Art Integrated Learning

Guidelines
ART INTEGRATED LEARNING

GUIDELINES

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING
Art Integrated Learning (AIL) is a framework of experiential learning which provides an equitable learning environment for all learners through their own access points. Students engage in art activities and construct personal meaning through their learning in an art integrated environment.

AIL was envisaged as pedagogy applicable to all levels of school education with the objective of developing the target areas of cognitive, socio-emotional and psychomotor domains of the learner. At multiple levels of the teaching-learning process, Art integrated learning has opened spaces for the existence of a learning that is both inter-disciplinary and holistic in nature.

Prior to its implementation as a pedagogical tool, the framework has been field-tested at different schools across the country for its viability and efficacy in making the teaching-learning process meaningful and joyful. The ensuing results and feedback from various stakeholders (which include teachers, authorities and parents) have been extremely positive and overwhelming. The pedagogy of AIL has been made part of NISHTHA (National Initiative for School Heads' and Teachers' Holistic Advancement), an initiative of Department of School Education & Literacy, MHRD, to prepare teachers of elementary classes for holistic and competency based teaching. To ensure the smooth implementation of this mega capacity building program, of which AIL is a training module, this guideline shall be crucial in hand-holding of our teachers and also guide them in this process.

These guidelines are meant to apprise all our stakeholders of school education with Art Integrated Learning as pedagogy and its innate relevance to education. It systematically explains all aspects of the innovative pedagogy of Art Integrated Learning; if followed in true spirit, they can help create vibrant AIL classrooms where we can hear the students singing, or see them dancing, acting, and creating works of art—all in ways that reflect a growing understanding of their core scholastic concepts.
The development of these guidelines is the culmination of struggle of many who have played their part in the journey to reach this milestone. Throughout this journey, rigorous discourse has borne new concepts, methods and objectives that have complemented AIL as pedagogy. I would like to acknowledge the teachers and Head of Schools, DIETs, SCERTs and RIEs for their faith in this innovation. Their sincere effort to implement AIL in their schools and their continuous feedback has helped AIL reach its present form.

I would like to acknowledge Professor Pawan Sudhir, Head, Department of Education in Arts and Aesthetics (DEAA) for her vision and perseverance towards this initiative, which has helped us evolved the pedagogy of experiential learning through arts.

Prof. Hrushikesh Senapaty

New Delhi

Date: Sep. 2019

Director
National Council of Educational Research and Training
The guidelines on Art Integrated Learning as pedagogy of experiential and joyful learning are a multitude of ideas that got matured over time, with valuable contributions of many. AIL as a process has witnessed rigorous efforts undertaken by our teachers and Heads of Schools, who are actively practising and disseminating this pedagogy since its inception. These guidelines have evolved from its nascent stage after receiving feedback from the team of experts associated with the process of training and implementation of AIL pedagogy. This wouldn’t have been possible without the immense contributions and valuable inputs received from various individuals associated with this project in one way or the other.

At the outset, I would like to acknowledge Prof. Hrushikesh Senapaty, Director, NCERT for his constant support and wisdom without which these guideline wouldn’t have seen light of the day. It is an honour to give gratitude to Late, Prof. Devi Prasad, an eminent art educator, Dr. Vivek Benegal, NIMHANS, Bengaluru for their enriching studies and invaluable views on art education some of which have been incorporated in this book. Special Mention also goes to the UNESCO Seoul Agenda (2010) which provided us with the blueprint of Art Education of which a QR code has been placed in the introduction chapter. I also acknowledge the scholars whose studies and researches have been referred to while developing this document.

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My heartfelt gratitude goes to Ms. Veena Gandhi, Principal, Nigam Pratibha Vidhalay, New Chaukhandi, Vikram Sonba Adsul, Teacher, Z.P.P. School, Ahmednagar, Maharashtra, and Dr. Suman Singh, Middle School, Siwan, Bihar for sharing their AIL related experience with us and being part of the system that helped in implementing Art Integrated Learning across different schools in the country. Their feedback has been integrated in this document for sharing glimpses from the field experience.
I am indebted to the faculties of D.I.E.T. Rajinder Nagar, especially Dr. Ashok Arora, then principal of DIET; Authorities of Municipal Corporation of Delhi (MCD) Education for their active collaboration in the field testing of the AIL approach in their schools which flagged off the journey of AIL as pedagogy of experiential learning and its implementation in selected schools of District West of Delhi State. This would become the benchmark for taking AIL across various states in the country. I would also like to thank the educational administrators, faculties of D.I.E.T’s, SCERT’s, of Delhi, Haryana, Maharashtra, Gujarat, Kerala, Karnataka, Andhra Pradesh, Meghalaya, Jammu and Kashmir, Bihar, Andaman and Nicobar Islands, Tripura and Madhya Pradesh for their active cooperation in identifying interested teachers and teacher educators to be trained on AIL and also for implementing and scaling up AIL in their respective states.

It would be appropriate to mention the active involvement of all the five RIE’s (Ajmer, Bhopal, Bhubaneswar, Mysore and Shillong) and four DMS school Ajmer, Bhopal, Bhubaneswar and Mysore for capacity building of their elementary teachers on AIL and its implementation. The AIL exemplars provided in this document are drawn from a pool of activities designed by the AIL teachers, teacher educators for the Art Integrated Learning Handbook. I thank all those who participated in designing of these activities.

Pictures given in this publication are an added contribution from schools who have been associated with us since beginning of the journey as active practitioners. My sincere thanks go to Shweta Uppal, Chief Editor, Publication Division, who helped iron out this document for its present quality.

Last but not the least; I appreciate the hard work and efforts put in by Nayana Prasad and Nishan Chakrabarty; JPFs, associated with Art Integrated Learning Programmes, Sanjid Ahmad, DTP Operator, DEAA in realising the document at each stages of its development. I sincerely feel that these guidelines will be beneficial in furthering of AIL pedagogy and in making schools the hubs of joyful learning.

Prof. Pawan Sudhir
Head, DEAA
NCERT.
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INTRODUCTION

Children are naturally curious and engage in play with objects and respond to music, rhythm and colours. From infancy, they delight in the interplay of light, sound, movement, shadow, shape and colour. Visual and tactile experiences such as exploring cereals or pulses in the kitchen, sculpting in sand, painting with fingers, scribbling with charcoals, playing with props like sticks and brooms, playing horse on Babaji’s stick or ghar-ghar help children develop holistically: they create shadows in patches of sunlight displaying experimentation and scientific temper. They form shapes such as squares, lines and circles with sticks or pebbles, leaning towards mathematical concepts. For young children, scribbling and stacking are first representations of their inner realities that emerge as detailed.
and imaginative stories if given a chance to describe their artworks. As children grow, their drawings and sculptures begin to reflect their observations of the world. Nurturing artistic sensitivities and creative responses needs to be the universal thrust of elementary education. Using art to connect to the immediate environment brings out diverse perspectives, enriching the learning processes by enabling students to observe, explore, think and learn without constraints. It is in this process that children engage with emotions and creativity on a cognitive level to integrate and simplify complex learning experiences.

In India, Nobel Laureate Rabindranath Tagore pioneered the idea of a relationship between arts and learning; many of his thoughts are captured in a book titled 'Art-The Basis of Education' by his student Devi Prasad (1998). Extensive research in the field has established that utilizing visual and performing arts in teaching-learning process encourages creativity, develops problem-solving abilities and improves the ability to handle mental imagery, as well as an understanding for using spaces creatively. This leads to the holistic learning and development of children. The recommendations of the National Curriculum Framework (2005), state that art education at all stages enables students to fully appreciate and experience the beauty of the universe and helps in their healthy mental development. [National Curriculum Framework, NCERT, 2005] The details for using art as a basis for learning have been described in the Position Paper on National Focus Group on Arts, Music, Dance and Theatre (page 7-8). The paper also stresses on the inclusion of art education in the curriculum of school education as a compulsory subject up to class X.
Art Integrated Learning (AIL) is a teaching-learning model which is based on learning ‘through the arts’ and ‘with the arts’: it is a process where art becomes the medium of teaching-learning, a key to understanding concepts within any subject of the curriculum. Learners explore creatively while building connections between different concepts through various art forms. Art experiences, both in visual (drawing and painting, clay modelling, pottery, paper crafts, mask and puppet making, heritage crafts etc.) and performing arts (music, dance, theatre, puppetry etc.) lead to a better understanding and construction of knowledge about different concepts. Arts have the flexibility to accommodate age-appropriate opportunities for learners who can explore at their individual pace. This resonates with the experiential learning approach.

The preamble of the ‘Seoul Agenda (2010)’ emphasises that

“...arts education has an important role to play in the constructive transformation of educational systems that are struggling to meet the needs of learners in a rapidly changing world, characterised by remarkable advances in technology on the one hand, and intractable social and cultural injustices on the other.”

The agenda further defines goals for the development of arts education:

i. Ensure that arts education is accessible as a fundamental and sustainable component of a high quality renewal of education.

ii. Assure that arts education activities and programmes are of a high quality in conception and delivery.

iii. Apply arts education principles and practices to contribute to resolving the social and cultural challenges facing today’s world.
1.1 Some Exemplary Studies that Earmark the Significance of AIL

There is significant academic research that corroborates the importance of arts in the process of learning. Learning through the arts aims at the development of cognitive (thinking, recalling and reflecting), affective (social and emotional) and psychomotor (use of body and movement) abilities of the learner. Khan and Ali (2016) in their 'The Importance of Fine Arts Education an Overview' found that study and participation in the fine arts influences learner behaviour and attitudes: “An effective education in the fine arts helps students to see what they look at, hear what they listen to, and feel what they touch. Engagement in the fine arts helps students to stretch their minds beyond the boundaries of the printed text or the rules of what is provable.”

Some empirical studies are cited as evidence for the possible results of Learning through the Arts:

- **Arts and disadvantaged groups:** In an Elementary School catering to mixed social groups in Washington, employing the arts in academic classrooms was associated with improvement in test scores in Mathematics and English (Donna St. George, 2015). In particular, students living in poverty benefitted from the integrated approach. The researcher further emphasized that interest in the integration of arts is growing globally, driven by increasing research that points to the academic, social and personal benefits to students.

- **Arts create innovative processes:** Nobori (2012) was amazed at how the arts unlock pathways to learning. The process of integrating arts may seem like conducting art projects in classroom settings, but becomes a teaching strategy that seamlessly merges art experiences with core curricula to build connections in engaging learning contexts. For instance students choreographed a dance using locomotor and non-
locomotor movements to demonstrate their understanding of the solar system.

**ARTS AND COGNITIVE PROCESSES:** Benegal (2010) stated that arts lead to dramatic changes in the brain such as strengthening the ‘attention network’. Brain areas involved in music are also active in processing language, auditory perception, attention, memory and motor control. Art Education is a much-needed way of promoting balanced mental development in today’s knowledge-based world.

