

News Paper as Initiative to STEM Education in Making Career for Students in 21st Century at Vidyalaya Level

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Abstract: *Students and their parents are in a notion that once they get a degree with some knowledge of computer technology, they will sustain in today's job market. But looking at the demand of job skills, the students are not able to survive as their dreams of package are too high than their capability. So in order to stay competitive in job quit their education needs a supplement of STEM i.e. Science, Technology, Engineering & MATHS Education. But STEM today does not have a sense of terminology, but it is something more than that. Even though a student is in a commerce stream, humanities or art faculty, the student needs to develop some skills like Geometrical Skills Learning skills, Literacy Skills & Life Skills, from very early age only so that they can adjust themselves in today's changing job market. Since Read Newspaper are not reused effectively, the another has prepared some, age wise/class wise STEM box and implemented on the students.*

Keywords: STEM Education, Geometrical Skill, Learning Skill, Literacy Skill, Life Skill

1. Introduction

This work in clubbing two aspects: Preparing students for 21st century job, using low cost, read, newspaper, to initiate STEM Education irrespective of streams of teaching-learning. To develop some basic skills required to adjust in today's challenging job, the kids are required to enter in a stream of innovative way of teaching learning process. For this the teacher has to design method of delivering the content in a different manner, so that the syllabus becomes more and more interesting. Naturally activity based learning will enhance the creativity in the child. Different skills will start creeping unknowingly.

Now what is STEM education all about? It is an abbreviation of Science, Technology, Engineering & Mathematics. It is an applied approach. STEM is neither a system of education nor a method of teaching. It is also not a syllabus to be taught. It is the application of what we have learned into day to day life. STEM is the blended learning environment and showing students how the scientific method can be applied to everyday life. It is bearing by living, for living and of living.

It focuses on the development of the attitude of a child towards social adjustment. But taking it in a broad sense, the activities designed with not only help students to develop an attitude in all streams of education, as the skills developed are interconnected.

HYPOTHESIS; The creeping of the Geometrical Skill, Learning Skill, Literacy Skill and Life Skills will help students to adjust themselves for the 21st Century jobs in every sector by development of problem solving skill.

This era is of developing entrepreneur, start up India moment, for which students need to incorporate many inter-

related skills, which will make them successful in various fields of self employment or jobs.

This also addresses the inadequate number of teachers skilled to incorporate the technique.

A) Primary School

The STEM education focuses on developing awareness in and around.

B) Middle School

The level of activities increase but awareness, and different occupational related assignments creep in so that under represented population can understand their capability to career section.

C) High School

At this level bridging in-school and out-of-school opportunities is emphasized. Application of subjects they are studying and challenges a head for the students to apply their knowledge and skill in moving towards Self employment or innovative practice according to necessities in an around.

Basically Smart Class is not everyone's cup of tea. So some low cost activities with news paper, have been designed keeping in mind different level of skill developed.

2. Methodology

Despite a having best brains in India the exam focused education model has limitations related to innovation, problem solving and creativity Have undergone through the level of understanding of students of different age groups.

- Since every class has students of different background, environment, ability, their syllabus was also taken up, to that the activities designed can go parallel with the teaching learning process. This approach is experimental and computational complexity blended learning's.

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- Some class wise age wise activities were designed with read out newspapers and implemented on students

Primary Level

Activity-1 Growing Seeds

Planting of plants in a moist newspaper paper base, with natural compost from animal waste & observing them grow-environment awareness progress.

- **Materials:-** Clear plastic containers with a lid. News Paper, Cotton ball, glue spray, bottle with water seeds.
- **Method:-** Fold a news paper in half and placed 3 dots of glue (one for each type of seed) a couple inches from the bottom of the paper. Then glue a seed (or two) on each one of the glue dots to prevent the seeds from falling to the bottom of the containers
- After allowing the glue to dry a little, placed the paper in the plastic containers. Then added moistened cotton balls to help hold the news paper towel in place. Then snapped on the lid, labelled the seeds and the planting date.
- A few days later, the first seed sprouted. The green beans, peas and corn sprouted first. Followed by pumpkin and carrots.
- The excitement of students were regarding the growth rate, colour of roots, shape of roots and observing small black dots on pea seeds.

Activity-2

Preparing Of Flip Card

News paper made hard using fevicol and dried cloth pins, silver foil or actual coins.(shown in annexure)

How to Play

- Have your students can't at the values of the coins on each clip card and place a clothes pin on the correct value at the bottom of the news paper card.
- It may help in performing addition. Encourage to count the largest can first, than the smaller ones.

