, visual arts, Theatre which should include written, graphic, digital and cinematic forms; should also include the culinary art form, as there is no better way to learn about the value of tasty and nutritious food, about crops and spices of India then through the medium of learning to cook.

It is recommended that classes VI to VIII (Upper primary) should also be introduced to the Culinary Arts, so as introduce them to the various food groups, spices, cooking styles etc.
Culinary Arts Integration contributes to a much broaden learning experience.

- A student in a Class happen to own a mold used for making Arabic Mamool Cookies.
- The Class had recently read “Gate-4A” a story where Arabic Mamool Cookies play a prominent role.
- The class gathered in the Culinary Art Class Room and made the Cookies together.

One Student Said,

We had fun making and eating the cookies together, but this also feel more culturally aware. It helped me to see Middle east in a different light.
In this report, Students make a significant dish or meal specifically mentioned in the book.

Students write a rationale .......... Discussing the food’s importance and then present and serve the food to their classmates.

They take the photographs of the exhibited food for photo gallery of the School.
In this History or Language arts activity, Student will explore foods from a particular time period.

They then bring various dishes to present and eat with their classmates.

For Example:
In a Shakespear Course, Students can hold a Whole Class Renaissance Meal. They can research English Renaissance food, make dishes and present them to their classmates.
In this Economics Project, Students can create small restaurant businesses such as Bakeries, Coffee shops or Pizza shops.

Student will present Business Plans to their classmates, providing samples of the food their shops will sell.
Food in Every Country

- In this Social Science Activity, Students research cultural influences of various countries and make a representative dish to present and discuss with their classmates.

- The website www.foodbycountry.com is an excellent resource for learning about how Country’s food is determined by Economic, Geographic and Historical influences.
In this History or Art Activity, Students can study the traditional substances of Paint used by different cultures, which often includes Regional Food items.

Students can bring examples of these items to Present or actually paint with

This can take the study of cultural and Ethnic foods to a new level.
In this Activity, Students learn the art of food photography.

They can make dishes and learn study various ways to Stage, Light and Photograph their dishes.
In Theatre Arts, Students are often taught to explore the life of a Character.

Researching the food of a character’s life is an excellent way to truly understand a specific culture, time period or experience.
SOME SUGGESTED ART INTEGRATED LEARNING ACTIVITIES

Grade: Pre/Primary

Art Work!

Freedom of imagination brings innovation
Some Suggested Art Integrated Learning Activities

Grade: Upper / Primary

Images speak: Expression is communication
SOME SUGGESTED ART INTEGRATED LEARNING ACTIVITIES

Grade: Primary

1234567890
1234567890
1234567890
1234567890
1234567890

Even something as objective as numbers can have many possibilities.
Some suggested art integrated learning activities

Grade: Primary

You can draw, paint, fold or even weave numbers.
SOME SUGGESTED ART INTEGRATED LEARNING ACTIVITIES

Grade: Upper Primary

Concepts To Cover
- Line
- Line Segment
- Ray
- Intersecting
- Parallel
- Perpendicular
- Right Angle
- Obtuse Angle
- Acute Angle
- Triangle
- Square

Set **limits**, but don’t **restrict**
SOME SUGGESTED ART INTEGRATED LEARNING ACTIVITIES

Grade: Upper/Primary

Nature is Geometry, Patterns & Numbers

Pentagon = 5

Hexagonal Grid = 6
With simple **wood blocks** you can connect: Maths (numbers), Physics (Balance, Inertia, strength), Biology (wood)

Simple uncoloured furniture beading: **Non-toxic, affordable, easy to find**

Grade: Primary, Secondary
SOME SUGGESTED **Art Integrated Learning Activities**

Grade: Upper Primary & Sr./Secondary

**Drama/Theatre** involves storytelling, acting, body movements, sound, music, space manipulation, set-prop design, apparel design, sound and light design. Students can showcase a wide variety of subject understanding.
Some suggested Art Integrated Learning Activities

Simple toys are great to develop ‘making’ skills & understand complex concepts.