**ARTS AND SOCIO-EMOTIONAL DEVELOPMENT:** Based on his research, Harvey (1989) found out that art process relates to cognition, achievement, motivation, and self-concept in elementary school students. In essence, arts when integrated with learning process work splendidly as affective education. “The use of art, movement, and music can result in metaphor-making and problem-solving of social/ emotional conflicts. In this way the creative arts practices unite the cognitive aspect of creativity and the therapeutic aspect of behavioural and personality change. Because of this integration of thinking and feeling, the creative arts therapies offer an opportunity to positively affect social/emotional and academic behaviour”.

**ARTS AS PEDAGOGY:** Puri and Arora, (2013) reviewed the use of Art Integrated Learning in 107 classrooms of 17 Municipal Corporation in New Delhi and found (i) remarkable difference in school environment, (ii) increased level of student involvement in the learning process, (iii) significant improvement in students’ attendance, (iv) improved academic achievements and (v) more confidence and openness to handle new situations than their peers in the non-AIL classrooms.

The aforementioned research underlines the role of arts in the creation of an environment which helps in socio-emotional, cognitive, and psychomotor development of the learners.
Art Integrated Learning as an approach was discussed in the National Curriculum Framework (2005), specifically in the Position paper on Music, Arts, Dance and Theatre and has been taken forward by NCERT through its constant effort in the past decades.

All stakeholders were involved in preparing the institutions with an attempt to take regional opinions to create a ‘pan Indian’ involvement. The procedures are described in the subsequent paragraphs.

1.2 Creating An Art Integrated Learning (AIL) Model

Art Integrated Learning is an NCERT initiative based on the recommendations of NCF 2005 of which the Position Paper on Music, Arts, Dance and Theatre clearly mentions

"education through the arts, where learning takes place using different arts forms as tools in the teaching–learning process”.

The 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. The process adopted for its development was systematic and based on field research. Sequence of the development is as follows:

Need analyses

Interactions and Focus Group Discussions (FGDs) with stakeholders such as: Teachers and Heads of School of elementary stage, with faculty from SCERTs, DIETs and Departments of Education of different states (Bihar, Haryana, Maharashtra, Gujarat, Meghalaya, Karnataka, Delhi etc.) were organised with an objective to identify need of the system and design ways to build their capacity to implement AIL for a joyful learning environment in every school. Interactions with stakeholders and collected data, point out at many issues and concerns to be addressed. There were hundreds of frequently asked questions (FAQ’s).
Designing of Training Modules

Based on the frequently raised questions/issues and the difficulties faced by different stakeholders, it was decided to design seven training modules preferably with appropriate audio-video content, for the capacity building of the teachers, HoS and teacher educators on AIL in year 2010. These modules are a package of written exercises supported with video films and slide shows. Seven modules namely: Ice-Breakers, Art in Everyday School Activities, Methods and Materials, Art and Art Education, Integration of Arts with other subjects, Role of Museums in Education and Evaluation in Arts are sequentially placed in two volumes.

Before finalization, the package was field tested in Municipal Corporation (MC) Primary schools of District West of Delhi state, in collaboration with District Institute of Education and Training, (DIET) Rajinder Nagar, (SCERT, Delhi) and Deputy Director (Education, MCD) of District West, New Delhi. Complete process of development was documented. The final package was then used for the capacity building of selected teachers from Delhi schools.
**Capacity Building of the Schools**

It involved orientation of the educational administrators, which included Directorate of District Education (DDE), Assistant Education Officers (AEO), SIs and principals of the selected schools on AIL model and its implementation. Training of teachers was an intensive exercise of hands-on-experiences using methods and materials of different art forms, planning of subject/stage wise activities, mock sessions and presentations, which lasted for 10 days. The capacity building design also had provision of monthly hand-holding sessions for three consecutive months, which helped teachers gain confidence in utilising AIL skills in the classrooms.

**Field Study**

After one academic year of AIL implementation in these schools a comprehensive study, namely ‘Art Integrated Learning: An Impact Study’ was conducted by the team of teacher educators Dr. Ashok Arora, Principal and Dr. Lovely Puri, Head PSTE, DIET Rajinder Nagar, SCERT Delhi in collaboration with Jamia Millia Islamia (JMI). Study was conducted in 34 schools (17 AIL and 17 Non-AIL), on 102 teachers and 5130 students of Municipal Corporation of, Distt. West, New Delhi.

*Objectives of the study were to:* (i) study the possibilities and scope of art integrated learning pedagogy as perceived by trainees (ii) study the perception of resource persons regarding possibilities and obstacles in adopting art integrated learning pedagogy in actual classroom (iii) find out the extent of practice of the AIL pedagogy by the teachers who have received training (iv) study and compare the learning outcomes of students taught by the teachers who received the AIL training with the students taught by teachers who were not trained in AIL and (v) study and compare the perception of different school functionaries about AIL pedagogy with those who were not oriented AIL pedagogy.

*Tools* used for the study included; ‘Checklists’. Checklist-1 to study kind of activities that teacher is doing as part of the implementation of AIL and Checklist-2 to study the use of various materials for
teaching-learning activities by the teachers. Another tool used was ‘Class Room Observation Schedule’ (CROS) which consists of 4 sections; (i) Teaching-Learning Environment. (ii) Teaching Strategies (iii) Personal Characteristics and (iv) Evaluation. Third tool used in the study was ‘Perception scale for Teachers’ (PST) to study perception of all teachers covered in the sample. A ‘5 point scale’ which consisted of 4 sub scales to study their perception about: (i) Meaning of Art Integrated Learning, (ii) Teaching strategy, (iii) Justice with the course content, (iv) Impact on the child.

‘Interview Schedules for Principals’ (ISP) was used to study the perception of school principals/HoS on using art as teaching-learning method and its effects on overall learning environment of the school. Last but not the least was the ‘Interview schedule for Resource Persons’ (ISRP) to elicit their perception about; (i) capability of teachers they have trained to effectively use AIL pedagogy, (ii) feasibility of implementation of the programme in schools (iii) changes they observed in the teachers’ behavior towards AIL during their interaction with them.

The findings of the studies were positive and were supported with the statistical data. The empirical inferences were heavily inclined towards the teachers, principals who were trained in AIL pedagogy as compared to non-AIL trained teachers and principals. The perception of AIL trained stakeholders was positive in terms of the curriculum transaction, learner centered classroom, coverage of textbook content, and overall personality development of the child. Approximately 90-100% of AIL trained respondents were of the opinion that there was a visible improvement in terms of teaching-learning effectiveness, a noticeable difference in participation of children in co-curricular activities and in the school environment which helped in making learning experiential and joyful. After the implementation of AIL in schools, there was an increase in peer learning which was also corroborated by the positive feedback received from Directorate of District Educations (DDE) West and administrative officers involved in this project. Resource persons involved in this study opined positively on the capacity of teachers to comprehend and apply AIL pedagogy in their schools. They reached a consensus of AIL being
an effective innovation that has the ability to create a long lasting symbiotic relationship between the teacher and the taught. Overall, the impact study was beneficial and an analytical proof of the efficacy of AIL pedagogy if implemented in true spirits.

**NATIONAL SEMINAR**

The National Seminar on Art Integrated Learning was held in December, 2012 by DEAA, NCERT with an objective to provide a platform to AIL practitioners (teachers and teacher educators) to share their classroom experiences, case studies, and the impact of ‘Art Integrated Learning’ on the lives of children and practitioners both and to provided a platform for educational leaders from DIETs and SCERTs to meet AIL practitioners face to face, with a clear focus on advocacy of AIL for its scaling up in different regions of the country.

Presentations of the seminar started with the keynote address by Prof. Krishan Kumar, the former director, NCERT and an eminent educationist, wherein he emphasized on the importance of arts for the holistic development of students. Other than the keynote address there were 14 presentations in all by the AIL practitioners. There was an exhibition cum display of teachers and students’ work which included students portfolio, teachers’ diary, art work created by children etc. There was an open house session for questions answered by the presenters. Last session of the program was dedicated to the preparation of roadmap by the state representatives. The Seminar concluded with the short cultural performance on the ‘life of Mahatma Gandhi’ and a play on the RTE Act, 2009, by the students of MC Primary Schools.

The seminar was attended by 155 participants consisting of teachers, teacher educators, DIET Principals’, Director SCERTs’ Senior faculty of IASEs of JMI and DU and faculty of NIE NCERT. This intervention proved to be the beginning of an initiative to implement AIL in primary schools of many states in the country.

NCERT has subsequently conducted capacity building programmes on AIL in 15 states and union territories by year 2017. AIL has successfully been introduced as pedagogy of experiential and joyful learning in its on-going initiative of block level research in five regions with the respective Regional Institutes of Education (RIEs).
It has been eight years since the implementation of AIL in our school. Before AIL, we had pre-defined concepts for learning and achievements and were totally confined to existing methods of teaching. A neat and clean building, classroom with charts, well-disciplined students and good results seemed to be sufficient. But, when the two teachers, who received training from NCERT started implementing this pedagogy, there was an overall change in the school environment. The impact started reflecting in behaviour of students, of teachers, and in teacher-student relationship. Children attending AIL based classes were seen to be more confident, interactive, responsible and helpful. Thus, impressed by the outcome of AIL classrooms other teachers also started applying it in their classes. There were always sounds of clapping, singing etc. in these classrooms and attracted students towards this learning process. Overall academic level of children was uplifted; their participation in Zonal and inter zonal competitions increased remarkably, number of Merit Scholarships also went up.

Gradually it made us believe that art activities can provide children with freedom of expression and much needed socio-emotional development which in turn can make them motivated and active learners. Now I believe that a child whether first generation learner or belonging to a weaker section of society or physically challenged, is equal in talent and creativity if given supportive environment such as AIL pedagogy. It was the first time that we could feel the concept of holistic learning and development happening in our classrooms. Thanks NCERT.

Ms. Veena Gandhi
Principal, Nigam Pratibha Vidhyalaya
New Chaukhandi
New Delhi-110018
Art integrated learning (AIL) approach has proven to be one of the best approaches so far in my opinion. It is because of AIL that my rapport with my students became stronger and I could understand them better. It enabled me with a skill to explain the subject content in an easy and interesting manner. My students got better clarity of subject knowledge and their involvement in learning process increased. Because of AIL, they have started expressing themselves with more confidence and clarity. Their interest in art activities brings them to school on time and they are reluctant to leave.

AIL has given students the opportunity to think freely; when they started participating in different art activities they became more enthusiastic, their curiosity increased, they started exploring and creating new things. They started cooperating and helping each other willingly. AIL has made them achieve Learning Outcomes of Mathematics and Science without much efforts and they are no more afraid of class-tests. Their ability to communicate, listening to each others has increased manyfold.

Overall, AIL added life and excitements to the school environment. It helped them overcome fear of learning and assessment on one hand and increased their eagerness to express on the other. It has provided space and opportunity to all children and my school became a progressive and happening platform of joyful learning.