Activity-3 (Shown In Annexure)

PIZZA- a month watering food item for today's kids.

Learning- Concept of Fraction

Skill Developed:- Computation

Make news paper hard by applying fevicol and dry it. Show different portion of pizza pasted on it and ask student to clip it. Student can create that our pizza trap and create their our fraction.

Skill- Understanding

Middle School

Activity-4: Geometrical Figures

Making geometrical figures with artistic and attractive tool, using news papers, colours and slits of coloured papers.

Ecological Activity:- Activity-5

Skill: Develops Cognitive Abilities but also shapes concrete thinking into abstract.(shown in annexure)

- Roll some pieces of news paper thick and long and tie it with a thread and on the branches of plants.
- Wrap the outside surface with same sticky food semiliquid like jaguar liquid and roll the newspaper stick on same seeds, then having it on branches of trees, birds can feed on them.

Geometrical Activities

Skill: Visual, Descriptive, Drawing, Logical, Applied Skills Developed.

Activity

News paper sphere, triangle, square, rectangle with news paper rolls.

High School

Activity-6

- (a) Making article with news paper like paper bag & decorate it.
- (b) Figures from news paper rolls like wall clock, peacock, photo frame, and combination of different geometrical figures.

Skill from making:- Concept of point, line, plane, parallel, perpendicular, their properties that relate to measurement and problem solving

Student Gain

Skill from Art

- Sense of community and connection with their peers.
- Motor skills, decision making, visual learning, cultural awareness, critical thinking and innovation.

Application

- Similarities and difference away objects application to real life problems like volume of tank in cubic cm, carpet area in sq. meter.
- Can design product to projects that require SPATIAL AWARENESS.
- Can handle WEB DESIGNING.

3. Findings

- For preparing students for 21st Century job, designed activities with, read, news papers and incorporated it in classes.
- The classes were divided into 3 levels primary, middle and secondary.
- Students while being involved with the activities during learning were found to develop skills like.
 - a) Coordination
 - b) Communication
 - c) Leadership
 - d) Creative Imagination
 - e) (e) Involve in gathering information from different sources.
 - f) (f) Sharing ideas.
 - g) (g) Flexible behavior and even
 - h) (h) Initiative by those students, who were inactive in class.

4. Discussion

Though STEM Education was taken as a base but it was found that the activities designed were effective methods of delivering teaching rearing proves in class students took interest and their school bags contained rolls of news paper sticks, which they prepared from home only a some students prepared outline of maps with the sticks, some prepare pen with seeds and kept the plant pot with sapling grain from newspaper pen seed in the class. This creativity really surprised me.

Students Organizational Skill Came into limelight when they started doing multi tasking i.e. introduced the use of news paper in making imaginary projects in different subjects. While doing so, their peer co-ordination, leadership, imitiveness i.e. leadership skill came up. students life skill was highlighted when in swacchta mission, they started preparing news paper tiffin bags, to absorb oil & made a campaign for polythene free vidyalaya campus. Students are seen to build teams with other class and section students to learn from each other.

5. Conclusions

Using my usage of news paper as developing multiple skill away students of different classes, so that they can be competent in job sector, it was found that: skill development follows 3 steps of development, what so ever be the method or technology.

Recognize → Describe → Apply Logic.

In this competitive field students should be aware consumers, responsible citizens and proficient member of working force. For this they should have basic skills, which help them to lead, a successful life by making space comfortably and skillfully around away to dignify his presence in any circumstances.

Thus I was able to observe a behavior change in my students in respect of their competency in:

Learning skills [Critical flanking, certainty, communication and collaboration]

- (i) Literary skills [can overcome mis concepts, understand facts, can use media and technology with given instructions, use of gadgets]

Activity-2: Preparing A. Clip Card



- (ii) Geometrical Skills [Concept of direction, movement, location, designing]
- (iii) Life skills [Flexibility, leadership, social skills]

