

# “ANI-MEL” DISRUPTIVE TECHNOLOGY IN THE LAB



# Acknowledgement

Kaurna miyurna, Kaurna yarta, ngadlu tampinhi.



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## WHAT IS DISRUPTIVE TECHNOLOGY?



## PHOENIX RISING FROM THE ASHES



## HINDU DEITY LORD SHIVA

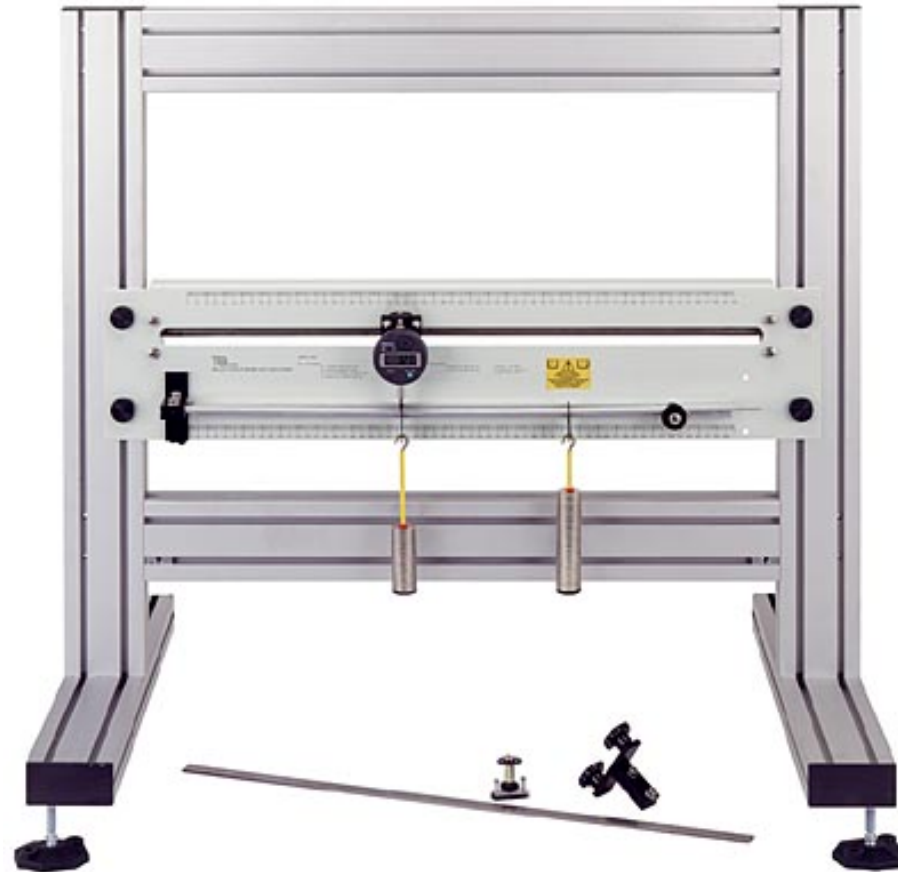