Vikram Sonba Adsul
National teacher awardee 2017
ICT National Teacher Awardee 2017
Z. P. P. School, Bandgarwasti, Tal- Krajat
Dist. Ahmednagar, Maharashtra
एक शिक्षक के लिए आरंभिक कक्षा (कक्षा 1 एवं 2) हमेशा चुनौतीपूर्ण रही हैं। विधालय की चहचंहारीय के अन्दर नवप्रवेशी बच्चों को आनन्ददायी विद्यालयी मात्रतन उपलब्ध कराना मेरे लिए हमेशा चुनौतीपूर्ण रहा। कक्षा में बच्चों के शोर, एक दूसरे से लड़ाई और फिर मुझसे उनकी शिकायत, कभी। नबर (पेशाब करने) के लिए छुट्टी, कॉर्क में झाला दवाएं देर से भागने की तैयारी, मेरे विचार में भी मुझे अस्वीकार कर देना आदि मेरी दैनिक चुनौतियाँ थीं। मैं शिक्षागतियों को संभालने की पूरी कोशिश करके, परिणाम भी दिखा लेकिन सभी क्षणिक हर प्रशिक्षण में मेरे बच्चे मेरे अंडे के सामने कॉर्क में झाला दवाएं कक्षा से भागने की मुद्दा में दिखाई देते थे, एक वक्त प्रश्न के साथ- 'आखिर कब तक भागगे?'

वर्ष 2012 के अगस्त महीने में मैं एनसीईआरटी की कक्षा समेशकत अभ्यास की टेनों के लिए भाग ले, राज्य शिक्षा शोध एवं प्रशिक्षण परिषद के परिषद में उपस्थित था। इस रोजा प्रशिक्षण, हर रोज मेरे कई प्रश्नों पर प्रश्न करता, जो आज मेरे लिए, मेरे पास मेरी हर कक्षा के जरूरतों की समाधान है। प्रशिक्षण के दौरान कक्षा समेकित अधिगम की गतिविधियों और मैं ने कक्षा में जो महत्वपूर्ण करती थीं, दोनों में बहुत फर्क नहीं था। फर्क था तो वह ये कि वित्तकार्यों द्वारा मेरे कराई थीं लेकिन कभी उनसे उन खिलों, खिलों की रेखाओं और रंगों में कठिन उनके विचारों, उनके पसंद-नपसंद आदि पर बात नहीं की, विचित्र आकृतियाँ तो बनाई लेकिन उनके आकर, छोटे-बड़े, तुर-नहीं, जोड़ने-घटने की समस्या सहित अन्य गणितीय अवधारणाओं में कभी उनका उपयोग नहीं किया, बच्चों ने अपने पसंदीदा रंग बनाने की दृष्टि में उनके विचारों से लेकर कागज़ तक बनाए लेकिन मैंने कभी उन चित्तों पर उनकी समझ, उनकी भाषा, उनके पूर्व ज्ञान, उनकी रचना-विचार आदि को न समझने की कोशिश की न ही शिक्षण प्रक्रिया में उनके उपयोग की। शिक्षण प्रक्रिया में इनके उपयोग और इनका महत्ता परखने की विधि दृष्टि मुझे कक्षा समेकित अधिगम ने दिया। शिक्षण प्रक्रिया में इनके उपयोग ने हमें उपयोग करने के साथ-साथ इनके महत्ता परखने की विधि दृष्टि मुझे कक्षा समेकित अधिगम ने दिया। शिक्षण प्रक्रिया में इनके उपयोग करने की समझ करते ही सवकृत कदम बढ़ता गया। जिन बच्चों को कक्षा में रोकने के लिए संघर्ष करने पड़ता था वे न सिर्फ रंग के बैक्टर उत्साहित से बेखबर अपने विचारों के नीचे नहीं देखने के लिए सफल संघर्ष करते दिखाई दे थे। घटी बनने पर अब हर कक्षा से आश्चर्य आने लगी “माट साहेब हमारी के करार में आई। खूब माजा आये (मास्टर साहेब हम लोगों की कक्षा में आईये बहुत मजा आता है।)।” वहाँ मजा आयेंगे सीखता है। एक प्रशिक्षण के मेरे सभी सवालों का जवाब दे दिया था, अब न कोई वक्त था न कोई वक्त प्रश्न।

Thanks AIL.

डॉ सुमन कुमार सिंह
उ. मा. विद्यालय, कोड्गंज बंसती भगवानपुर हाट, सीवान (बिहार)
1.4 **OBJECTIVES OF AIL**

The pedagogy contained in the art based process accommodates space for varying pace of individual children. Learning and developmental needs of all children including children with special needs, weaker socio-economic backgrounds and diverse cultures benefit from performance and expression through the medium of art. Art encourages, promotes and implements learning and living to be part of natural process. Discovery, observation as well as experimentation makes learning concrete, creative and rewarding for one and all.

Artwork of the learners brings in the vibrancy of their social contexts. Art is a journey where people are co-travellers sharing and moving together as a team. It also breaks barriers of language as art has its own language. It helps children belonging to different backgrounds build communication and interaction beyond barriers. In small ways children learn about the coexistence and multiplicity of social realities.

Celebrations like sports day, health *mela*, science fair and festivities in school use arts to enhance appeal and add colours of warmth and welcome. Integrating local arts and crafts in different school spaces like classrooms, corridors, different rooms, and outdoor area creates home school linkages besides the school environment becoming attractive and child friendly. Integration of arts with learning promotes:

- children’s need to experience processes rather than strive only for a pre-fixed goal
- experiential learning of academic content leading to holistic learning
- interdisciplinary connections
- expression with freedom and opportunity for self-reflection
- development of different domains
- possibility for children with different social backgrounds to interact on one common platform
active participation of every child
- growth of social skills by giving students experiences of working as a team
- emotional expression and stability
- appreciation for diversity and cultural confidence
- observation, experimentation and building scientific temper
- aesthetic sensibility and respect for national and cultural heritage

1.5 Stage Wise Learning Objectives

Learning through the arts can take place at all levels of schooling. Art integrated learning is experiential in nature and makes all children respond with their imagination and emotional strengths. The needs of children will vary with age, social contexts and ability. Stage-wise objectives for engaging children in art integrated learning are as follows:

1.5.1 Pre-Primary

At this stage children are both highly inquisitive and energetic. Creative activities such as drawing, painting, clay work, music are both appealing and engaging for young children. At this stage ‘all education should be through the arts’. The objective of children’s participation in visual and performing arts is to:

- make learning joyful and engaging
- encourage children to be aware of their environment through keen observation and unhindered exploration
- promote sensitivity towards their environment
allow free emotional expression, communication and creative involvement
facilitate children to express freely and spontaneously

1.5.2 PRIMARY

Art education at this stage needs to link with all subjects such that it becomes a tool of teaching-learning concepts. Art can play an effective role in strengthening the child’s curiosity, imagination, and sense of wonder. They should have a positive impact on the skills related to intellectual, socio-emotional, motor, language and overall literacy. The objectives of AIL at primary level are to help children:

- experience joy and eagerness to learn
- learn to live in an inclusive environment
- discover concepts of Mathematics and Science in the world around them
- be aware of interdisciplinary connections
- enhance observation, curiosity, exploration and creative and free expression
- explore and understand body movement and coordination
- develop expressive communication and critical thinking skills
- foster an inquisitive attitude towards learning and knowledge
- understand and regulate their emotions
- create awareness of rich heritage and cultural diversity

1.5.3 **Upper Primary**

During this stage children are ready to comprehend more complex interconnections between concepts and the environment. AIL can allow children build on simple concepts as well as relate them with academic content meaningfully. Children also enhance the skill to work in groups and explore ideas together. The objectives of AIL at the upper primary level are to help children:

- explore multiple perspectives of concepts
- construct knowledge of themes, subjects and concepts and be aware of the inter-disciplinary connections
- develop a pluralistic approach and appreciate different possibilities
- promote teamwork and mutual appreciation
- enhance communication skills, language skills and problem solving skills
- build sensitivity towards environmental and societal concerns
- create art and apply their artistic skills in day-to-day activities
- learn inclusive practices of respect, care, empathy and compassion
- foster socio-emotional competencies and cognitive competence
- understand and regulate their emotions
- create awareness of rich heritage and cultural diversity
Art Integrated Learning provides a unique opportunity to the children to explore various themes and concepts through visual and performing arts. It means art becomes an integral part of the classroom teaching-learning process. For example, on the theme of Water we have the question: ‘Where does water come from?’ The children may use ‘black colour’ for dirty/sewage water and ‘blue’ to say it’s a river. At this point, the teacher needs to have the skill to understand and comprehend children’s art experience and lead the process to connect it to the subject learning. The teacher
may intervene and say “let’s follow the river to find its source!” and suggest movements, music and colour to locate the source of the river, unfolding the constructivist teaching learning approach.

Though the art experience is flexible, and children do learn in the process of experimentation and exploration, a broad frame of teacher preparation will be crucial for the effective implementation of AIL. The potential of AIL is best realized by capacity building and readiness of all stakeholders. Hence, the following steps are recommended for effective implementation of AIL:

- Capacity Building
- Planning of Activities
- Planning Time
- Planning Resources
- Classroom Management
- Community Involvement

### 2.1 Capacity Building

Introducing art as a resource will require re-orienting the school system in the use of it as pedagogical tool. All stakeholders of school education, including the school management need to be oriented to understand the importance and the relevance of this pedagogy. Capacity building here refers to any effort being made to improve the understanding, skills of educators and others to implement AIL in their school. It reduces a school’s reliance on outside support or services, by building their internal capacity. Teacher-training workshops and teacher observation programmes should be undertaken to bring about a paradigm shift in the ways students learn and the ways teachers approach teaching and learning. This means that teachers will themselves have a deeper conceptual understanding of the content they are expected to teach and the pedagogical knowhow with suitable skills to create appropriate learning environment.
2.1.1 **Orientation of Educational Administrators Including School Principal/HoS**

For effective implementation of AIL, which is a pedagogy of experiential and joyful learning, the educational administrators including school principal/HoS need to be aware of its relevance and help in creating a conducive environment for its implementation in true spirit.

2.1.2 **Training of all Teachers on AIL Pedagogy**

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

- understanding 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 means to learn
- hands-on training on using different methods and material 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
- using AIL as an assessment tool
- skills of presentation and exhibition of children’s work

2.1.3 **Sensitization of the Community**

Community plays a very integral role in the learning and development of children. Therefore, a clear understanding of AIL as a pedagogy
by the community goes a long way in its effective implementation. It is recommended that before the launch of AIL, schools organize a brief session for the immediate community (parents) on its role towards the quality education of their wards.

### Sources of Training

NCERT can build capacity of the States (on request) on AIL by training a selected number of master trainers/state resource group (SRG) who can train other teachers, further. States SCERTs/DIETs and Directorate of Education can organise their training programs while making use of AIL training Package of NCERT for training their teachers.

### 2.2 Planning of Activities

Once the teacher begins to utilise AIL methodology, she would need to work on the dynamics of planning. AIL would require linking art experience to the subject matter seamlessly and to identify methods and techniques to engage children in group activities. Teacher’s pre-planning; familiarity with the subject combined with attention to guiding and reviewing children’s responses will keep the journey on track.