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References

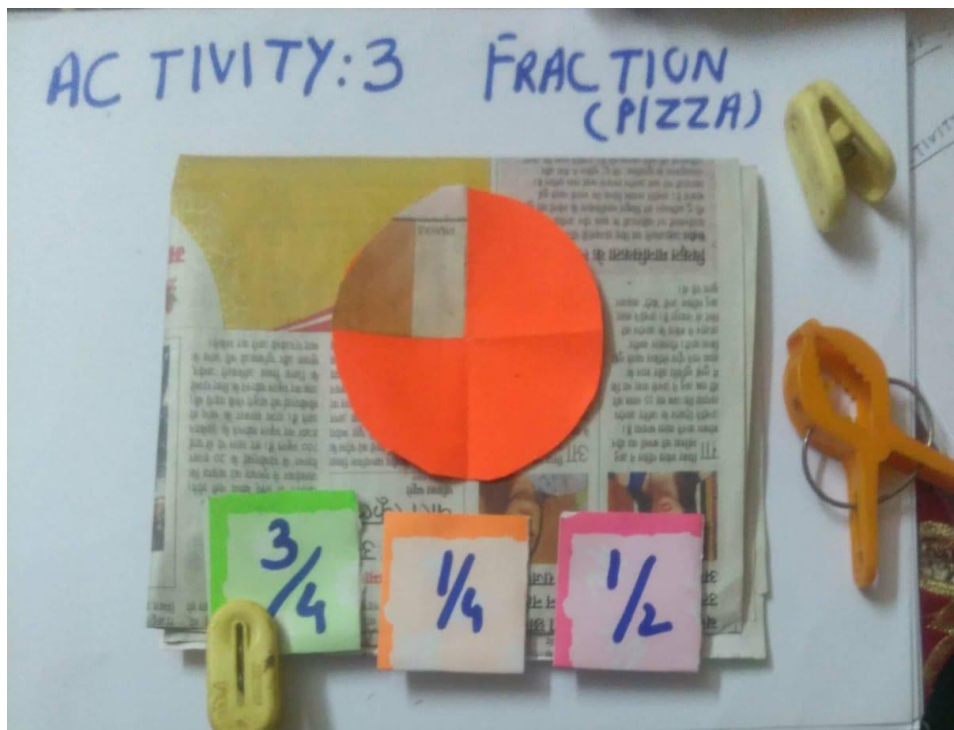
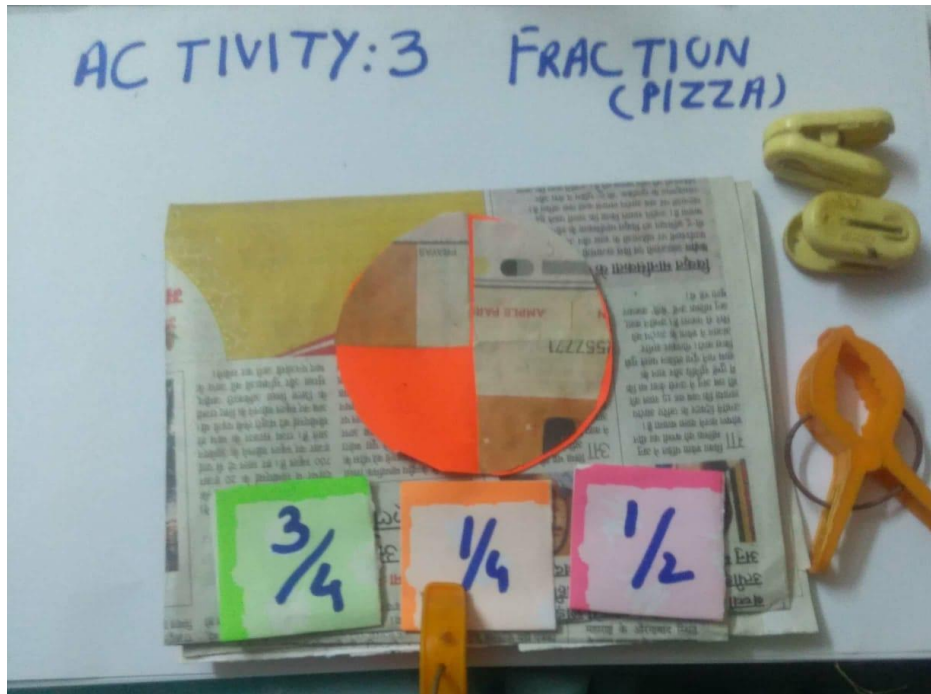
- [1] J. Dindyal, The Mahtama Mathematics Enthusiast G, 73-83 (2007), Google Scholar
- [2] Published on line, 05 Dec. 2017.
- [3] Boarding of student geometry skills reverred from spatial intelligence. Nova Riasuti a) Mardiyama (b) and Ikrar Pramudya
- [4] <http://chld.development.info.com/leaving/spatial.shtultin k>
- [5] <http://iuef12.blogspot.com/2018/10learning outcomes of-stem-education. html.?m=>

Annexure

Activity Growing Seed



Activity 3: Pizza



Activity 4: Geometrical Figures



Activity-5: Birds Food



Activity 6: Paper Bags, wall clock etc.



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