# PROFESSOR CLAYTON M. CHRISTENSEN





# DEFLECTION AND BENDING RIG

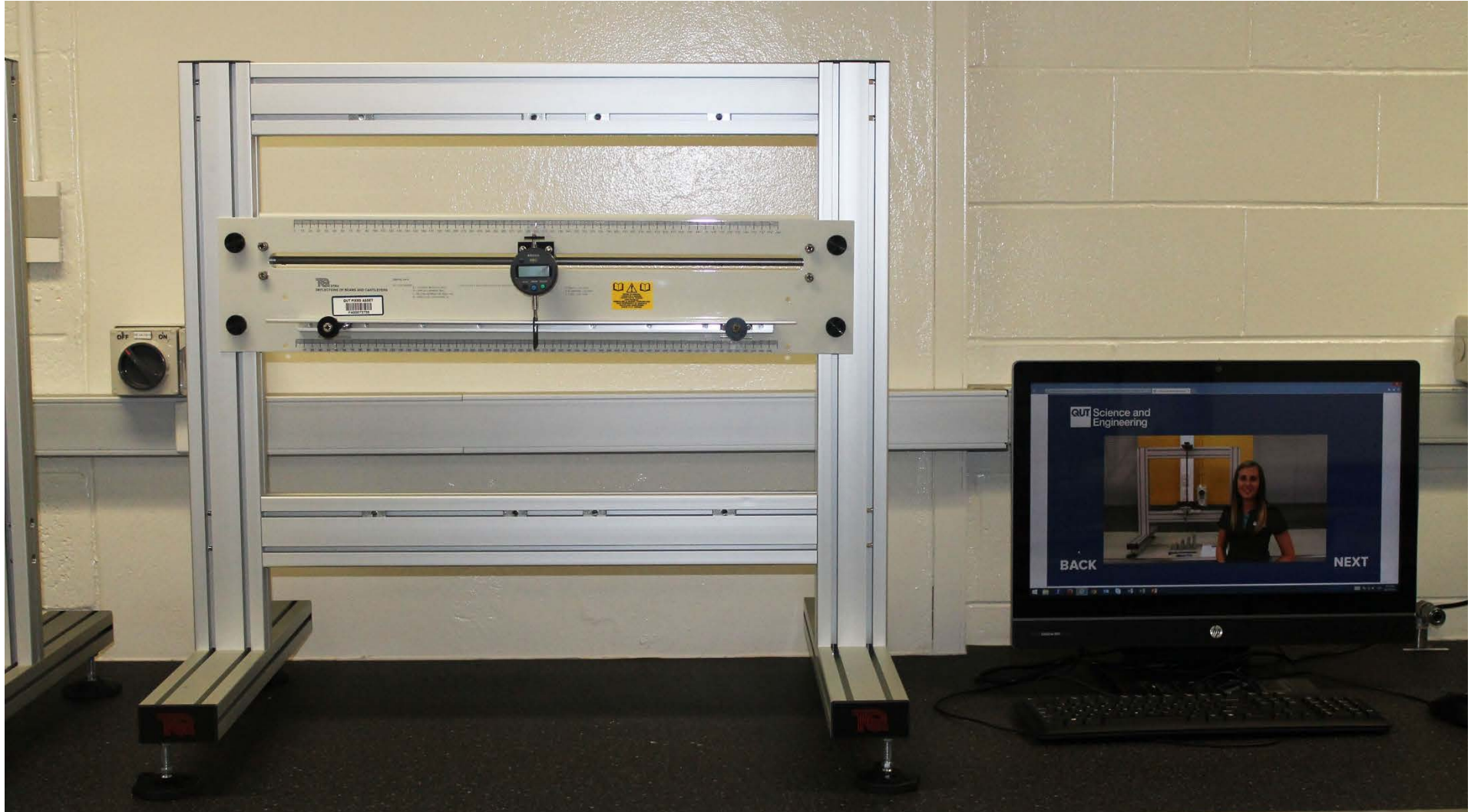


# ORIGINAL PRACTICUM



