ABSTRACT:
In present paper attempt is made to investigate impact of Art Integrated Learning on students academic achievement. Factors considered for the students learning are students’ improvement in Chemistry, Critical thinking and creative thinking. Total 80 students participated in the study from fourth grade, fifth grade and ninth grade. Data was collected through pre-assessment survey, post assessment survey, students’ journal, observation sheet, students’ self-assessment. Result of the study reveals that Art Integrated Learning students learning in the class-room is improved. Student shows positive attitude towards Art Integrated Learning. It has significantly increased critical thinking skills and Art Integrated Learning help students to display their knowledge and creativity.

KEYWORDS: Art Integrated Learning, engagement, critical thinking, creative response.

INTRODUCTION
“There is lack of meditation and creativity everywhere, especially in schools. The arts are missing from our lives and we are going to way to violence” - Yehyai Menuhin.

Art Integrated Learning is teaching strategies in which the art are integrated with non-arts curriculum to deepen the students understanding in both. Incorporating arts into the curriculum may provide students with a deeper understanding and desire to learn. The art may create culture that value critical reflection and innovative approach to teaching-learning while fostering a strong sense of community among students, staff and faculty.

Art Integrated Learning is important to many school teachers as it is critical factor in fostering and increasing student’s engagement in learning process, critical thinking and even creative response. Art Integrated Learning may create a culture to foster, a strong sense of community among all stake holders.

The students’ engagement can be defined as degree of attention, curiosity, interest, optimism and passion that students show when learning with high level of motivation, stimulation and their seen progress in class-rooms. Art Integrated Learning increase student’s engagement, critical thinking and academic achievement. Art Integrated Learning encourages students to practice high level learning by creating presentations and creative projects in core subjects at school.

Students acknowledge effectiveness of the active and creative learning class-room environment and appreciate pedagogical change that enhances learning experience.

Art Integrated Learning provides students with an enriched and valuable learning experience. Art Integrated Learning catalyses student’s imagination and critical thinking about class-room objectives. Art Integrated Learning provides an opportunity to student’s
to experience inquiry and critically analyze the art work while challenging their own work. Presentation by students also provides chance to demonstrate their abilities to analyze, synthesis and evaluate. Art Integrated Learning makes student to see better, to envision, persisting to be playful, learn from mistakes, and make critical judgment. Art Integrated Learning makes the student creative.

**METHODOLOGY:**

**Research Design:**

The quantitative and qualitative techniques are used to collect data. The data is collected for the period of six weeks. The classes selected for the study are grade 4, grade 5 and grade 9. Total 80 students participated in this study. Art Integrated Learning lessons are implemented in all three classes the social studies/environmental science lessons are incorporated through Art Integrated Learning (visual, literary, music and dance). Data collected through survey (before and after study) journal reflection, observation sheet, students’ self-assessment.

Teaching lesson through Art Integrated Learning incorporates visual arts (drawing, painting, photography, literary arts (stories and poetry) and music and dance.

Prior to start the lesson, students took an Art Integrated Learning survey. It consists of five questions, one open ended, two multiple choice and two rating style scale questions. The objective of the survey was to gain insight about students’ attitude towards Art Integrated Learning in class-rooms, students’ perception about their ability to think critically and their engagement in lesson. We also conducted survey at the end of eighth week. On comparing two surveys, we were able to evaluate the progress marks.

After completing each lesson, students reflected their learning by responding to series of journal prompts. Students were asked to think over objective of lesson, activity assigned with lesson, and their learning from the lesson. It makes the student to think
1) What is the feeling towards Art Integrated Learning?
2) How Art Integrated Learning improve their learning?
3) What are the concepts they are still struggling to understand?

Students’ responses are recorded in note book collected and reviewed at the end of each lesson.

Teachers observation was essential component of our data collection and we used throughout our action research. Tally sheet system is applied to track student’s behaviour through our observation. Time and date of observation is recorded in tally sheet along with title of lesson/unit/chapter. Student’s observation is recorded once in a week for eight weeks.

There are three sessions of observation in tally sheet. Section ‘A’ is “critical thinking, skills recorded are valuating, inferring and explaining. Section 'B' is “creative response” it consists of students showcasing their unique style. Section ‘C’ is student’s engagement it includes active participation of students in lesson by staying on task, collaborating and responding peers and teachers.

The final tool for data collection was self-assessment and includes students, to evaluate effectiveness of lesson on engagement, critical thinking and creativity. Student’s reflection was also reflected in written journal, but self assessment as concrete evaluation. The self assessment included short answer questions. Responses to question were analyzed by using rating scale.