Grade:
Pre/Primary
Sr./Secondary

Arvind Gupta toys available on YouTube &
www.arvindguptatoys.com
**Training of Teachers on ART INTEGRATED LEARNING Pedagogy**

For effective implementation of ART INTEGRATED LEARNING, which is a pedagogy of experiential and joyful learning, the school principal needs to be aware of its relevance and help in creating a conducive environment for its implementation in true spirit.

For the effective implementation of this pedagogy, the teacher needs adequate training in the following aspects:

- Should have understanding of the concept of AIL as a pedagogy
- Hands-on training in the AIL techniques: This would enable all teachers (including art teachers) to understand how art forms become engaging methods for learners to be joyful, attentive, expressive, inquisitive and keen observers, which leads them to the construction of their own knowledge skills to create inclusive classrooms using art as a means to learn.
- Hands-on training on using different methods and materials of various art forms as a part of the teaching-learning process.
- Planning and conducting AIL activities
- Collaborating with teachers of different disciplines including art education, health and physical education
- Generating cost effective and local-specific resources for using AIL as an assessment tool
- Skills of presentation and exhibition of children’s work
INTEGRATING ART WITH PHYSICS, CHEMISTRY AND BIOLOGY

Sciences provide an understanding of a universal experience, Arts are a universal understanding of a personal experience... they are both a part of us and a manifestation of the same thing... The arts and sciences are avatars of human creativity.
Can Teach:

- Substances that are attracted by a magnet are called magnetic substances. Example: Iron, cobalt, nickel, etc. Substances that are not attracted by a magnet are called non-magnetic materials.
- Students were provided different materials and asked to use them to create patterns and at the same time to identify the magnetic and non-magnetic materials.

Grade: Secondary
Can Teach: Simple Harmonic Motion (SHM) which is a motion along a straight line. The body moves back and forth with respect to a mean position. The children will learn about frequency, amplitude, etc.

Grade: Secondary, Sr Secondary
CONSERVATION OF ANGULAR MOMENTUM
Grade: Secondary, Sr Secondary
The Art of Chromatography

Grade: Secondary, Sr Secondary
Haiku is a type of short form poetry originally from Japan. Traditional Japanese haiku consist of three phrases that contain a kireji, or "cutting word"

There are only three lines, totaling 17 syllables.

The first line is 5 syllables.

The second line is 7 syllables.

The third line is 5 syllables like the first

Lithium, Li

Lighter than water,

empower my phone, my car

Banish depression.

Carbon, C

Show-stealing diva,

throw yourself at anyone

decked out in diamonds.

Grade: Secondary, Sr Secondary
The concept of periodic table can be enhanced through playing scrabble. The symbols of elements can be created into scrabble card and the children can be encouraged to play whenever their schedule permits.

The first 12 elements of the periodic table to be used to created a wall clock.

The first 30 elements of the periodic tables can be used to create a monthly calendar.
The crossword puzzle is a kind of word game which can help students to extend their learning.

From exam point of view it plays an important role in evaluating for solving multiple choice type questions.

Thus it can be useful for students to memorize terminology, definitions, spelling, and pairing key concepts.
Some suggested Art Integrated Learning activities

Grade: Sr./Secondary
Geometry and chemistry

A.G. Smith

<table>
<thead>
<tr>
<th>No. of e-pair</th>
<th>Geometry</th>
<th>Shape of Molecule</th>
<th>Examples</th>
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<tbody>
<tr>
<td>2</td>
<td>Linear</td>
<td></td>
<td>CO₂, BeF₂</td>
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<tr>
<td>3</td>
<td>Trigonal planar</td>
<td></td>
<td>SO₃, BF₃</td>
</tr>
<tr>
<td>4</td>
<td>Tetrahedral</td>
<td></td>
<td>NH₃, CH₄</td>
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<tr>
<td>5</td>
<td>Trigonal Bipyramidal</td>
<td></td>
<td>PCl₅, PF₅</td>
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<tr>
<td>6</td>
<td>Octahedral</td>
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<td>SF₆, SeF₆</td>
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ART INTEGRATED
LEARNING EXEMPLARS
USING ART FORMS TO SEND OUT MESSAGES IN SOCIAL INTEREST
INTEGRATING ART WITH EVS/SCIENCE
SOME SUGGESTED ART INTEGRATED LEARNING ACTIVITIES

Can teach: Writing, Reading, Directions, Topography, Geography, Planning, Measurement, Conversion, Angles, Area, Space management, Systems thinking
INTEGRATED DANCE WITH LEARNING OF SOCIAL STUDIES

DANCING SCIENCE

Can Teach:
Students learnt about the movement of earth around the sun & creation of day and night.