### Stage Wise Planning of AIL Activities

#### 2.2.1 Pre-Primary

As recommended by NCF 2005, all the education at this stage should be through arts: drawing, painting, clay modelling, singing, actions or movements. It further emphasizes that 90% of the curriculum must be art oriented. Therefore, while planning activities for this stage, the teacher must keep the above criteria in mind. Another important point for this stage is to focus on the process and not on the product. Suggested activities are:
poems/rhymes in rhythm and melody which children enjoy while learning through movement and songs. Poems on themes from their immediate environment which will help in developing a sense of auditory and visual imagery

exploration of different sounds through commonly found objects which can help them differentiate between noise and music

While planning activities for this stage, focus should be on using locally available, age appropriate materials such as pebbles, seeds and beads, leaves, flowers, sand, clay, sea shells, feathers, wood sticks, tree barks, natural colours, etc.

2.2.2 PRIMARY

At the primary stage, arts should be integrated with all subjects and used as an approach for teaching and learning of different concepts.
This will help children freely express their ideas and emotions. They will also develop all the senses through keen observation, curious exploration and spontaneous expression. As is the system in most of our primary schools, one teacher teaches all subjects to her class which gives her the freedom and scope to plan art experiences in a way that cater to learning of multiple disciplines. While planning activities for this stage, the teacher should keep in mind that:

- the process and not the product should be focused upon
- the art experience should be planned such that it serves an interdisciplinary purpose catering to multilevel needs of the classroom
- in case of multi-grade classrooms (classrooms where there are students from different standards), the teacher should pay attention to the composition of the groups as age group becomes a fundamental point while designing activities. The need of inclusive classrooms should be focused upon
- the art integration in classes 1-3 and 4-5 should be 80 and 70 percent respectively. (NCF 2005)
- the children of classes I and II should be left with the material to experiment and express on subjects and situations they observe around them
- class III onwards they can be given simple topics related to their day to day life and immediate environment which also covers their curriculum

### 2.2.3 Upper Primary

At the upper primary stage, emphasis should be laid on the use of learner’s own imagination and development of their creative expressions. It is suggested that children of this stage work together in teams for their socio-emotional development and enhancement of life skills (inter-personal communication, collaboration and cooperation, respect for diversity and appreciation for each other’s
Using clay as learning resource | Mandal Parishad Primary School Uppavanka Village
Kalandurg Mandal, Anantapur, Andhra Pradesh

perspective, developing leadership skills, problem solving abilities etc.). As this age group is the beginning of adolescence, their growing up concerns are also addressed naturally and effectively through integration of arts.

The existence of a strong collaboration between teachers of different subjects, including those of art education is important while planning Art Integrated Learning activities. This will help teachers to manage teaching-learning time efficiently and promote interdisciplinary approach which leads to holistic learning.

While planning activities for this stage, the teacher needs to see that:

- the focus is on the process and not on the product
- needs of inclusive classrooms are taken care
- while making the groups they should follow a heterogeneous approach to ensure no discrimination on the lines of social prejudice and gender stereotypes
- periodic re-grouping of children is done for better exchange of ideas and accommodating different learning levels
- children are allowed to use diverse art forms and material to avoid monotony
ICT as an exploratory tool is encouraged

- children are provided with opportunities to interact with local/regional artisans to enhance their sensitivity and awareness towards indigenous cultural heritage
- field visits to places like museums, galleries, historical monuments, melas, bazaars, haat etc. are incorporated
- the extent to which the art experience can be taken to connect it with the concept/subject content
- art experience is utilised as an assessment tool also

Art education with its inherent quality of involving the learner has possibilities for being a satisfying medium of creative expression. The learner is both the performer and the observer of the performance where the process stimulates his/her mind.

2.2.4 Suggested Format for Writing AIL Activity

AIL activity plan is a suggestive format, which is flexible in nature. Teachers may think and prepare their own plans while keeping in mind the need of the learning situation. The suggested format is based on the commonly used format for AIL activities in the field:

- **CLASS**: The class for which the lesson plan has been prepared should be mentioned.
- **SUBJECTS**: Specific subjects for which the activity is being planned should be mentioned.
- **THEME/CHAPTER**: These can be developed in any subject around the themes (NCF 2005), as this helps in permeating subject boundaries and accessing knowledge holistically. It also helps in covering a wide range of concepts, issues and skills.
- **ART FORM/S BEING USED**: The teacher may specify whether the art form being used is visual, performing arts or both.
- **TIME REQUIRED**: It is essential that the teacher works on a time-bound plan to ensure effectiveness of the teaching-learning
process. However, if any child or a group requires more time, it should be allowed respecting the individual pace of children.

- **Planning of Art Experiences/Activities Step Wise:** Teacher can design AIL activity plan for facilitating children through well designed art experiences. Some art experiences can be in the shape of ice-breakers which can be conducted and completed in 10 to 15 minutes and others can be longer to suit the need of Learning Objectives and Learning Outcomes of the plan.

- **Follow-up Exercise/s:** Every art experience should have follow up exercise/s which can be in the shape of question answers, brainstorming activities, presentation/ performance etc. For more details teacher can refer to the exemplars given in this document starting at page number 45.

- **Assessment:** AIL as pedagogy provides opportunity and spaces for ‘assessment as learning’, assessment for learning’ and ‘assessment of learning’. Therefore while preparing AIL Plan teacher can think of creating easy to follow and seamless spaces for assessment and maintain records. For more details please refer to the AIL as assessment at page number 36.

- **Linking of Art Experience/s with the Concept/s or Theme/s:** While preparing the AIL plan teacher can think of the suitable points where the targeted theme or concept can be seamlessly linked to the art experience of children.

### 2.3 Planning of Time

Time management at every stage is an important aspect of teachers’ professional competence and productivity. Teachers can sometimes find it challenging to take out time for organizing art experiences, due to paucity of time. This can compromise the creation of a joyful and experiential learning environment. On the contrary there are interesting time-slots available in schools such as morning assembly, festivals of celebrations, special assemblies and excursions, which
can be utilised for mass art experiences and can be easily linked to the subject content and learning outcomes. Following are some suggestions for the planning of time:

2.3.1 **PLANNING OF ANNUAL CALENDAR**

The school team while planning the annual calendar should look at the following time slots available with every school and utilise them for Art Integrated Learning:

- **MORNING ASSEMBLY**: It is the most enriching period when the whole school gets together to begin the day. The assembly time can become an effective learning stage if the performances can be linked to the content and themes of the classes. For example, if the topic in the classroom is about the Solar System, all children along with their teacher can plan a performance on the topic. One theme/topic can continue for a week or two, which will allow an exploration of different aspects under one theme. On one hand, this provides teachers with increased learning time and on the other it helps in creating a joyful learning environment for every child in the school.

- **ZERO PERIODS**: This is a time slot of fifteen to twenty minutes either before the first period or after the last period before the school closes. This time can be utilized to do an art-based ice-breaker or activity to revisit or get introduced to a concept (for more details on ice breaker activities refer to Training Package on Art integrated learning for primary teachers.)

- **SPECIAL EVENTS AND CELEBRATIONS**: There are many special days and celebrations in the annual calendar, for example Children’s Day, Teacher’s Day and Environment Day, National festivals like Republic Day, Independence Day and Gandhi Jayanti, festivals such as *Holi, Diwali, Eid, Christmas, Baisakhi, Basant Utsav, Guru-Parab and Onam* etc. which can be connected to the subject content and provide opportunities for experiencing and expression.
through art forms. This needs thoughtful and proper planning for creating suitable art experiences. These activities can help schools preserve and conserve cultural heritage which is affected due to many influences and reasons.

- **Bal Sabha**: This provides space for creative and meaningful art experiences where every child in school can get an opportunity to showcase his/her talent. For *Bal Sabha*, children can be encouraged to compose and recite poems, give their opinions on current affairs, create greeting cards, posters, sing, dance, dramatize, do mimicry, puppetry, etc. Hence, every week this half a day of *Bal Sabha* can be conveniently utilized for experiential learning.

- **Mid-day Meal/ Lunch Breaks and Short Breaks**: While children are proceeding with the lunch, the school may utilize
this period of time for playing popular age-appropriate songs/music to create a positive and joyful environment. Research has shown that this leads to better receptivity in children. It also helps in developing a sense of calmness and peace.

- **SCHOOL MAGAZINE:** Both printed and wall magazines have ample space for art experience. Content areas such as poems, stories, reporting of events, life incidents, photographs, paintings/illustrations/cartoons and comic strips etc. provide unlimited opportunities for joyful learning and can be linked with the curricular themes.

- Interschool competitions, House Competitions, field trips, etc. can also be planned on similar lines.

### 2.3.2 Time Table Planning

While planning class/subject-wise time tables at the upper primary level, there should be provisions for club/block periods to conduct art integrated learning. Club/block periods combine more than one period together to ensure uninterrupted learning. This approach can be applied to every subject at least once a month. Activities for the Club/Block period can be planned in an inter-disciplinary manner, so that two or more teachers have an opportunity to work
as a team. In Primary section, a particular teacher is vested with the responsibility of an entire class and hence can exercise his/her choices for conducting the activities in club periods.

### 2.4 Resource Planning

Proper planning of resources adds a novelty to the art integrated experience. Regular research and extensive groundwork by the teacher helps them to create a rich repository of resources which include regional/local resources. The resources should be easy to use and convenient to procure as their easy availability will ensure increased frequency of usage. The teachers should be aware of the content available online and its appropriate application. While selecting the resources, especially the physical ones, one should be confident of the fact that there is flexibility in the choice of resources.

#### 2.4.1 Types of Resources

1. **Material Resources**: While planning and selecting material and equipment for AIL activities one can practice thumb rule of following five points – resources should be
   i. economical,
   ii. environment friendly,
   iii. reusable,
   iv. innovative and
   v. locally available.
Few examples of material as resource are:

- Old magazines and newspapers
- Old and new notebooks and used packaging materials
- Old cloths, socks, dupattas/Saris etc.
- Clay strings, threads, beads, ribbons (golden and other colours) sutli etc.
- Bangles, bindi etc.
- Fish clips, buttons
- Coconut shells, pistachio shells, walnut/ almond shells etc.
- Pebbles, bark, feathers, sand, bamboos and broom sticks etc.
- Lids, bottle caps and old carton boxes
- Invitation cards, balloons, balls, sponges etc.
2. **COMMUNITY RESOURCES**: Ways and forums to involve the local community meaningfully must be devised to develop a healthy and proactive community-school partnership. When provided with opportunities to interact with local/regional artisans, students enhance their sensitivity and awareness towards the indigenous cultural heritage. For example, school authorities may invite local weavers, potters and different service providers so that students may have an intimate engagement with them. Families of the children may also be involved in a positive manner with the school to support learning of children. For effective and meaningful community participation it is recommended that periodic field trips/excursions are included to visit places like hospitals, post office, bus depots, railway stations, etc.