**Data Analysis:**

The objective of the study is to investigate effects of Art Integrated Learning on students learning. The measurement of students learning by analyzing tool which focused on the engagement of students, critical thinking and creative response. Tools applied for data collection was pre and post assessment survey, journal reflection, and observation tally sheet and students self-assessment. The pre-assessment survey was first tool for data collection and assessment. It is used to get knowledge about student’s engagement, student’s attitude towards Art Integrated Learning and perception of critical thinking abilities. Students were guided to give one response per question. The students were asked to comment on the group activities and stories also.
The result of the survey are analyzed by questions, grade level and combined into graph to study the comparison among different grades.

**Question One:** what help them to continue to engaged while learning?

![Figure 1](image1.png)

*Figure 1. Pre-test results to the question, “what helps you to stay involved in what you are learning?”*

As per Fig-1. At minimum distractions students of primary classes engage in learning at maximum extent. In secondary classes’ student engage is of great extent during hands on activities.

Students are asked about how they felt about Art Integrated Learning. Range of five point Likert scale is given. It is clear that students’ positive attitude towards Art Integrated Learning was highly motivated. (Fig.-2)

![Figure 2](image2.png)

*Figure 2. Pre-test survey results for the question “how do you feel about the Art Integrating learning into your learning. One stands for strongly disagree, two: disagree, three: neutral, four: agree, and five: strongly agree.”*

Question three addressed different term of Art Integrated Learning that best to spark creativity. It includes music, dance, drama, literature (short stories, poem), visual arts (sculptures, picture, paintings) (Fig.3) or they have the option of selecting none. This information is significant in planning lesson.
Figure 3. Pre-test results for the question, which of the following forms of Art Integrating learning activities, you feel best sparks your creativity? Students were given the four choices and were to choose one.

Students where asked whether Art Integrated Learning improves their creativity, with option yes or no. Most of the students believe that Art Integrated Learning in classroom improve their creativity. It has significant positive impact on their learning.

Figure 4. Pre-test results for the question, on a scale of 1-10, how would you rate your critical thinking skills? One represents poor and ten represents excellent.

Last question is pre-assessment survey to rate their critical thinking skills. Most of the students believe that they possess critical thinking skills and have scope for growth.

Figure 5. Students reflection in their journal about how the Art Integrated Learning makes them feel.
Fig 5: on commencement to implement Art Integrated Learning we had student’s journal at conclusion of every lesson. Two lesson covered by integrating visual arts, two by literary arts, two by music and dance – total six lessons. Students were asked to respond on how they feel during Art Integrated Learning process. Fig. 5 shows that among all three grade students fell creative and inquisitive also at learning the concept and content. Art Integrated Learning provides students positive learning experience.

**Figure 6.** Students responses on “how Arts Integrated learning into lesson has helped them.”

Result of second journal prompt was shown in fig-6. Result of the study reveals that grade nine students are paying more attention and have much concentration as compared to grade 4 and grade 5 students. Art Integrated Learning lesson provide better understanding and also emphasis to overcome weakness during lesson.

**Figure 7.** Students reflection on “what they still are struggling with after an arts integrated Learning lesson was taught. The responses were put together in like categories.”

Result in Fig.7 shows students struggle with content of lesson, most of the students’ struggles with history lesson. This observation is not in time with previous journal prompt.

We also took observation notes using a tally sheet and noted the behaviour of the three lowest achieving students in each grade. This observation noted for all art integrated lesson. We collected the data at the beginning, middle and end of each case. The criteria involve our tally sheet, how many times a student exhibited critical thinking (by using evaluation, inferring and explanation) creative response and student engagement (active participation, collaboration, response to peers and teacher).
Figure 8. Three students of fourth grade were observed based off of a three category observational tally sheet.

Fig. 8 shows grade-4 students observation in engagement in Art Integrated Learning lesson. Result of the study shows that the students actively participating in the activities of Art Integrated Learning by staying of task, collaborating and giving response to peer and teachers, students facing difficulties in using critical thinking skills (by evaluating, inferring or explaining).

Figure 9. Three students of fifth grade were observed based off of a three category observational tally sheet

Fig 9. Shows grade five students, expressing their creativity. Students also struggle with their critical thinking skills.

Figure 10. Three students of ninth grade were observed based off of a three category observational tally sheet
Result in fig. 10 shows grade nine students actively engaged in Art Integrated Learning lesson as compared to grade 4, and grade 5 students. Art Integrated Learning lesson activities involve students in participation but students struggle with sowing knowledge in unique way. Result of study shows that Art Integrated Learning enhances student’s academic achievement through engagement.