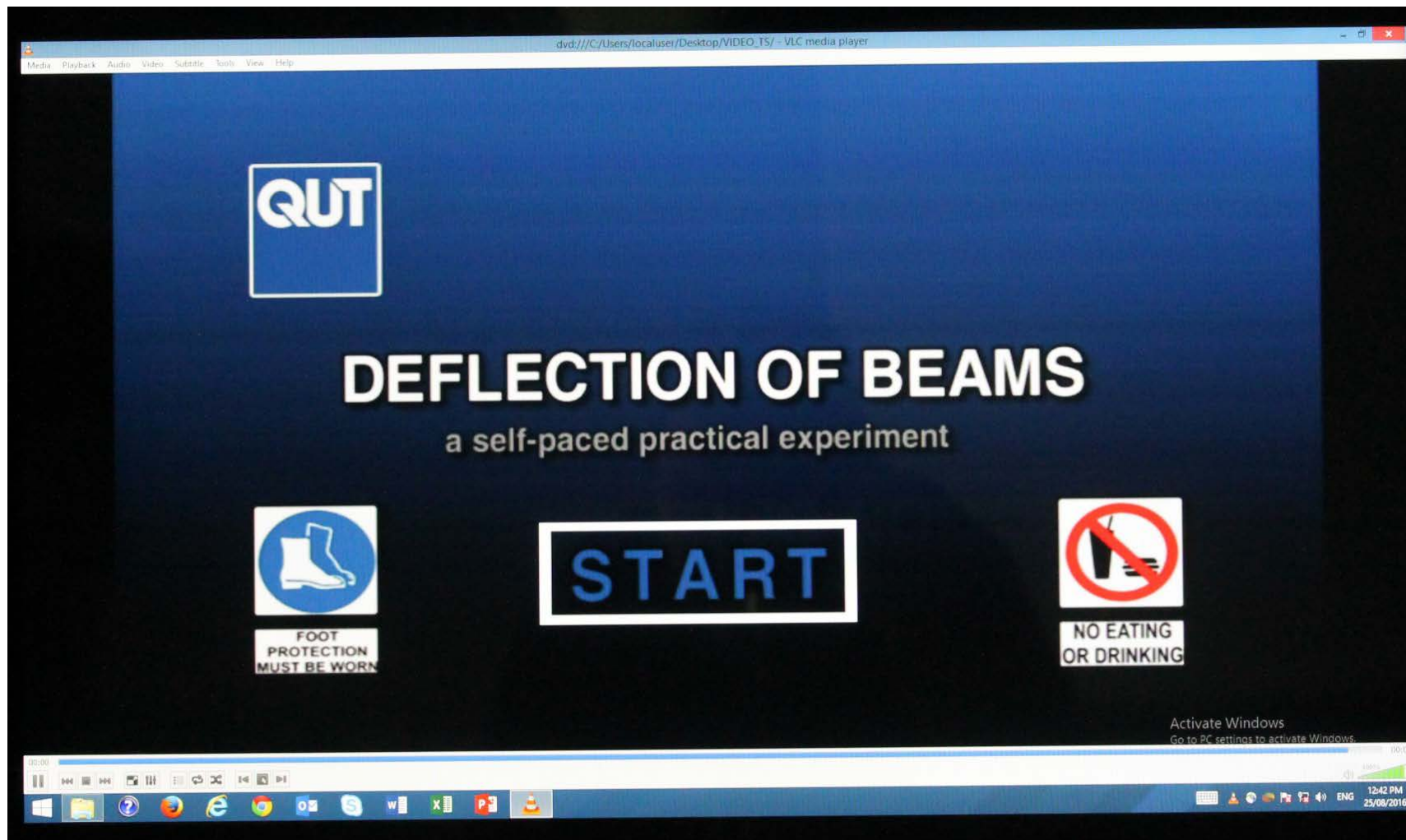


# AUTOMATED DELIVERY PRACTICUM

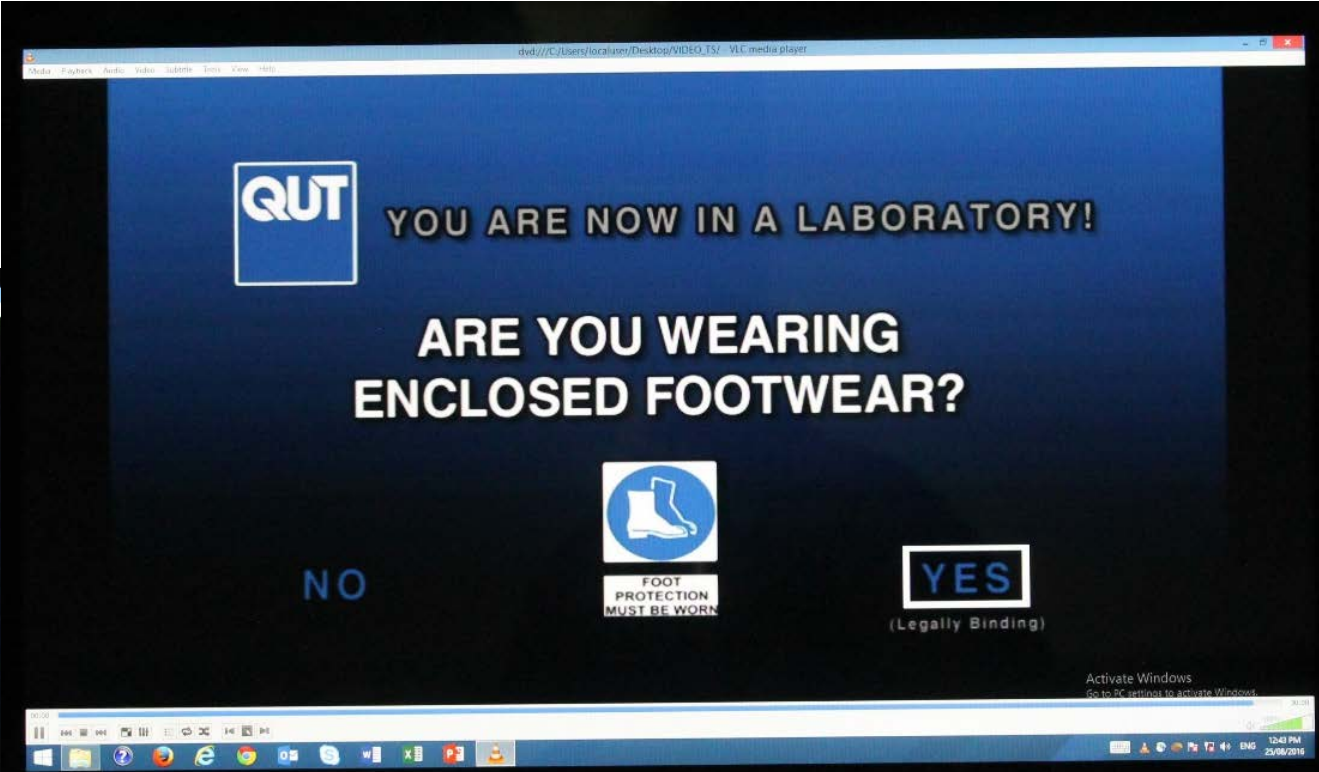
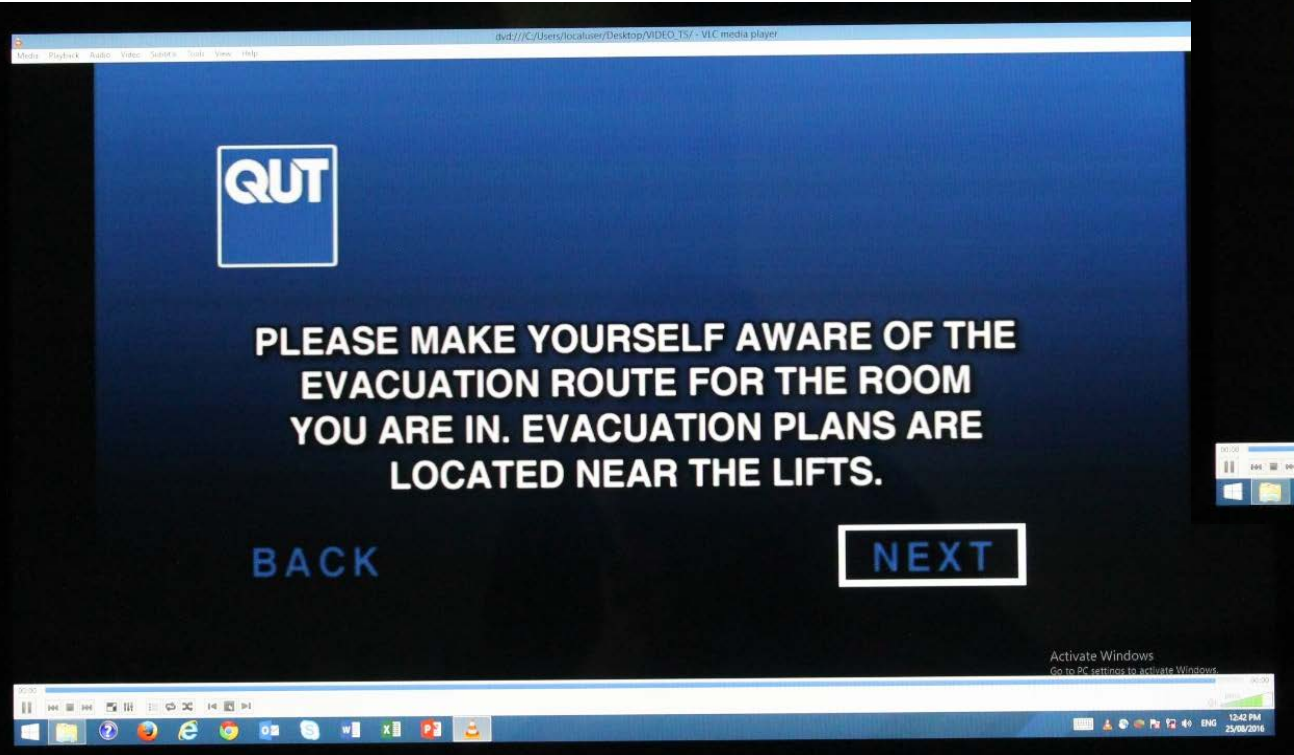




