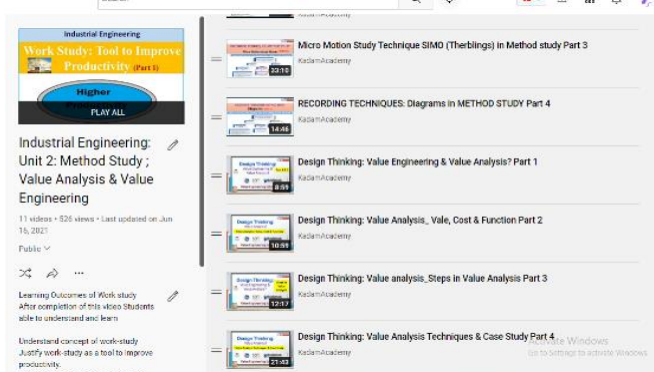


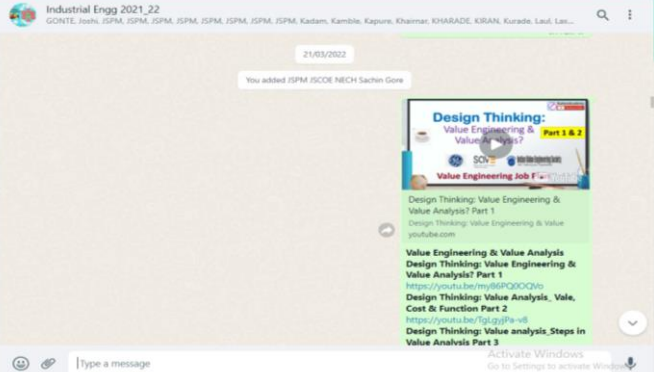
DEPARTMENT OF MECHANICAL ENGINEERING

Teaching Learning Innovative Report

| | |
|----------------------------------|---|
| Name of Method | : Flip Classroom Activity; BE Mech IE (Elective-3) Course_Sem 2_ March_2021_22 |
| Description | <ul style="list-style-type: none"> • Flip class room activity: in this activity YouTube video link of my channel shared to students through IE course WhatsApp group. • Instruction given to them to watch, write notes. • Instructions given to present / explain what you learned from video with your thought process in the classroom. <p>Value Engineering & Value Analysis</p> <ul style="list-style-type: none"> • Design Thinking: Value Engineering & Value Analysis? Part 1 https://youtu.be/my86PQ0OQVo • Design Thinking: Value Analysis_ Vale, Cost & Function Part 2 https://youtu.be/TgLgyjPa-v8 • Design Thinking: Value analysis Steps in Value Analysis Part 3 https://youtu.be/JC48oFFEOQI |
| Suggested/Developed By | : Dr. Prakash Kadam |
| Reproduced By | : Dr. Prakash Kadam |
| Implemented From | w.e.f. 21st March 2022 |
| Outcome | Students ability to analyze learning material, write on paper & Presentation & communication skill, Leadership Skill, Knowledge improved. |
| Innovative Technique Used | TPS, Role Play, Four Board Method, Flip Classroom , Peer Learning, Game Pedagogy, Extempore, Jig Saw |

Evidences







JAYAWANT SHIKSHAN PRASARAK MANDAL'S

Jayawantrao Sawant College of Engineering

(Approved by AICTE, New Delhi, Govt of Maharashtra and Affiliated to University of Pune)

Id.No. : PU/PN/Engg./199/(2004)

S. No.58, Handewadi Road, Hadapsar, Pune - 411028

Ph. : 8484897374

Telefax : 020-26970880

Email : principal@jspmjscoe.edu.in

Website : www.jspmjscoe.edu.in



Prof. Dr. T.J. Sawant
D.E.E., B.E.(Electrical), MISTE, Ph.D
FOUNDER SECRETARY

Dr. Rajendra D. Kanphade
M.E. Ph.D. (Electronics Engg.)
LMISTE, FIETE, SMIEEE
Principal

Name: Pavan S. Patil
Roll No: 4354 Sub: IE
Design Thinking - Date: 2/3/22

Value Engineering & Value Analysis:-

These two terms are as synonymous but difference betn them is

- value analysis is applied to existing product with a view to improve its value. It is analysis after birth of product thus it is remedial procedure.
- value Engineering is applied to product at design stage. thus it is preventive process.
- value analysis:- value analysis originated from 11th world war due to shortage of essential material.
- Lawrence D miles was 1st to develop with scientific approach & technique and name it. Saved \$200 million over 17 years.
- value Analysis is one of the major techniques of cost reduction and control without reduction in quality, performance & appearance, reliability.

When to apply - VA:-

- 1) Company's products are loosing in the market and there is decline in sales.
- 2) - If - are priced higher than the competitors.
- 3) New design of products being undertaken.

Value Engineering:- In field of value investigation dividing into four types:-

- 1) Use value
- 2) Esteem value
- 3) Cost value
- 4) Exchange value.

1) Use value:- It is a measure of properties, quality and features which make the product accomplish a use or service.

2) Esteem value:- properties which makes the ownership of product or object with very desirable.

3) Cost value:- It is measure of sum of all costs incurred in producing product.

$\text{cost value} = \text{raw-material} + \text{labour cost} + \text{tool cost} + \text{overhead expended to produce the product.}$

4) Exchange value:- properties that makes the object or product possible of being traded for other items.

$\text{Value} = \frac{\text{Function}}{\text{Value cost}}$

1) Value can be increased by

- 1) when we reduce cost.
- 2) when we improve Function.
- 3) Both the cond.

2022/3/21 11:48

Vicky Nannawade - 4366
IE - 2/3/2022

Value Engineering & Value Analysis.

Value Analysis:-
It is applied to the existing product with a view to improve its value. It is analysis after birth of product. Remedial procedure.

Value Engineering:-
It is applied to the product at the design stage and thus it is early stage preventive process.

Value Analysis:-
Improve the product with lower cost.

Value Engineering:-
It is a design thinking & function oriented and stakeholder - inclusive approach to innovation and problem solving that can drive the improvement of your system.

Value Analysis:-
After 1st world war due to shortage of essential material this is originated. Lawrence D miles - 1st - saved \$200 million over 17 years. - team Dr. E. Co. (USA)

without damaging
with low cost \rightarrow quality
 \rightarrow reliability
 \rightarrow Performance
 \rightarrow Appearance.



Dr. Prakash Kadam]

Developed By

[Dr. P.A. Patil]

HOD, Mech. Engg, Department