Grade: Primary
We will always have STEM with us. Something will drop out of the public eye and go away, but there will always be science, engineering and technology. And there will always always be mathematics.
Have you ever wondered why most of the floor tiles are square in shape and in most of the group housing societies or commercial projects, we see that the wall/ floor tiles are also square?

Ceramic tiles are available in a variety of size options which are mostly squares of sizes 4x4, 6x6, 12x12, 16x16 inches, etc.

- Perimeter of each rectangle is same but their areas are different
- The area increases with the reduction in the difference of length and breadth and the area of rectangle R5 is maximum because it is a square of side 12cm

Hence amongst all the rectangles of the same perimeter square has the maximum area, square tiles are more economical.
# Musical Fractions

**Grade:** Upper Primary, Secondary, Sr. Secondary

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<tr>
<th>Fraction</th>
<th>Music Note</th>
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<tbody>
<tr>
<td>Whole</td>
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</tr>
<tr>
<td>Half</td>
<td>🍰</td>
</tr>
<tr>
<td>Quarter</td>
<td>🍰</td>
</tr>
<tr>
<td>Eighth</td>
<td>🍰</td>
</tr>
<tr>
<td>Sixteenth</td>
<td>🍰</td>
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**Eighth Note**

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**Musical Fractions Unit**

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*Image courtesy of Paula Kim Studios.*
PYTHAGORAS RATIOS AND GUITAR FRETS

DIFFERENCE BETWEEN PITCH AND LOUDNESS

AMPLITUDE

FREQUENCY

SAME VOLUME (AMPLITUDE)

HIGHER PITCH (FREQUENCY)

LOWER PITCH (FREQUENCY)

SAME PITCH (FREQUENCY)

HIGHER VOLUME (AMPLITUDE)

LOWER VOLUME (AMPLITUDE)

GRADES: SECONDARY AND SR SECONDARY
INTEGRATING ART WITH LANGUAGES
DEVELOPING LANGUAGE SKILLS

**Language Skills**

**Input**
- Speaking
- Listening

**Output**
- Writing
- Reading

**Total Communication Process**

- Listening: 45%
- Reading: 16%
- Writing: 9%
- Speaking: 30%
USE OF SHAPE POETRY TO ENHANCE LEARNING OF LANGUAGES

Grade: Secondary/Sr Secondary

Can Teach:
Vocabulary, writing style, and literary devices
DIALOGUE WRITING USING ARTISTIC CARTOONS

Grade: Secondary/Sr Secondary
INTEGRATION OF FOLK ARTS WITH DIFFERENT SUBJECTS

Grade: Primary

Can Teach:
- Expressive communication and enhanced creativity.
- Rich heritage and cultural diversity of our country.
कला एवं हिंदी की एकीकृत गतिविधि

बंदर और मगरमच्छ

शिक्षण की संप्रशियाँ: भाषा की शुद्धता का ज्ञान, बच्चे समस्या का समाधान करने में सक्षम बन पाएँगे, बच्चों में रचनात्मकता का विकास होगा, मौखिक कौशल का विकास, बुद्धि तत्परता का प्रयोग करना सीख पाएँगे।
Art Integrated Learning should cater to the individual learning pattern and respect the pace of the student. Must be evaluated with proper rubrics.

Guidelines for Teachers

To Follow the AIL Based Assessment in True Spirit, the teachers must keep the following Points in Mind

- Non-judgmental
- Non-comparative
- Non-competitive
- Non-threatening
What’s your Ikigai?
ART INTEGRATION - TOWARDS EXPERIENTIAL LEARNING

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Thank You !!!!