



# PATTOM THANUPILLAI MEMORIAL COLLEGE OF EDUCATION

Maruthoorkonam, Kottukal P.O., Balaramapuram, Thiruvananthapuram, Kerala - 695501

Phone : 0471-2267420

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**Documentary evidence in support of the claim for Lesson plan /activity plan/activity report to substantiate the use of ICT by students in various learning situations**

**2.3.4:**

**LESSON PLAN /ACTIVITY  
PLAN/ACTIVITY REPORT**



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## Lesson plan /activity plan/activity report

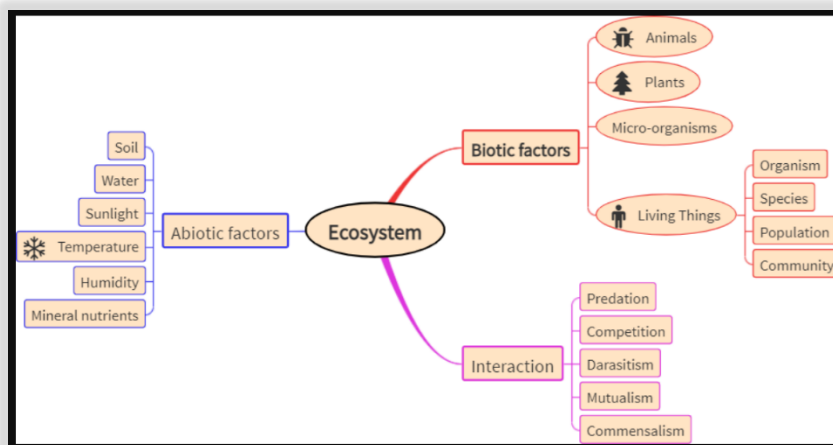
### 1. Understanding Theory Courses:

For understanding theory courses, Digital Texts were designed by student teachers in the form of padlet, in which they included text, videos and images on a relevant topic facilitated the students to share their ideas with others. A sample padlet created by the students on the topic 'Managing food waste' is given below:

**Food Management Lesson Plan: Managing Food Waste**  
A comprehensive lesson plan for grades 8 and 9 on reducing and managing food waste

- Learning Objectives:**
  - Understand Food Waste:** Students will be able to define food waste and identify its sources in their daily lives.
  - Analyze Impact:** Students will be able to explain the environmental, economic, and social impacts of food waste.
  - Develop Strategies:** Students will be able to create and implement strategies to reduce food waste at home and in school.
  - Calculate Waste:** Students will be able to measure and calculate the amount of food waste they generate.
- Instructional Activities:**
  - Essential Question:** THE BIG FOOD WASTERS. Includes infographics showing that 40% of food is wasted and 30.8% of food is lost.
- Assessment:**
  - Food Waste Quiz:** Students take a short quiz to assess their understanding of food waste concepts and reduction strategies.
  - Group Presentation:** In groups, students create and deliver presentations on innovative food waste reduction strategies. Peers provide feedback using a rubric.
  - Reflection Journal:** Students write daily reflections on their personal food waste habits and efforts to reduce waste.
  - Waste Reduction Plan:** Students develop a detailed plan.
- Closure:**
  - Class Discussion:** Facilitate a class discussion on the most surprising things learned about food waste and the most impactful strategies to reduce it.
  - Exit Ticket:** Students complete an exit ticket answering: '1. One thing I learned today, 2. One way I'll reduce food waste, 3. One question I still have'
  - Commitment Wall:** Students write personal commitments to reduce food waste on virtual sticky notes and add them to a shared Padlet board.
- Homework:**
  - Food Waste Diary:** Students keep a food waste diary for a week, recording all food they throw away and why. They'll analyze their findings in the next class.
  - Recipe Creation:** Students create an original recipe that uses common leftover ingredients or parts of food often discarded. They'll share recipes on Padlet.
  - Community Impact Project:** Students research local food banks or composting facilities and write a short report on how these organizations help manage food waste.

The students also constructed concept maps to give a diagrammatic overview of key ideas associated with a particular topic that indicates how the ideas relate to each other. This activity helped the students brainstorm and generate new ideas, allowed them to communicate ideas, thoughts and information more clearly, helped to integrate new concepts with older concepts, and enabled them to gain enhanced knowledge of the topic and evaluate the information. A sample digital concept map created by the students on the topic 'Ecosystem' is shown below:



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## 2. Practice Teaching:

During practice teaching, the student teachers integrate ICT in content transaction to make the class more interesting to the students. Since active engagement is a key part of any lesson plan, whether students are working independently or collaboratively, technology engages students as it is interactive. Children get fascinated with technology and it encourages and motivates them to learn in the classroom. A sample ICT integrated lesson plan developed by students for effective classroom instruction is shown below:

LESSON PLAN - 30 (ICT BASED MODEL)	
Name of teacher: Chandana P.F.	School: PTMMS, Maruthoorakonam
Subject: Chemistry	Standard: 2A
Unit: Properties of Matter	Strength: 26/28
Lesson: Distillation	Date: 24/7/2024
	Duration: 45 minutes
<u>Curricular Statement</u> : Through observation, discussion, and experiments, pupil will learn the concept of distillation.	
<u>Content Analysis</u> Terms: Distillation, Condenser, volatile, boiling point, acetone, fractional distillation, fractionating column, ethanol, methanol. Facts: - Distillation involves evaporation and condensation. - Distillation can be classified into two types, simple distillation and fractional distillation. - When a mixture is heated, the component with the lowest boiling point evaporates first.	



*[Signature]*  
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**Concept :-** Distillation is the process of separating the components of a mixture when one of its components is volatile and the others do not evaporate under the same condition.  
- Fractional distillation can be used to separate the miscible components of a liquid mixture having only a small difference in their boiling points.

## Learning Outcomes

**Remembering:** Pupil will be able to recall the concept of distillation.

**Understanding:** Pupil will understand the concept of distillation.

**Applying:** Pupil will be able to apply the knowledge of distillation in real life.

**Analysing:** Pupil will be able to distinguish between distillation and fractional distillation.

**Evaluating:** Pupil will be able to evaluate the significance of distillation.

**Creating:** Pupil will be able to illustrate distillation.

**Pre-requisite:** Pupil should know the concept of, vaporisation, condensation, and boiling point.

## Classroom Interaction

Good morning, students!  
All good?

Teacher says that today we are going to learn with the help of ICT presentation.



Teacher opens the PPT.

A question is asked in the introduction.

HOW WILL YOU  
SEPARATE WATER AND  
SALT WATER FROM  
SALT SOLUTION?

## Pupil Response

Good morning teacher.  
Yes.

By evaporation,  
Distillation  
(mixed response)




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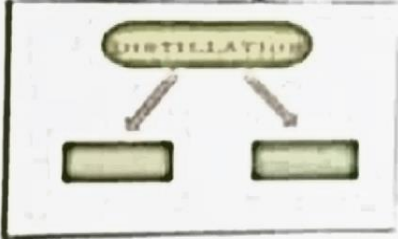
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Teacher shows another slide.



Do you know distillation are of two types? What are they?




Teacher shows the next slide containing the process of simple distillation. Observe and try to understand the process on your own.

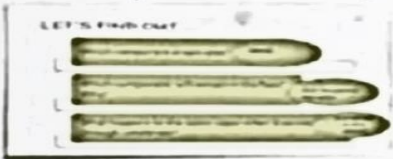
Observe.

confused.

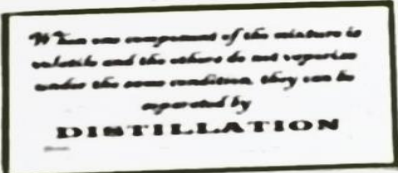
Observe.



Then some questions are given.



Then a definition of distillation is shown and students are asked to read it aloud, and a video of distillation is shown.



When one component of the mixture is volatile and the others do not vaporize under the same conditions, they can be separated by **DISTILLATION**.

Observe.

Water  
Salt. Water vaporizes  
Condenses to form  
water.

Reads and observes.



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The student teachers also give activity work in groups while scaffolding students . Sample group activity work sheets are given below:

## Group 1:

**Directions:** You will be reading an article individually, completing some questions. Then you will discuss the article and your responses with your group. You will create a Google Slide that I have shared with you with the information from the questions and share the answers with the class.

1. Read the following article quietly.  
<http://theplate.nationalgeographic.com/2016/04/20/we-all-waste-food-heres-how-you-can-stop/>
2. Answer the following questions and be prepared to share with your group.

## Questions:

- 1.What is the main idea of this article?
- 2.What are 2 details that support this being the main idea?
- 3.How will the information help get rid of or reduce the problem of food waste?
- 4.What is the most interesting thing you read in this article? Why?

## Google Slide Rubric:

Main Idea ( _____ )	_____/5
2 Supporting Details ( _____ )	_____/5
Question 3 Answered ( _____ )	_____/5
Most Interesting Fact ( _____ )	_____/5
1 Visuals/ Colorful/Creative ( _____ )	_____/5
Oral Presentation ( _____ )	_____/5
Total	_____/30



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## Group 2:

**Directions:** You will be reading an article individually, completing some questions. Then you will discuss the article and your responses with your group. You will create a Google Slide that I have shared with you with the information from the questions and share the answers with the class.

1. Read the following article quietly.  
<http://www.npr.org/sections/thesalt/2015/09/16/440825159/its-time-to-get-serious-about-reducing-food-waste-feds-say>
2. Answer the following questions and be prepared to share with your group.