3. **SPACE**: It has been seen that in the traditional set up learning is very often confined to specific areas: whereas in AIL, it is recommended that the teacher needs to become more flexible while selecting and using learning spaces. Spaces/places should be such which provide children with an opportunity to explore, experiment, create and express themselves freely. For example, walls of buildings, staircases, school stage, school rooftops, field and garden areas etc. can be utilized for the same.

Note: While exploring spaces/places, special attention is to be paid to the inclusive needs of the children.

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**ICT-based Resources - Teachers and children can explore**

ICT resources like internet and computers to avail content for activities and exemplars. The audio-visual medium is beneficial as a source of reference for its better approachability. Films and short videos can also be projected through this for recreational and educational purposes. Educational repositories like National Repository for Open Educational Resources (NROER) can be accessed for AIL purposes.
2.5 **Class Room Management**

Class room is the space that becomes a fertile ground for learning if utilized and managed appropriately. Given below are some suggestions for effective classroom management:

- **Flexible seating arrangement** which provides space for activities with free movement of children and teachers. For better efficacy of AIL, it is recommended that the traditional seating arrangement (rows and columns) should be discouraged and arrangements such as sitting in U-shape, semi-circle, etc. should be encouraged to create space for activities and presentations.

- Teachers/facilitators should move across the classroom space while interacting with the children. This will help the teacher reach and facilitate every child in the classroom.

- AIL approach recommends children working in groups for active engagement and collective learning. At pre-primary
stage group sizes should be of 2, in standards 1 and 2 groups can be of 2-3 children at a time and in standards 3 to 5 groups can be of 4-5 children. By the upper-primary stage, children develop better group dynamics: therefore teachers can plan the grouping of children keeping in mind the need of the activity and not the number.

- For better results, keep changing the configuration of groups which will aid students in getting to know each other better, appreciate each other’s strengths and abilities and learn collaboratively for better comprehension of the subject, leading to enhanced socio-emotional skills.

- Encourage the process of inclusion while respecting all kinds of diversity. While forming groups, the multi-level and multi-grade nature of the classroom should also be kept in mind.

- Presentations by children should be encouraged to create an interactive learning environment.

- Every classroom should have display areas where children’s work can be displayed.

- A reading corner may be created where children have easy access to story books, comics, folklores, fables etc.

- The classroom can also have an innovative performing space/area which can be used for regular presentations and performances.

If practiced in true spirit, the above will not only help children to develop a sense of ownership of their classroom and school but can also transform them into learners for life.

2.6 DISPLAY OF ART WORKS

Every classroom should have a dedicated space for display of the children’s art works as it plays an important role in igniting the interest and eagerness to learn more. It also helps children to analyse
and appreciate their own works and also of others. Some suggestions for a meaningful display are as follows:

▶ The original unedited art work of all children should be displayed. Classroom walls, corridors etc. can be used as display areas.

▶ Every child should be appreciated for the process of creation and not for the product.

▶ The display should be periodic in nature i.e. displays should be updated on a weekly /monthly basis.

▶ Apart from the work of children, display area can also have the work of great artists which can help children understand the nuances of a particular art form and refine their own aesthetic sensibilities.
Art integration is the process of using multiple art forms to facilitate and improve content learning and socio-emotional outcomes. While doing arts students are proactively engaged in the creative inquiry process to construct and demonstrate understanding of the content. It is a cross-curricular pedagogical approach, where the child is given enough space and scope for free expression.

Art Integrated Learning (AIL), is a pedagogical tool, where art is used as a pathway to experiential learning in which the learner passes through.
through various stages of observation, imagination, exploration, experimentation, creation and application of knowledge.

Assessment through art integrated learning helps the facilitator to move away from the traditional paper-pencil or oral and recall method towards a continuous and comprehensive assessment method which can help assess both the learning of the subject as well as the socio-emotional development of the student. It helps to democratize the process of assessment, in which students are offered multiple modes to express their learning. Hence, it becomes an effective tool for both competencies-based learning and to assess the competency-based learning.

### 3.1 To Follow the AIL Based Assessment in True Spirit, the Facilitators Must Keep the Following Points in Mind

- **Non-judgmental:** The facilitator does not reflect his/her own biases or allows his/her attitude to pervade his/her interactions with the students.

- **Non-comparative:** The facilitator must assess students on their own merit and not compare one with another.

- **Non-competitive:** AIL based assessment should be a joyful activity, where every child gets an equal opportunity to participate and get acknowledged without competing with another.

- It must cater to the individual learning pattern and respect the pace of the student. Assessment in art integrated learning is an on-going cyclical process that begins with the identification of clear learning outcomes and can occur at various points within the teaching and learning process.

- **Non-threatening:** AIL based assessment is a non-threatening activity where children perform without any fear of failure or being judged.
AIL based assessment empowers the teacher/facilitator with a variety of tools and techniques of assessment.

AIL based assessment is a unique platform where both individual and group performances can be assessed for the competency-based learning outcomes.

The facilitators can assess both verbal and non-verbal expressions of the student. Verbal expressions are mainly ways of oral communication like speeches, presentations and announcements as well as casual conversations between friends; non-verbal expressions are visual cues which include gestures, facial expressions, body movement, touch, and any other way to communicate without speaking.

AIL based assessment allows the facilitator to assess the socio-emotional and life skills development of the student. These skills are creative-thinking, critical-thinking, empathy, coping with stress, coping with emotions, inter-personal relationships, effective communication skills, decision-making skills, self-awareness and problem-solving.

Puppetry as part of classroom learning—Demonstration Multipurpose School, RIE Bhopal
The facilitator can conduct the assessment even in the multi-grade settings (Teacher dealing with vertical age groups) which are prevalent in many of our schools.

An opportunity to the facilitators to have an inclusive and a fair practice of assessing students keeping in mind the cultural, socio-economical contexts, gender concerns and students with special needs.

3.2 **TOOLS AND TECHNIQUES FOR ART INTEGRATED LEARNING-BASED ASSESSMENT**

Art integrated learning assessment promotes task based performance and helps in assessing competency-based learning of the student. Suggested tools and techniques are:

- drawings and paintings done by students
- art activities which may include cutting, pasting, thumb printing, leaf rubbings, movement and rhythm etc.
- role play, dramatization, puppetry etc.
- worksheets and workbooks.
- observation records of field visits and excursions
- portfolios with samples of finished artwork; even unfinished artwork may be recorded and assessed
- descriptive and anecdotal reporting of the overall progress of a child’s cognitive, socio-emotional, and creative development should be maintained.
- facilitators can maintain personal notes to organise records of subject-specific learning progressions of students, their inclination towards different forms of arts, strengths and challenges. Special talents (giftedness) can also be identified and nurtured.
- periodic theme-based displays/exhibits in classrooms and corridors by students.
3.2 Art Integrated Learning — Guidelines

- project works done in groups (primary and upper primary classes).
- stories, poetry, letters, posters, and story-illustrations based on a theme.
- presentations and performances of the children.

This list given above is suggestive and the facilitator can create and use their own tools and techniques.

3.3 Do’s and Don’ts in Assessment

Do’s

- appreciate every child and recognize his/her efforts
- assess the process and not the product
- provide constructive feedback
- give qualitative and encouraging remarks
- give equal opportunity to all students including those with special needs
- respect the pace of the learner and be flexible with the timings to provide opportunity to those who are still in the process of completing their activity.
► ask open-ended questions that give them space for writing, talking, drawing and creating.
► display original, unedited art work of every child (Even if the work is incomplete).
► refer to classroom displays during the teaching-learning process
► compare the child’s progress to his/her own earlier performance and not with others.

**DON’TS**

► do not comment on the artistic quality of the representation
► do not compare artwork of one student with another
► do not arrive to the classroom with preconceived notions
Roles and Responsibilities

These guidelines have been written to familiarize various stakeholders with the AIL process and its implementation. This also informs them of their roles and responsibilities to ensure smooth and hassle-free implementation of this initiative. Suggestions for the different stakeholders are as follows:
4.1 **Roles and Responsibilities of the Heads of School (Hos)**

The Head of school has a crucial role in the implementation of this pedagogy. The school Principal shapes how the national, state and district policies can be unfolded in his/her school. The HoS will lead the planning, encourage implementation and conduct follow-ups and handholding of his/her team. The HoS needs to:

- hold a clear vision and develop the yearly goals and plan for AIL implementation in their schools
- orient teachers and parents for their readiness and clarity about the concept
- be flexible with teachers and encourage them to participate in capacity development of AIL
- acknowledge and appreciate the best practices of AIL classrooms in his/her school
- encourage flexible time tables for club/block period and Team Teaching
- lead the process of creating the annual school calendar which can be creatively used for AIL pedagogy
- organize monthly meetings for better follow-up and handholding of teachers
- mapping and mobilization of community resources with the help of students and teachers

4.2 **Roles and Responsibilities of the Teacher**

A successful AIL classroom is highly dependent on the teacher’s efforts to integrate arts with the subject teaching. In an AIL classroom, a teacher is expected to play the role of a mentor, guide and a facilitator of student’s who helps facilitate the learning process.
The teacher will:

- hold a clear vision and goals for his/her classroom in alignment with that of the school, state and nation.
- be flexible and co-operate with HoS to implement the vision
- design AIL activities individually as well as with the team
- keep experimenting and exploring diverse arts forms, methods and materials
- attend capacity building programmes for continuous professional growth
- follow Time table for clubbed periods and be a part of Team Teaching
- creatively use the annual school calendar including festivals, assemblies, Bal Sabha and special days for AIL pedagogy, e.g. Using Bal Sabha for lessons in Social Sciences on elections
- participate in mapping and in mobilizing community resources with the help of students and other teachers
4.3 ROLE OF ART TEACHERS IN AIL

Role of art teachers in AIL is that of facilitators. Art teachers must understand the use of AIL as a pedagogy of learning. They should be able to differentiate between “Art as a subject” and “Art as a tool of teaching and learning different subjects”.

