



Co-funded by the  
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# Activities Issues

(all in English)





in Communications and People Skills  
Development for Engineering  
Leaders Subject (4 students)



Curriculum Development  
of Master's Degree Program in

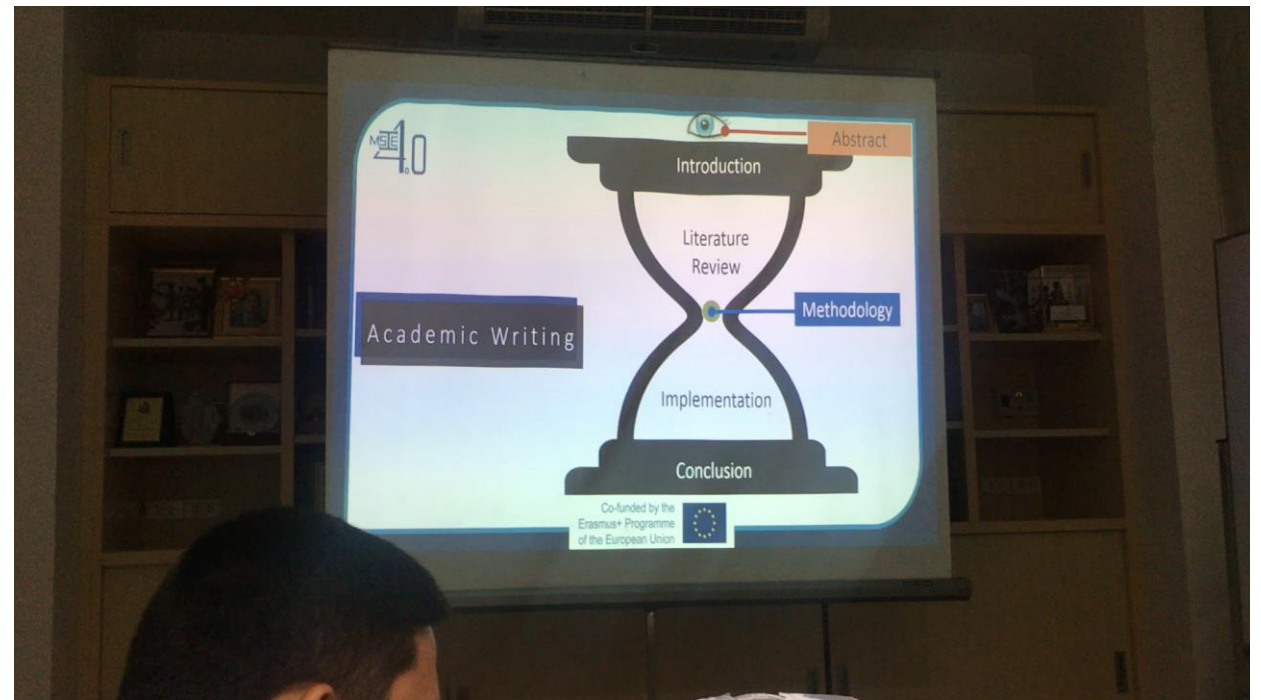
Industrial Engineering for Thailand Sustainable Smart Industry

# LOVE Model

 <b>V-Visiting</b> (passive immersion)	 <b>E-Experimenting</b> (active immersion)
<ol style="list-style-type: none"><li>1. Field classes, trips and excursions</li><li>2. Conference</li><li>3. Virtual reality</li></ol>	<ol style="list-style-type: none"><li>1. Project-based learning (PjBL)</li><li>2. Laboratory classes</li><li>3. Virtual laboratory</li></ol>
 <b>O-Observing</b> (passive absorption)	 <b>L-Learning</b> (active absorption)
<ol style="list-style-type: none"><li>1. Lecture</li><li>2. Guided conversation</li><li>3. Integrated or interdisciplinary teaching</li><li>4. Showing video material</li><li>5. Seminars conducted in classes</li><li>6. Live lecture from a remote place</li></ol>	<ol style="list-style-type: none"><li>1. Discussion</li><li>2. Demonstration with exercising</li><li>3. Class debate</li><li>4. Small groups debate</li><li>5. Simulation</li><li>6. Problem-based learning (PrBL)</li><li>7. Programmed teaching</li><li>8. Workshop</li><li>9. Brainstorming</li><li>10. Case study</li><li>11. Online interactive learning</li><li>12. Game-based learning</li><li>13. Guided practical exercises</li><li>13. Role play</li><li>14. Assignments</li><li>15. Individual presentation</li></ol>

# L-Learning

- Explain and written (technical and non technical)
- Guided practical exercises
- Team working in comp. env.