## Questions:

1. What is the main idea of this article?
2. What are 2 details that support this being the main idea?
3. How will the information help get rid of or reduce the problem of food waste?
4. What is the most interesting thing you read in this article? Why?

## Google Slide Rubric:

Main Idea ( _____ )	____/5
2 Supporting Details ( _____ )	____/5
Question 3 Answered ( _____ )	____/5
Most Interesting Fact ( _____ )	____/5
1 Visuals/ Colorful/Creative ( _____ )	____/5
Oral Presentation ( _____ )	____/5
Total	____/30



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## REPURPOSE-REUSE-RECYCLE FOOD SCRAPS

In your small group, you will research how to use food scraps (no feeding pets or composting) rather than waste them. Divide up the list so each person has four (4) food scraps to investigate.

### Scraps include:

- peels/ends of onions, carrots, celery, potatoes
- leftover boiled potatoes/mashed potatoes
- leftover cooked vegetables
- broccoli ends/stems
- chicken carcass
- ham bone
- sour milk
- ripe banana
- soft apple
- bread heels/ends/stale pieces
- leftover coffee from the day
- bacon grease

Create a Google Slide Presentation to share your findings. Each presentation should include:

- Title Slide with all group members names & an appropriate image
- One slide per food scrap which includes...
  - the name of the scrap,
  - a way to reuse with source/website link (hyperlink)
  - a photos (before & after)
- Concluding slide(s): Each person individually responds to this:
  - Name 3 of these suggestions you already practice in your own home.
  - Name 2 suggestions you don't practice, but would attempt to try.
  - Name 1 that you honestly would NEVER attempt and why.

Submit finished project via Google Classroom



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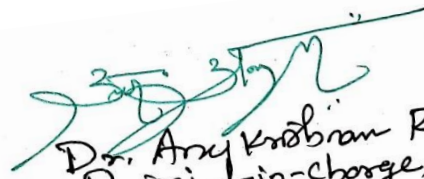
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### 3. Internship:

During School Internship, the student teachers update a weekly report of school experiences including curricular and co-curricular and extension activities in blog. Sample blog page links of student teachers are given below and some blog links are provided in any other relevant information in the same criteria.

1. <https://akhil7510.blogspot.com>
2. <https://alabdull.blogspot.com>
3. <https://aparnasukumar.blogspot.com>
4. <https://archangel1997.blogspot.com>
5. <https://abhiramism.blogspot.com>
6. <https://akhilt333.blogspot.com>
7. <https://aug281999.blogspot.com>
8. <https://fathima2001.blogspot.com>
9. <https://mahi2197blogspot.com>
10. <https://sarathsdharan2324.blogspot.com/?m=1>
11. <https://sidharthkapilavasthu.blogspot.com>
12. <https://divyagopan21.blogspot.com/2024/07/semester-4-teaching-phase-ii-part-2.html>
13. <https://chandanabed.blogspot.com/>
14. <https://afiyaf.blogspot.com>
15. <https://maryajeeshar.blogspot.com>
16. <https://Shayehzaz.blogspot.com>
17. <https://akhilasuresh27.blogspot.com>



  
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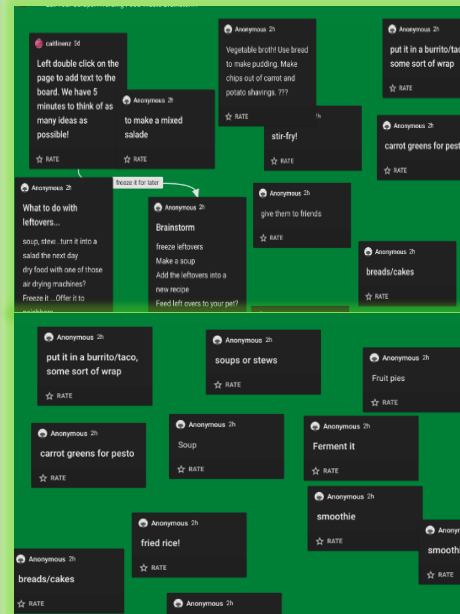
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## 4. Out of Classroom Activities:

Awareness/ conscientization programmes with ICT integration were conducted by the student teachers in the school/community during practice-teaching on various socially significant and challenging themes, and records were maintained. Glimpses of the conscientization programmes with the use of ICT during Internship by student teachers is shown below:



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## 5. Biomechanical and Kinesiological Activities:

Yoga sessions and areobics sessions are organised in the college for the student teachers, which comprise a set of spiritual, physical, and mental practices that help to channelize their body and its functioning in a better way. These sessions incorporate meditation, breathing exercises, and stretches to allow stress reduction, relaxation, and rejuvenation. Snaps of the yoga practice session are shown below, with Shanti Mantra played in the background to create a calm and peaceful atmosphere. Also, the lyrics of Shanti Mantra is displayed as PowerPoint presentation along with the demonstration.