- Art teachers, apart from teaching art education, should also participate in planning of AIL activities of different subjects and for the whole school.
- They must readily and happily be part of the team teaching.
Exploring new spaces and experimenting with material adds to the fun of learning
Girls Middle School Wanihama, Gulab Bagh, Srinagar, Jammu and Kashmir

Art Integrated Learning - Exemplars
### कला आधारित गतिविधि के लिए आवश्यक सामग्री

चार्ट पेपर, कैंवस, गोंद, रंग, अक्रोनस, गूंथी हुई मिडिंग, ब्रश आदि। (बच्चों को सामग्री साझा कर उपयोग के लिए प्रोत्साहित करें। स्थानीय सामग्री की खोज करने और उनके उपयोग के प्रति बच्चों को प्रेरित और संवेदनशील करने की जरूरत है।)

### अधिगम प्रतिफल

विविध उद्देश्यों के लिए अपनी भाषा अर्थवा/ और स्कूल की भाषा का इस्तेमाल करते हुए बातचीत करते हैं, जैसे जानकारी पाने के लिए प्रश्न पूछना, निजी अनुभवों को साझा करना, अपना तर्क देना आदि।

### प्रथम चरण

कक्षा की शुरुआत बच्चों के हालचाल एवं एक मनोरंजक गतिविधि के साथ आनंददायी माहौल में की जाएगी। बच्चे एक गोल घेरे में खड़े होंगे। हाव-भाव के साथ ताली बजाते हुए पहले एक गीत गाएँगे- 'खाएँगे जी खाएँगे, खूब जलेबी खाएँगे।' दो तीन बार इस पंक्ति को दोहराने के बाद गीत को गोल में एक-एक बच्चे से होते हुए आगे बढ़ाएँगे। सभी बच्चे सस्तर और हाव-भाव के साथ गाएँगे, जिस बच्चे की बारी आये वह अपनी पशंद की भिंडाई, फल, सब्जी आदि का नाम लेकर गीत को पूरा करेगा, जैसे किसी को केले पशंद हैं, किसी को खरबूज़े पशंद हैं तो वह अपनी बारी आने पर बोलेगा खूब केले खाएँगे या खूब खरबूज़े खाएँगे।

### ACTIVITY 5.1

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<tr>
<th>Primary Section</th>
<th>Hindi</th>
</tr>
</thead>
<tbody>
<tr>
<td>भाषा शिक्षण के उद्देश्य</td>
<td>बच्चों का मोरिक भाषा विकास</td>
</tr>
<tr>
<td>पाठ का नाम</td>
<td>पकौड़ी (रिमझिम-1)</td>
</tr>
<tr>
<td>प्रयोग में लाई गई कला</td>
<td>दृश्य एवं रोल प्ले (प्रदर्शन) कला</td>
</tr>
</tbody>
</table>

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कक्षा में स्थान प्रबंधन को ध्यान में रखते हुए बच्चों को बैठाएं। हालाँकि, बच्चे गोले, आवत या वर्ग के आकार की किसी ज्यादातर या किसी अन्य रोचक आकृति में बैठें तो आपस में बातचीत आसान होगा। अगर बच्चों से उनके पास देने के नियम पदार्थ पर बातचीत होगी। बातचीत में भाषा कोई बंधन नहीं होगा। बच्चे जिस भाषा में सहज महसूस करेंगे उसमें बातचीत की होगी। जिन बच्चों को पकवान, मिठाई, नमकीन, कोई पेय पदार्थ आदि पसंद है तो उसे यह जानने की कोशिश होगी वह क्यों पसंद है, कैसे बनता है, उसमें कौन-कौन सी चीज़ें पड़ती हैं आदि। एक ही पकवान अलग-अलग बच्चों के पर अलग-अलग तरीके से बनता होगा, बच्चों से बातचीत में इसे भी शामिल करने की जरूरत है। जिन मिठाइयों या पकवानों के बारे में बच्चे नहीं जानते हैं, उसके बारे में अपने साथी से सवाल करें, शिक्षक बीच-बीच में इसके लिए बच्चों को प्रेरित करते हों। इससे अधिकतम बच्चे अपना अनुभव साज़ा कर पाएंगे और सुन पाएंगे। सभी बच्चों को बातचीत में शामिल करना अविद्यालयी होगा। कुछ बच्चे शर्मित होंगे या कुछ कम बोलने वाले स्वभाव के होंगे, उन्हें विशेष प्रोत्साहन देते हुए बातचीत में शामिल किया जाएगा।

बस्तुतः: यह गतिविधि बच्चों के मौखिक भाषा विकास को ध्यान में रखकर की जाएगी। यह गतिविधि बच्चों के अंदर की डिज़ाइन को तोड़ते हुए उनमें आत्मविश्वास को बढ़ाएगी। इसका अर्थ बच्चों की सहभागिता को लेकर, शिक्षक से बातचीत या आपस में बातचीत पर सक्रियता रूप से पड़ता है। इसपर यह गतिविधियां से बच्चों की रुचि/ अरुचि की जानकारी भी होती है, जो सीखने की योजनाओं के निर्माण में सहायक होती है।

**दूसरा चरण**

पहले चरण में बच्चों से की गई बातचीत को ताजा करते हुए ‘पक्की’ कविता की बच्चों बच्चों से की जाएगी। पिछली कविता का सस्तर एकल गायन संहित होड़े, बड़े समूह, छोटे समूह आदि में किया जाएगा। जोड़े में एक बच्चा एक पंक्ति और दूसरा बच्चा दूसरी पंक्ति हाव-भाव के साथ गाएगा। इसी तरह छोटे समूह में एक समूह आधी कविता को गाएगा तो दूसरा समूह आधी कविता को गाएगा। इसके अतिरिक्त शिक्षक परिस्थितियों को देखते हुए अपने विचेक से रोचक बदलाव कर सकते हैं।

**तीसरा चरण**

यात्री या किसी वाद्ययंत्र की थाप के साथ बच्चे गोल घेरा में घुमेंगे। बच्चे के निर्देश के साथ बच्चे रूक जाएंगे। तेज बोलने पर तेजी से चलेंगे। और तेज कहने पर कुछ और तेजी से चलेंगे जबकि खूब तेज कहने पर और ज्वाडा तेज चलेंगे।

बच्चे के निर्देश के साथ बच्चे रूक जाएंगे। इसके बाद ‘पक्की’ कविता का गायन बच्चों द्वारा शुरू किया जाएगा। बीच-बीच में शिक्षक भी अपना स्वयं ठेंगा ताकि गायन की गति बनी रहेगी और तेज के साथ बच्चे धौड़ी ऊँची आवाज़ में गाना शुरू करेंगे। कुछ और तेज बोलने पर और तेज आवाज में
गाएँ। इसी तरह खुशी या दुखी दुखी होने पर, गाने की गति तेज और धीमी आदि होने पर गाने की गतिबिधि में कविता के गायन का आनंद बच्चे लेंगे।

चौथा चरण

यह सत्र बच्चों की प्रिय कला गतिबिधि ‘मिठी से कलाकृति निर्माण’ (कसे मोडेलिंग) को समर्पित है। बच्चों के चार समूह बनाए जाएं। चारों समूह के कार्य कुछ इसप्रकार बनें होंगे:-

समूह 1 - मिठी द्वारा सब्जियों की कलाकृति का निर्माण
समूह 2 - पकवानों की कलाकृति का निर्माण
समूह 3 - मिठाइयों की कलाकृति का निर्माण
समूह 4 - खाना खाने वाले पात्रों की कलाकृति का निर्माण

हर उम्र के बच्चों मिठी से खेलना पसंद करते हैं। इसके लिए चिकनी मिठी विद्यालय में तैयार की जा सकती है या समुदाय के कुल्हारों से प्राप्त की जा सकती है। अगर विद्यालय में मिठी तैयार करना हो तो कुप्पा सुनिश्चित कर लें कि इसमें कंकड़ या कोई अन्य अवांछित सामग्री आदि न हो। इसे गूँघे आदेश की तरह होना चाहिए।

पाँचवाँ चरण

चारों समूह अपनी-अपनी कलाकृतियों का प्रदर्शन समूहवार करें। सभी समूह बारी-बारी से अपनी कलाकृति के निर्माण, उपयोग, गुण आदि के बारे में बताएं। दूसरे समूह के बच्चों द्वारा पूछे गए प्रश्नों के जवाब दें। अंत में बच्चों की प्रस्तुति की सराहना एवं ताली की गड़गड़ाहट के साथ सत्र का समापन होगा।

आंकलन

पूरी शिक्षण प्रक्रिया में आंकलन सतत होता रहा। बोलने के क्रम में बच्चों के शब्द भंडार, शब्दों का चयन, अपनी बातों को परोसने का तरीका, जानकारी के लिए प्रश्न पूछते समय उनकी समझ आदि आंकलित होते रहे। बच्चों द्वारा सृजित कलाकृतियाँ उनके कल्पना, अनुमान, अनुपात, सृजन आदि की समझ, उपयोग और प्रस्तुति के क्रम में संवाद आदि आंकलन के बिना ही पूरी शिक्षण प्रक्रिया में अवलोकन के अतिरिक्त चेकलिस्ट, पोर्टफोलियो आदि आंकलन के बेहतर तरीके होंगे।

अन्य विषयों से जुड़ाव - कक्षा एक में भाषा और पर्यावरण अध्ययन अवधारणा और विषय-वस्तु के स्तर पर बिलाकुल तरीके हैं, अत: जुड़वां भी स्वाभाविक है।
**ACTIVITY 5.2**

<table>
<thead>
<tr>
<th>Subject</th>
<th>English</th>
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<tbody>
<tr>
<td>Standard</td>
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</tbody>
</table>
| Lesson    | Marigold Book 3
           | Unit II: Nina and the baby sparrows |
| Form of the art activity | Visual and Performing Art |

**TARGET LEARNING OUTCOME**

- Expresses orally her/his opinion/understanding about the story and characters in the story in English as well as in mother tongue.
- Uses meaningful short sentences in English orally and in writing a variety of nouns, pronouns, adjectives and prepositions in context compared to the previous class.

**TARGET LIFE SKILLS**

- Develops empathy and sensitivity towards immediate environment.
- Develops listening skills.

**MATERIAL REQUIRED**

- Paper, pencil, colouring material
- Space for moving around
DAY 1

STEP 1: ICE-BREAKER

Teacher asks the students to form two concentric circles [a smaller circle within a big one facing each other]. They are encouraged to make the circles in the least time possible. They are told that they will start moving as soon as they hear the teacher give a cue. [The cue can be a clap, whistle or a loud command]

PROCEDURE: The children standing in two circles will move in opposite directions. They stop the moment at the cue. The children facing each other from the two circles will make pair and can share an activity which they like most. They can share stories about places where they have been to or would like to visit with each other.

The game could continue for three-four rounds. Ensure that each child gets a chance to share his/her thoughts [If the children speak in their home language/mother tongue it should not be discouraged]. After the activity, the whole class including the teacher, may sit together and each child may share the favourite activities of any one friend they interacted with. Students can draw and colour them on a sheet of paper. After everyone has completed, their drawings are displayed on the display board. Children move around and try to find the drawing which matches with what their activity was [Two or more children may have the same activity and they should be allowed to pick up any one of drawings matching their descriptions].

Suggested Leading questions to connect with the chapter

1. How do you feel when you visit places you like?
2. If for some reason your visit is cancelled how do you feel?

STEP 2: ‘MY DEAR NINA’

The teacher announces that a little girl called ‘Nina’ has also come to talk to them and tell them why she did not go for a family function. The teacher fetches out a little stick puppet/transforms herself/modulates her voice to sound like a girl called ‘Nina’ (If a teacher is
not able to create puppets or sound like the make-believe girl called Nina, the teacher could say in a story telling mode about a little girl called Nina who is sad).

Nina greets the children and asks them whether they can guess why she did not go out with her parents. Many replies come in as the puppet interacts with various children and they are all acknowledged. The class ends for the day.

**Day 2**

**Step 3: ‘Nina and the Baby Sparrows’**

The teacher reminds the children about Nina, the little girl who came to their class the day before. She tells them that to find out Nina’s reason for not going out they will read the story ‘Nina and the baby sparrows’. The teacher can encourage children to read the story on their own first. After that the chapter will be read in a flow by the teacher using the correct pronunciations and expressions. After reading the story the group can brainstorm on the following questions asked by the teacher:

- How do you like Nina?
- What qualities do you think Nina had?
- Has anyone in the class shown such kindness to any animal or person?
- If so, when and how?
- What other qualities in a person which can make her/him a good human being?