# INTRODUCTION SCREEN

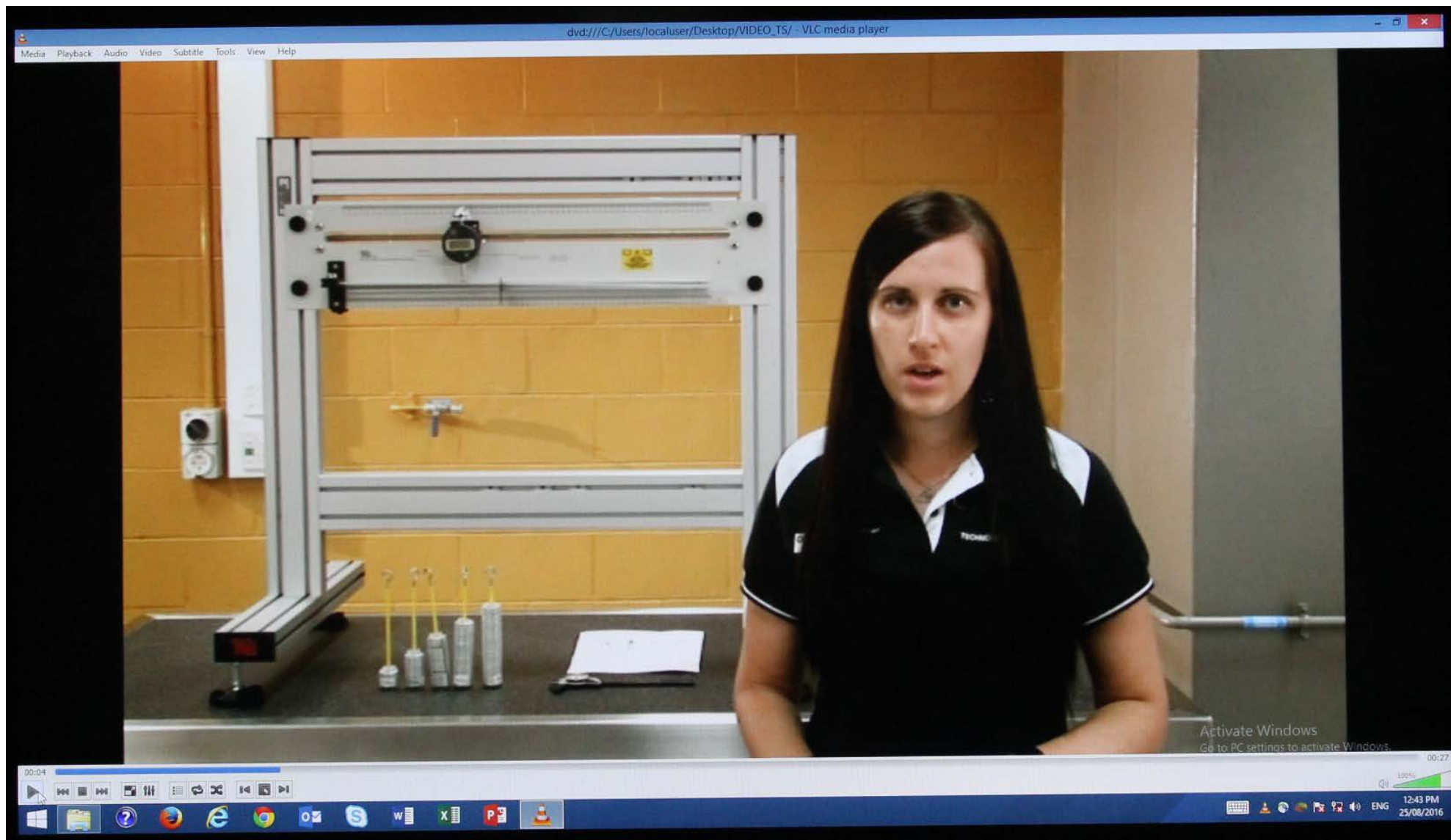


# HEALTH AND SAFETY CHECKLIST

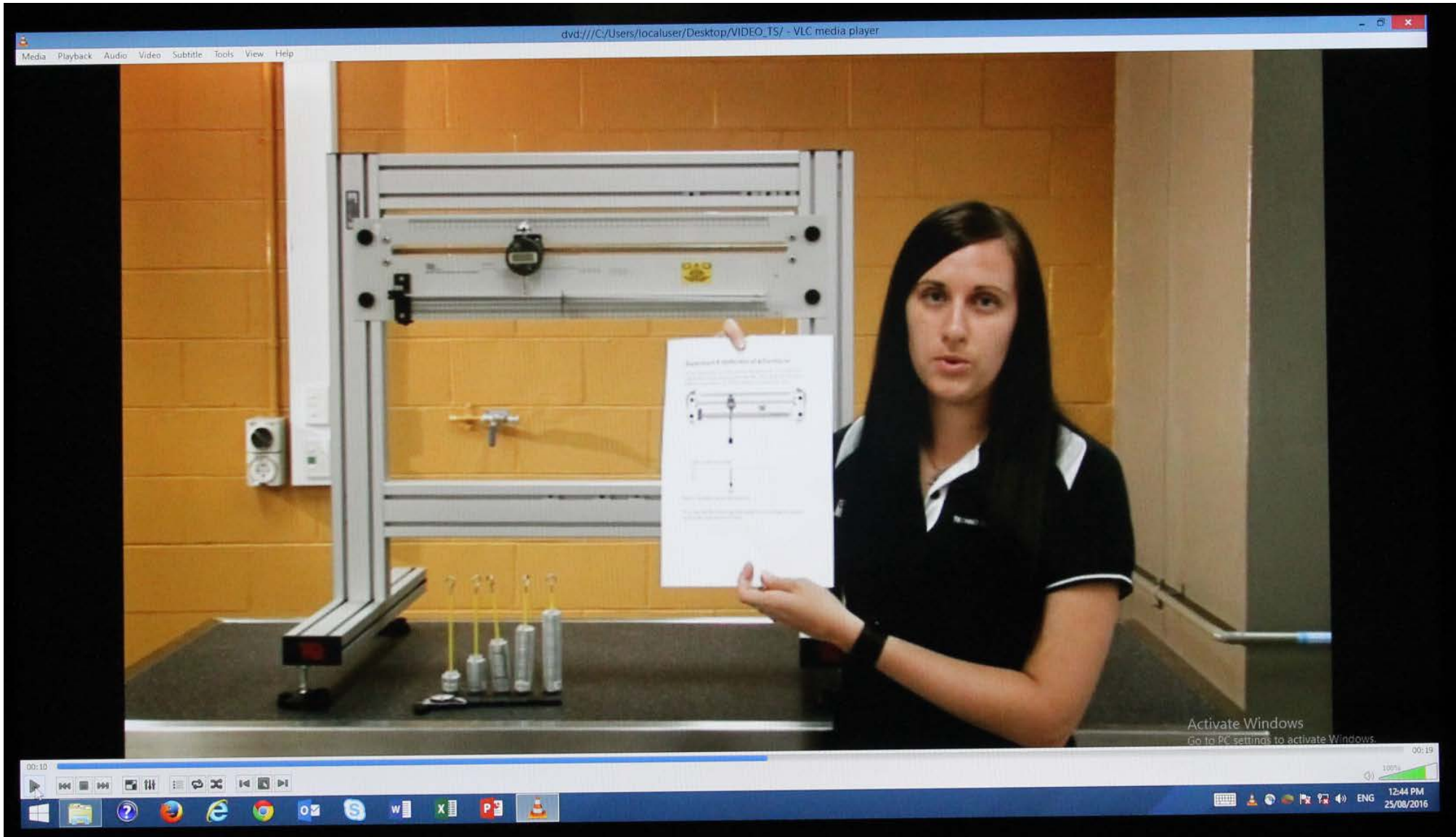




# EXPERIMENT INTRODUCTION SCREEN



# WORKSHEET EXPLANATION