# L-Learning



- Works Shop (Written & Oral communications)
- Case study
- Individual Presentation



## Works Shop & Oral Communications



# O-Observing



[https://www.ted.com/talks/julian treasure how to speak so that people want to listen](https://www.ted.com/talks/julian_treasure_how_to_speak_so_that_people_want_to_listen)

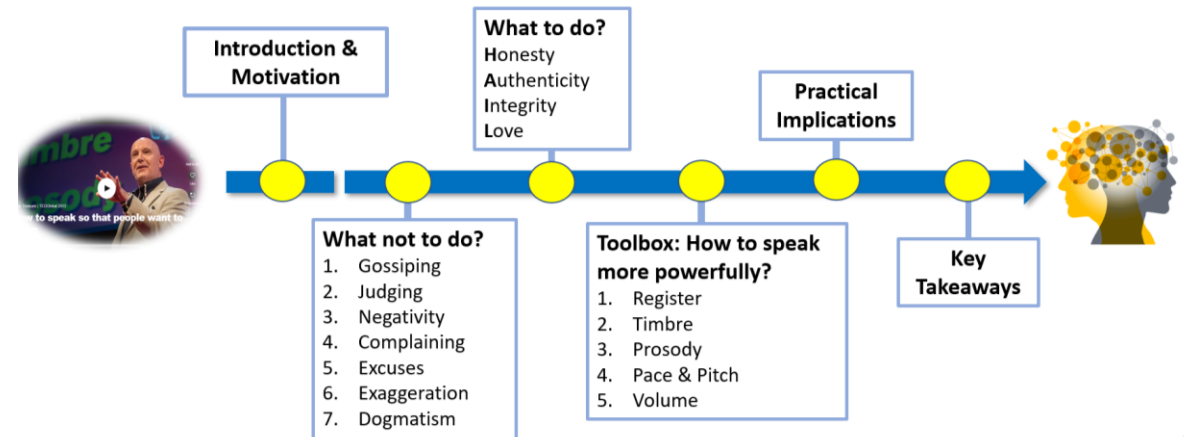
- How to speak so that people want to listen