Teacher can note down all the qualities told by children on the black board and maybe add the missing ones.

**Step 4: ‘Meet my friend’**

The teacher then asks children to sit in a circle and paint a face on their thumb. Every child can name their face. They have to introduce
the painted character, with a quality present in the person. The teacher is also a part of the group and begins the activity. She can begin by saying “Hello friends, my dear friend Savitri is an honest girl. She never cheats on any one” Another child could say: “Hello friends, my dear friend Raja is a punctual boy. He gives medicine to his grandfather at proper timings” This process will go on till every child gets a chance to speak. This can be used as an opportunity for assessment.

- Teacher can assess children’s ability to think of adjectives and to link them appropriately to the situation.
- If any student repeats an adjective, allow it. The children should be encouraged to think and relate it to different situations.

**STEP 5: PICTORIAL SEQUENCE**

The teacher can asks children to sit in groups and paint pictorial sequence of the story. Ask them to write few lines in their own words describing each scene: this description can be used by the teacher as an assessment to see whether the children have understood the story and got the sequence in the correct order. The group work could be displayed in the classroom.

- As an extension activity, children could be told to work in groups to add more scenes to take the story further
- The teacher could take this opportunity to let children talk about the other animals and their babies. Drawings could be made too

**EXTENSION ACTIVITY**

- The children can be asked to make a bird-bath and a feeding corner for the birds from waste material
- They can leave bread crumbs, grains for the feathered birds
- They can be encouraged to leave a bowl of water in a quiet corner of the school. The responsibility of looking after the bowl can be taken up turn wise
**Integration with the other subjects:** Teacher can link it to EVS by asking the following lead questions:

- How are birds different to human beings?
- Why are there fewer sparrows in the cities?
  
  Looking around, Class 3, Theme - Animals/Birds

- Chapter - Making pots
- Chapter 19 - Our friends, Animals

**Assessment tools suggested**

- Portfolio
- Customised performance indicator for group activities
- Self and peer assessment
1. Equal Parts of a unit (circle/ square/ rectangle)
2. Equal Parts of collection of objects
3. Identifies half, one fourth, and three fourths of a whole
4. Identifies symbol \( \frac{1}{2} \), \( \frac{1}{4} \), \( \frac{3}{4} \)
5. Representation of parts vs. whole as \( \frac{1}{2} \), \( \frac{1}{4} \), \( \frac{3}{4} \)
6. Explains meaning of \( \frac{1}{2} \), \( \frac{1}{4} \), \( \frac{3}{4} \)

This topic is of class 4 and 5. Generally it has been observed that children find fractions/ parts and whole a difficult topic. They find many such concepts challenging for them. Not only children find it tough, sometimes teachers face difficulties in delivering various abstract concepts of fractions. Misconceptions like - between \( \frac{1}{2} \) and \( \frac{1}{3} \), \( \frac{1}{3} \) should be bigger as ‘3’ is a bigger number than ‘2’; \( \frac{1}{2} + \frac{1}{2} = 2/4 \); how and why \( \frac{1}{2}= 2/4 \) etc. are prevalent. These misconceptions take root in the minds of children when the topic ‘parts and whole’ is dealt with mechanically. If children can visualize fractional numbers as parts of a whole, if they have an image of any fractional number in their mind based on experiences gained through concrete objects and links those experiences with this abstract concept, then their fear of mathematics may get converted into understanding and love for the topic.

Approaching the topic with art integration into it may help children develop clarity for the underlying concepts. Children love doing arts, and if the approach of teaching is art-based it becomes interesting and easy to grasp abstract concepts without any burden.
‘Parts and whole’ is dealt in two ways broadly- Area wise (area model) and set wise (set model).

- **Area model**: fractions/parts of areas of shapes (square, rectangle, circle and other shapes) Art activities like paper craft, drawing-painting involving areas like base help a child in increasing the understanding by visualizing the parts of a whole.

- **Set model**: fraction/parts of a collection of objects (set) like buying vegetables from a shop (part of a particular type of vegetable is bought) etc. Visual and performing art activities & icebreakers can provide such situations and scope for visualizing, observing and experiencing ‘parts and whole’.

Delivering concepts like parts and whole require a multitude of examples in both the types:— area and set model so as to provide a holistic idea of the application of the underlying concepts.

**Form of the art activity**: Visual and performing arts help in introducing these situations in an organic manner so that learning occurs naturally in a joyful manner.

### Target learning outcomes

- Identifies half, one-fourth, three-fourths of a whole in a given picture by paper folding and also in a collection of objects.
- Represents the fractions as half, one-fourth and three-fourths by using numbers/numerals.
- Shows the equivalence of a fraction with other fractions.

### Material required

- Old newspapers, magazines/calendars/used paper
- Scissors
- Glue (preferably locally available)

(Children should be asked to bring materials at least one day before the activity takes place)
**Step 1: The Circular World**

The teacher shall show a picture to children (picture contains all the figures made of circles only) and shall ask children to look at the picture and tell;

- What do you see in this picture? What attracts you towards figures in the picture?
- Do you find anything special and common in all the pictures given?
- How do you think the figures have been made?
- Would you like to try out a few of them?

Based on their replies the teacher welcomes all the observations with open heart/mind without giving any hints of being right or wrong for their observations.

It is important that children reply freely in the class and share their observations. Listening to children and welcoming all the observations so shared motivates them and make them express fearlessly (fear of being judged by the teacher). In such-free expression activities giving hints of appropriateness, a reply like nodding positively or negatively for a certain observation or feedbacks like right / wrong by the teacher, if they are avoided provides a healthy classroom environment which enables free and honest expression from children.

Now the teacher shares a situation with the children that, there exists a world where everything is circular. The teacher points to a blank display (made of 4 circular charts) and says this is the circular world and only circular things can be a part of the world. So, who wants to add a character to this world?

The children shall be asked to use the material (newspaper/calendar etc.) brought by them to create those figures. Children will be motivated to re-create the figures they saw in the picture given to them or to create new as per their choice. One can make any number
of figures as per his/her choice. In order to make such figures a child folds the circle in half, folds it again (makes it ‘aadhe ka aadha’) and uses the pieces to form a certain figure. These pieces are used in different creative ways and orientations which gives children an enriched hands-on experience of using these parts of a circle. This not only enhances their sense of creativity, imagination and aesthetic sense but also provides clarity and reinforces visuals of parts of a circle (which will help a teacher introducing their names as ‘aadha’/ ‘half’ or ‘aadhe ka aadha’/ ‘half of half’ once they are over with their art experience).

Now, all the children shall be divided into 4 groups and shall be asked to display their creations on the circular display board and create their own circular world. All the children shall be appreciated for their work done by them individually and in teams.

If a child is not able to complete his/her figures for any reason, he/she may also be motivated to complete it by looking at the finished work of other class fellows. Discussing the work of children also motivates them and instils a sense of confidence that their contribution is important and valuable to add meaning to the whole creation.

**STEP 2: HOME TASK**

A home assignment can be given to explore the idea: if there existed a rectangular world, what the characters would look like? They can try making figures using rectangle/square and its half and half of half etc.

Area model requires introduction of ‘parts and whole’ in variety of shapes like square, rectangle, circle and various other shapes a child come across in his daily life. Doing paper craft activities with these shapes helps in providing visuals for parts of that shape to a child, like how $\frac{1}{2}$ / $\frac{1}{3}$rd / $\frac{1}{4}$th of a circle or rectangle looks like and when combined together in different orientations and how these parts give interesting collage.
ART INTEGRATED LEARNING — GUIDELINES

TARGET LEARNING OUTCOMES

▶ Responds to different kind of instructions, requests and directions in varied contexts.
▶ Identifies details, characters, main idea and sequence of ideas and events in textual/non textual material.
▶ Infers the meaning of unfamiliar words by reading them in context.
▶ Writes short descriptions.

TARGET LIFE SKILLS

Team work, appreciation and aesthetic sensibility.

The teacher can read the suggestive exemplar and make prior arrangements for the smooth conduct of Art Integrated sessions.

MATERIAL REQUIRED

Used Paper, Old Newspapers, Old calendars, Sticks, Glue
(Children will be asked to bring the materials a day before the activity)

DAY 1

STEP 1: ‘SKY WALK’

Students are asked to stand anywhere in the activity area. Teacher plays a slow instrumental music in the background. Students are asked to walk according to the rhythm. After a while the teacher can ask students to stop.
Following instructions can be given:

Choose any one from the group and look at each other. Now move freely in the play area looking at the person whom you have chosen. You must not change the focus. Concentrate on him/her. Move in accordance with the movement of your friend (Mirroring). Teacher allows the children to experience the movements for a brief period and later can ask the pair to pick one among them as a kite and other person as a string which regulates the kite. Students should choose their roles quickly. Give adequate time to experience.

**STEP 2:**

Teacher asks the students to sit together and reflect on their experience as a kite and a string that regulates the kite. Students may later engage in kite-making using materials they brought.

Let’s read the poem: Teacher may read out the poem while they engage in preparing. Once they complete making kites they can read the poem silently and try to infer its meaning.

This activity can be given as home assignment, depending on time available.

**DAY 2**

**STEP 3: MY LITTLE KITE**

Teacher takes the children to the open space outside the class room. Students are asked to fly their kites in the open area. They collectively fly their kites in the playground. (The kites may or may not fly; students can try different methods to fly it and teacher can encourage them to come up with different solutions)

**OR**

Teacher asks the students to stand in a big circle. Students are asked to hold their hands at the back. Teacher calls a volunteer from the group and makes him/her stand in the centre of the circle.
Following the **instructions** can be given:

The one standing in the centre is a kite. The kite has broken its string and is sad: it needs to find the string to fly again. All the ones standing in the circle are the wind and the wind takes the string away from the sight of the kite. The ones standing in the circle can pass the string from one person to other silently and tactfully without getting the attention of the kite standing in the centre. If the person standing in the centre finds the string, the one who holds the string will be the next kite.

Students in the circle can sing the song:

*Little kite, little kite,*
*Where’s the string little kite*
*Little kite little kite*
*Can you find the string?*

The activity can be continued for 4 to 5 rounds.

**STEP 4: ‘IF I AM THE KITE’**

Teacher asks the students to sit silently in a comfortable position. Teacher can discuss about the poem and discuss the main features of it with the students.