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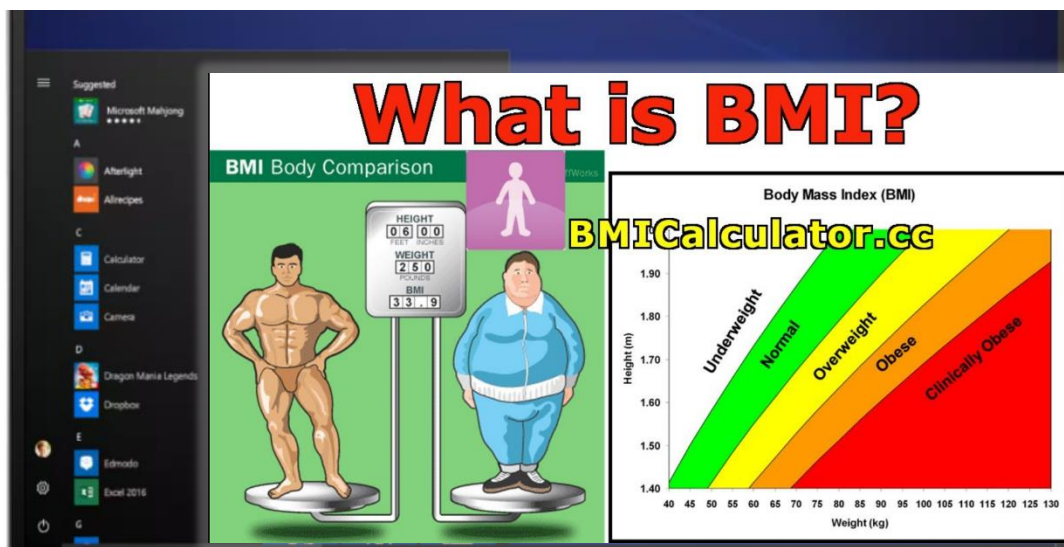
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## 6. Field Sports:

For equipping the student teachers in field spots in an efficient manner, besides sports practice sessions, theoretical sessions are organised to keep them updated about the benefits of sports and the positive experiences brought about by sports in a person's life. Besides this, the various types of sports equipment and accessories are introduced and presented to the students with the help of PowerPoints and animations.



*Online video class for facilitating the importance of Body mass Index*



*Online video demonstration for Throw ball Practice*

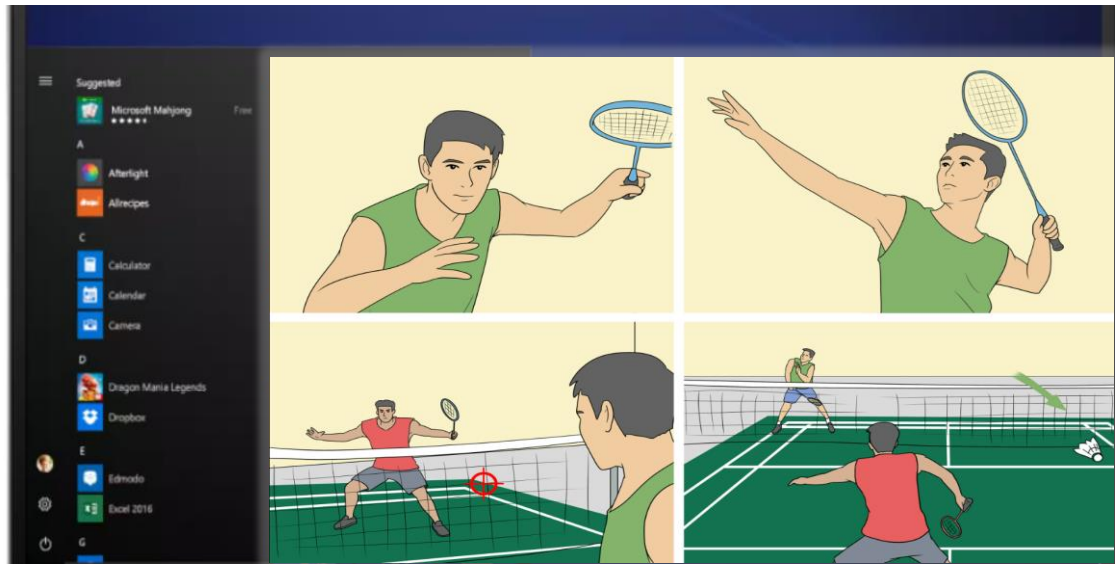


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*Online video demonstration for Badminton Practice*



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