- Showing video material
- Seminar conducted in class



## How to speak so that people want to listen?

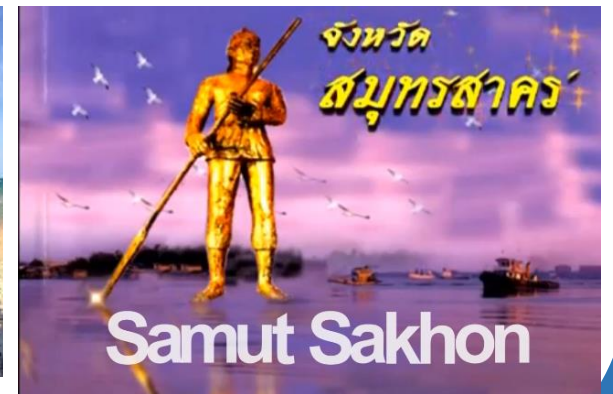
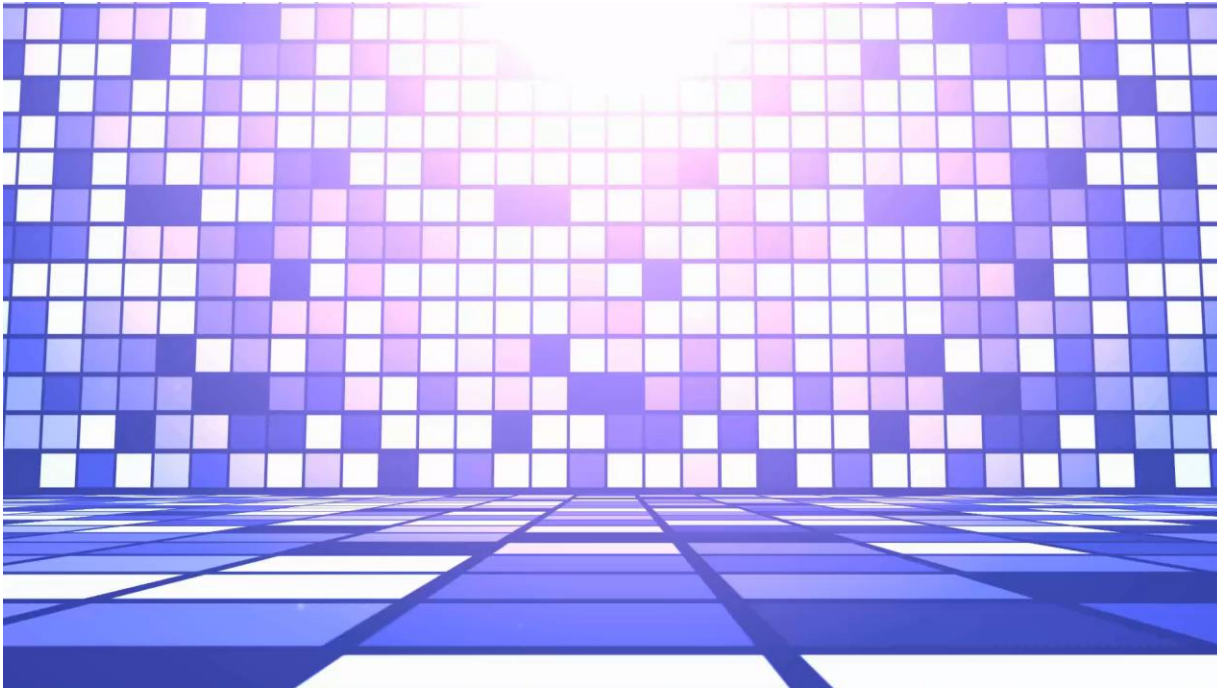
Throughline: How to make people listen when you talk.





# V-Visiting

- Home town Visit



# E-Experimenting

- Research presentation on Royal Thai Navy Laboratory





# E-Experimenting

- Research presentation on Royal Thai Navy Laboratory



- Research presentation on CIOD 2020

- Research Writing in International Journal of Applied Science and Engineering Progress, KMUTNB, Thailand



Applied Science and Engineering Progress, 2020

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#### Research Article

### The Influence of Vertical Centrifugal Casting on Nickel Aluminum Bronze Alloy for Using in the Royal Thai Navy

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#### Abstract

This research presents a guideline for forming nickel aluminum bronze or NAB workpieces in better mechanical properties for use in the Royal Thai Navy. In the past, NAB workpieces were formed by static casting and then were used in seawater condition, and it was found that the deterioration and low lifespan was a result of cavitation corrosion. Therefore, the analysis can be made that the mechanical properties are inappropriate for use in seawater conditions. This research discusses the advantages of the vertical centrifugal casting method on the static casting regarding the specimen's hardness value. Therefore, the objective of this research is to study the influence of vertical centrifugal casting on hardness of NAB specimens using experimental design to determine appropriate conditions for NAB specimen's hardness. The appropriate level of the mould speed is 483.8384 rounds per minute and the radius from centre of rotation is the 100 mm, and the result of the appropriate factors is 177.3542 VH as a maximum hardness. The regression equation from this research can also be used to form other appropriate mould speeds for other size of workpieces.



## Student Suggestions

- Class size should be more than 5 students to anticipate more communications.
- Class seems to present internally in classroom. Additional external presentation should be done with the audiences.
- International collaboration in communication should be available.
- V Class is good, however, some improvements are needed.



# Thank You