Teacher: “Imagine that you are the kites in the sky. What would you see from above when you look down? Draw the visual that comes to your mind and write a description”. The visual presentations can be displayed on the picture wall.
**ACTIVITY 5.5**

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<th>Upper primary section</th>
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<tr>
<td><strong>Topic</strong></td>
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<tr>
<td><strong>Sub-topic</strong></td>
<td>Human Respiratory System</td>
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<tr>
<td><strong>Form of Art Activity</strong></td>
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</tbody>
</table>

**CONCEPT: HOW DO WE BREATHE?**

When we inhale air, it passes through our nostrils into the nasal cavity. From the nasal cavity, the air reaches our lungs through our windpipe. During inhalation, ribs move up and outwards and the diaphragm moves down. This movement increases space in our chest cavity and air pushes into the lungs. The lungs get filled with air. When we exhale, ribs move down and inwards, while diaphragm moves up to its former position. This reduces the size of the chest cavity and air is pushed out of the lungs.

- Explains the role of the cilia and mucus in the respiratory tract.
- Explains the path of air moving through the respiratory tract.

**TARGET LEARNING OUTCOMES**

- Explains the shape/structure of alveoli and lungs.
- Compares the processes of inhalation and exhalation.
- Explains the relationship between the structure and function of alveoli.
Describe the effect of exercise on breathing.
Explains how lungs are affected by polluted air or smoking.
Draws labelled diagram of human respiratory system.
Appreciates the significance of oxygen in our daily lives.
Differentiate between respiratory organs of different animals.

TARGET LIFE SKILLS
Self-awareness, problem solving, creative and critical thinking, collaborative work, communication etc.

MATERIAL REQUIRED
Chart Paper, scissors, Gum, Colours, Crayons, Rangoli colours, sutli/woollen thread etc. (Encourage and sensitize students to use locally available materials)

STEP 1: DEEP BREATHING
(SIMPLE PRANAYAMA TO INHALE AND EXHALE)

OBJECTIVE: With the help of this exercise, children experience the rhythm of breathing.

LOCATION: The activity may be performed in an open space or classroom.

STEP 2: DISCUSSION
Discussion may be initiated for facilitating students in visualizing various parts of the respiratory system- (Some exemplary questions are mentioned below)

- Why do we breathe? (Probing question to direct the discussion to the need of oxygen in our body)
- What could be the reason of coughing sometimes while eating food [Probing questions to direct towards a discussion of trachea (wind pipe) and oesophagus (food pipe)]?
- How does the air moves after entering the nostril?
Which organs are involved in the breathing process?
What do you think may be the colour of your lungs?

Students can now be encouraged (in small groups) to draw the air passage inside a human body (the respiratory system). Encourage them to show their drawings. There can be a short discussion on what first and what next in the air track. Appreciate the efforts made by students to explore.

Teacher now can either draw the respiratory system on classroom blackboard or show a model/chart/animation of respiratory system followed with a discussion leading to the path of air inside human body, thus summarising the content.

Students in their group can now modify their diagram while comparing with the correct one shown to them. Students can be asked to pin up their diagrams on the classroom display board. The activity can end with a round of applause towards all.

**STEP 3: EXPERIENCING THE PASSAGE OF AIR INSIDE HUMAN RESPIRATORY SYSTEM**

Students can be taken to the open space/playground or corridor and draw 10-15 feet long human respiratory system with chalk/charcoal or with a stick on the ground. Colours/rangoli colours may be used to highlight different parts of the system.

The students will be involved in making flags/placards or labels of different parts of the respiratory system (such as nostrils, pharynx, larynx, trachea, bronchi, bronchioles, alveoli, lungs and diaphragm). These placards will be stuck on a stick and will be displayed/fixed on the respective organ of the respiratory system drawn on the ground. Also, every student will make one placard each with “AIR” written on it.

**EXTENSION ACTIVITY**

Teacher can assist students in preparing a dance movement activity depicting functions of human respiratory system session on the diagram they prepared—this can also be an assembly activity.
**Suggestions for the Role Play:** When teacher says “breathe in”, students wearing placard with 'AIR' written on it enter the nostril and slowly walk through the air passage. It may be suggested that after reaching the end of the wind pipe, half of the students walk into one bronchi path, other half into the other bronchi. Further each group goes into the smaller branches—the bronchioles and down into the alveoli. In the next step, students enter narrowly constricted air bags (alveoli): and the alveoli expands. Lung human chains will expand (move outwards) for the air to enter. At the same time, the diaphragm human chain will contract to increase the space around alveoli and lungs (It should be ensured that the creative movement of the student should be in a well-coordinated manner. This collective body movement results into a rhythmic dance. Here, teacher can play a piece of music or create beats for adding more joy to it. On listening to the word “Exhalation” the same set of students will start moving out, tracing the path Alveoli—bronchioles—bronchi—trachea—larynx—pharynx—nostril and at last out of the body.

**Inter-disciplinary Approach**

**English Language:** Interview with Mr. Lungs (Respiratory Family)
Role Play: Conversation between lungs of an individual residing in air polluted area and that in fresh air area.

**Mathematics:** Survey and analysis of data of number of smokers in the family, friend circle and neighbourhood. Students can make a pie chart of the same. They need to be made aware of the ill effects of the smoking on human lungs and what it can lead the smokers to.

**Extended Learning**
Teacher can ask children to explore and ponder about what happens to the air that goes into the alveoli. Does it go to the other parts of the body? How can the air go to the other parts of the body? Children could be shown the animation of respiratory system, Wherein the structure and function of alveoli, lungs, wind pipe, and diaphragm could be further discussed.
### ACTIVITY 5.6

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<td>Lesson</td>
<td>‘Visualizing Solid Shapes’</td>
</tr>
<tr>
<td>Type of Art Activities</td>
<td>Visual and Performing Arts</td>
</tr>
</tbody>
</table>

#### MATERIAL REQUIRED

Two paper puppet characters, Newspaper/used paper, Pencil, Ruler, Scissors, glue/local variants of glue, Broomsticks, clay/dough/rice flour/local variants.

#### TARGET LEARNING OUTCOMES

- Can identify various 3D shapes
- Differentiate between 2D and 3D shapes
- Represents 3D shape on a plane surface such as sheet of paper, black board etc.
- Understanding the meaning of the terms faces, vertices and edges.
- Identify the components of 3D shapes (faces, vertices and edges)
- Prepares the nets of platonic solids (Regular Polyhedrons)
- Builds castle using thryee dimentional shapes.
- Visualises various 3D shapes and draw their top, side and front views.
- Differentiates between Prisms and Pyramids.
DAY 1

STEP 1: STORY NARRATION

The teacher can narrate a tale to the students. The resolution of the story requires the students to build up a place to stay with some mathematical specification.

NARRATION: A little girl is happily playing beside the beach in the sand. She is making little houses in the sand. Suddenly a huge demon wave emerges with evil laughter “Hahaha!” The demon wave comes over the little girl’s head and says, “Little girl you must come and make a house for me under the sea, down in the sea bed!” The girl is afraid and replies, “Oh no! I cannot come with you into the sea”. The demon wave thinks for a moment and then says, “Hmmmm… Okay then. I will let you go if you make a beautiful place to stay made up of 3-shapes!”

The teacher asks the students if they can remember making play homes/tents/forts or any other places to live? (Teacher listen and appreciates responses). Teacher can also inquire about the objects they used for making it and what shapes were identified.

Group Activity (groups of 2-3 students): The facilitator will ask the students to discuss in groups and write down answers.

► What are 3- D shapes?
► How are they different from 2-D shapes?
► What are some examples of 3-D shapes?
► Where can you find them in their surroundings? (Students will identify and come up with examples which will be confirmed by the facilitator)
► Can you name the components of a 3-D shape?
► Try to make free hand drawings of 3-D shapes, identify the number of faces, vertices and edges they have and record it.

(Recap of the concept of 3-D shapes)
**STEP 2: DRAWING A STRUCTURE**  
**(OBJECTIVE: REPRESENTING 3-D SHAPES ON A 2-D SURFACE):**

The facilitator will state the objective and ask the students to draw a structure (monument/place of worship/fort/place of residence etc.) using 3-D shapes. Students are free to use any number of shapes any number of times for drawing the structure. The facilitator should make sure that each part of the drawings should be a 3-D shape.

**DAY 2**

**STEP 3: CREATING A STRUCTURE USING 3-D SHAPES**  
**(GROUP ACTIVITY)**

Ask students to build a structure using the 3-D shapes created. She/he will divide the class in groups of 5-6 each depending upon the class strength. Give 20 minutes to build. Model structure can be assembled on the floor.

**INTER-DISCIPLINARY APPROACH: ENGLISH CHAPTER – TSUNAMI**

The teacher can connect the demon wave to the Tsunami or other natural disasters to the story and link it with existing water crises-water pollution and water related environmental problems. She may pose the following questions:

- Do you think there is really a demon in the ocean?
- Do you think the demon in the ocean can get angry?
- What solutions can you suggest to save our oceans from the existing demons?
- What role can you play as students?

**SOCIAL SCIENCE**

The teacher will initiate a discussion on why some architectural constructions survive natural disasters while others do not. The discussion leads to critical thinking which brings out the relevance of traditional architectural techniques and local resources.
5.7 Some Important Methods and Techniques used in Art Integrated Learning:

- **Brainstorming:** It is a practical exercise to stimulate creativity in a group, and is a very useful training technique. The aim of brainstorming is to collect as many ideas as possible on a specific topic within a given time, in an uninhibited way. Once you have presented the topic to the group, invite them to present ideas, comments, phrases or words connected to it. Write all the responses on a blackboard or flip chart as they come up, without comments or questions. The process of brainstorming demands discipline, in order to overcome the temptation to pass judgment on ideas as soon as they are revealed.

- **Ice Breakers:**
  This is an activity that is conducted for building a favourable environment for joyful learning. These activities are useful for initiating art based experiences with ease as they help in creating interactive
atmosphere in the classroom. Ice-breakers should be flexible in nature and should be designed and used as per need.

**GROUP ACTIVITY**: This is a very common method which can be combined with other methods in any activity. Discussions in small groups are useful for learning from the experiences of other members of the group; group work helps in overcoming hesitation, enhancing life-skills and helps in socio-emotional development of every learner. There are number of ways of making groups but it is best if the teacher keeps changing the method of dividing students into groups so as to maintain their level of interest.

**PRESENTATION**: This is a technique which can be effectively used by both the teacher and the taught. Teachers can use this method to impart information, knowledge or ideas to the learners. This technique is quite effective in a situation where a lot of information is required to be passed on in a relatively...
short time. There are many types of presentations, ranging from simply speaking and PowerPoint presentations to more interactive presentation methods. In AIL activity plan, the presentations are suggested to be made by the students after completion of their group activities. This helps them share their observations/views/findings with all others. Teachers can make use of it effectively for peer teaching-learning.

**ROLE PLAYS:** Role play or simulation-based games imitate reality by assigning roles to the participants and giving them a situation to act out. Each person in a role play needs to have a clear idea of the role she/he has been assigned, and the objectives of the role play should be well-defined. The aim of a role play is to make attitudes, situations and experiences come to life in a dramatic and enjoyable way. In art integrated learning it is utilised as process drama.
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7. Nobori, Mariko. ‘How the arts unlock the door to learning’, *Edutopia, George Lucas Foundation for Education, August 2012*


**SUGGESTED READINGS**

11. Training Package for Art Integration for Primary Teachers, Vol.1 and 2, NCERT, 2015