This instrument, used in personal study is students-self-assessment given at the end of each lesson of Art Integrated Learning. Rating scale is used to evaluate the performance and engagement in Art Integrated Learning lesson.

![Figure 11](image1)

**Figure 11.** Students were questioned what they sensed was the most engaging about the lesson in a self-assessment that was given afterward each lesson. Results were compiled into like categories.

The most of the students opinion is that (Fig 11) Art Integrated Learning into curriculum will allow students to actively participate into the lesson, use their creative skills and be joyful during hands on activity.

![Figure 12](image2)

**Figure 12.** Students of Fourth grade were requested a series of questions given on a self-assessment, which was founded on a rating scale of 1-5, one signifies strongly disagree and 5 signifies strongly agree.

As per the result in Fig-12 most of the students of grade-4 felt that Art Integrated Learning lesson in EVS provides an opportunity to use their creativity in various ways. Students actively participate throughout the lesson. Students face difficulties in asking questions and collaborating with their peers.
Result of grade 5 students on responding to question given on self-assessment (Fig- 13) shows that most of the students rated with 3 and above which fall from neutral to strongly agree. Result shows that majority of the students focused during the lesson.

![Figure 14](image)

**Figure 14.** Students of Nine grade were requested a series of questions given on a self-assessment, which was founded on a rating scale of 1-5, one signifies strongly disagree and 5 signifies strongly agree.

Fig. 14 shows result of grade nine students on self-assessment, most of the students have positive opinion towards Art Integrated Learning lesson. Most the students felt that Art Integrated Learning provides an opportunity to use their creativity can focus on lesson and make connection with real life and lesson as compared to students of grade 4 and grade 5.

At the end of the research, we conducted post-assessment survey. The questions in the pre and post assessment survey were same. We compared item wise result.

![Figure 15](image)

**Figure 15.** Post-test results to the question what supports you to stay involved in what you are learning. The results were from three classrooms and compiled into the same like categories used from the pre-test.

Fig. 15 shows result of first question dealing with student’s engagement. Students of grade 4 and grade 5 response indicates that participation have increased in hands on activities and visual arts. Very Few students are, distracted grade 9 students show shift in participating in visual arts and drama.
Figure 16. Post-test results for the question how do you feel about Art Integrating Learning into your learning. One stands for strongly disagree, two: disagree, three: neutral, four: agree, and five: strongly agree.

Fig. 16 shows result of second question asked to vote Art Integrated Learning into learning. Result of the study reveals that there is significant increase in joyfulness, happiness, motivation and stimulation in Art Integrated Learning lesson in all grade students.

Fig. 17 shows the result of question: style of art test to spark their creativity. Visual art helps in testing Art Integrated Learning activity to spark the creativity for grade 5 and grade 9 students. Most of the students of grade 4 believe that Art Integrated Learning do not improve their creativity.

Fig. 18 shows the student’s response to rate their ability to think critically. Overall score of each grade students have increased slightly in post-survey. Art Integrated Learning increased student’s ability to think critically.
CONCLUSION:

1) Result of the study shows that Art Integrated Learning lesson in EVS/Social Studies has positive impact on students learning through engagement, critical thinking and creative response. In Art Integrated Learning students foster their creativity and improve innovation, thinking skills. Students’ felt motivated in lesson by raising questions, collaborating with peers and develop skills to prepare to face challenges of 21st Century. This result of the study is in line with Cooper (2011).

2) Result of the study reveals that students feel enthusiastic, confident and improve their ability to think critically. Students focused during Art Integrated Learning lesson.

3) Most of the students feel that Art Integrated Learning provides an opportunity to express the creativity in many ways. Art Integrated Learning provides positive discipline among students. Drama, visual arts and dance are the best Art Integrated Learning activities to spark their creativity. Art Integrated Learning catalyzed conceptual understanding.

4) Students in grade nine is better in making connection of lesson with real life as compared to students of grade-4 and grade-5.

5) Focusing on students participation, creative response and critical thinking, teachers are committed to provide positive learning experience through Art Integrated Learning, so that students will meaningfully learn through opportunities, but few students will struggle through Art Integrated Learning.

6) Art Integrated Learning focuses on students’ participation, critical thinking and creative responses. Art Integrated Learning emphasize positively on self-confidence of students. Art Integrated Learning develops positive discipline among students. Student’s attention and concentration also increases. Art Integrated Learning fosters higher level of student’s participation in learning. Students also creatively use their knowledge. The application of evaluation, inference and explanation provides stimulus to enhance critical thinking skills.

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