dvd:///C:/Users/localuser/Desktop/VIDEO\_TS/ - VLC media player

Media Playback Audio Video Subtitle Tools View Help

Material		
E value: _____ $\text{Nm}^{-2}$	Width b: _____ mm	
I: _____ $\text{m}^4$	Depth d: _____ mm	

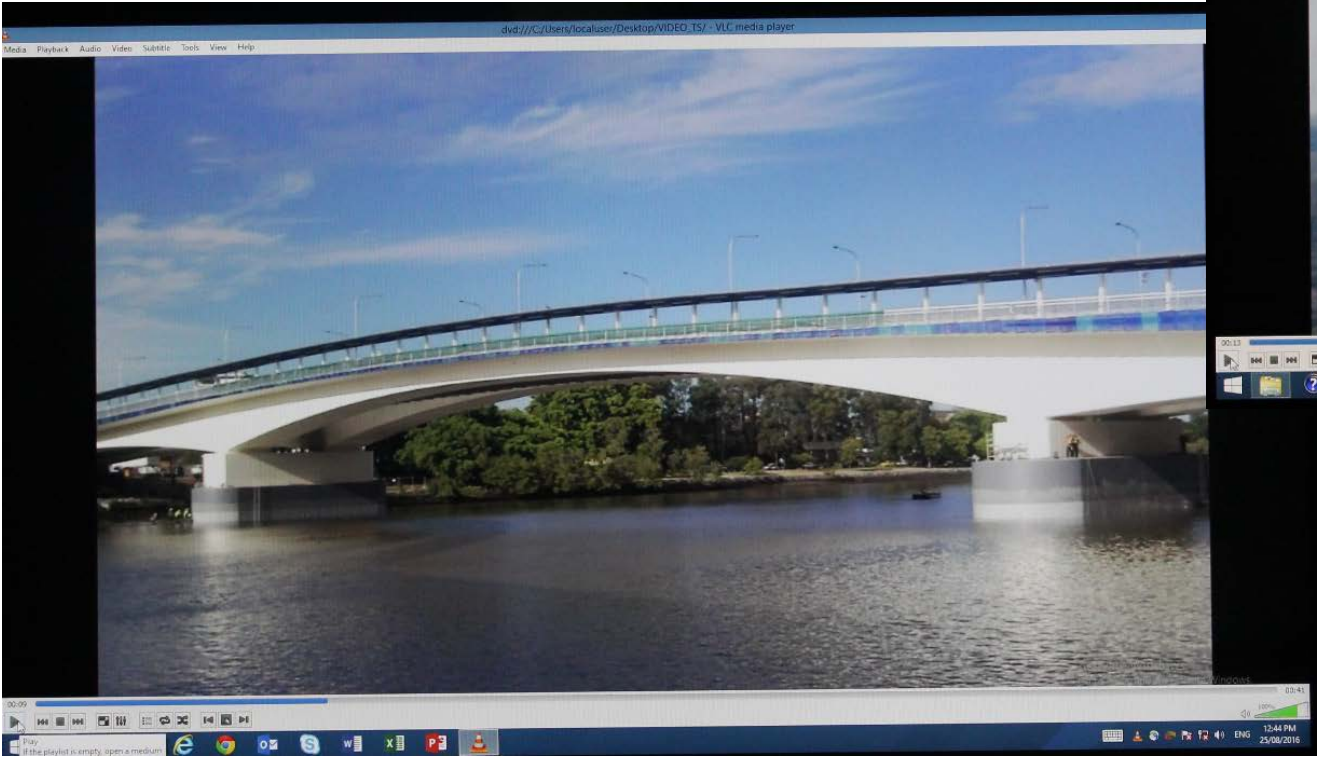
  

Mass (g)	Actual deflection (mm)	Theoretical deflection (mm)
0		
100		
200		
300		
400		
500		

00:10 100% 12:45 PM 25/08/2016

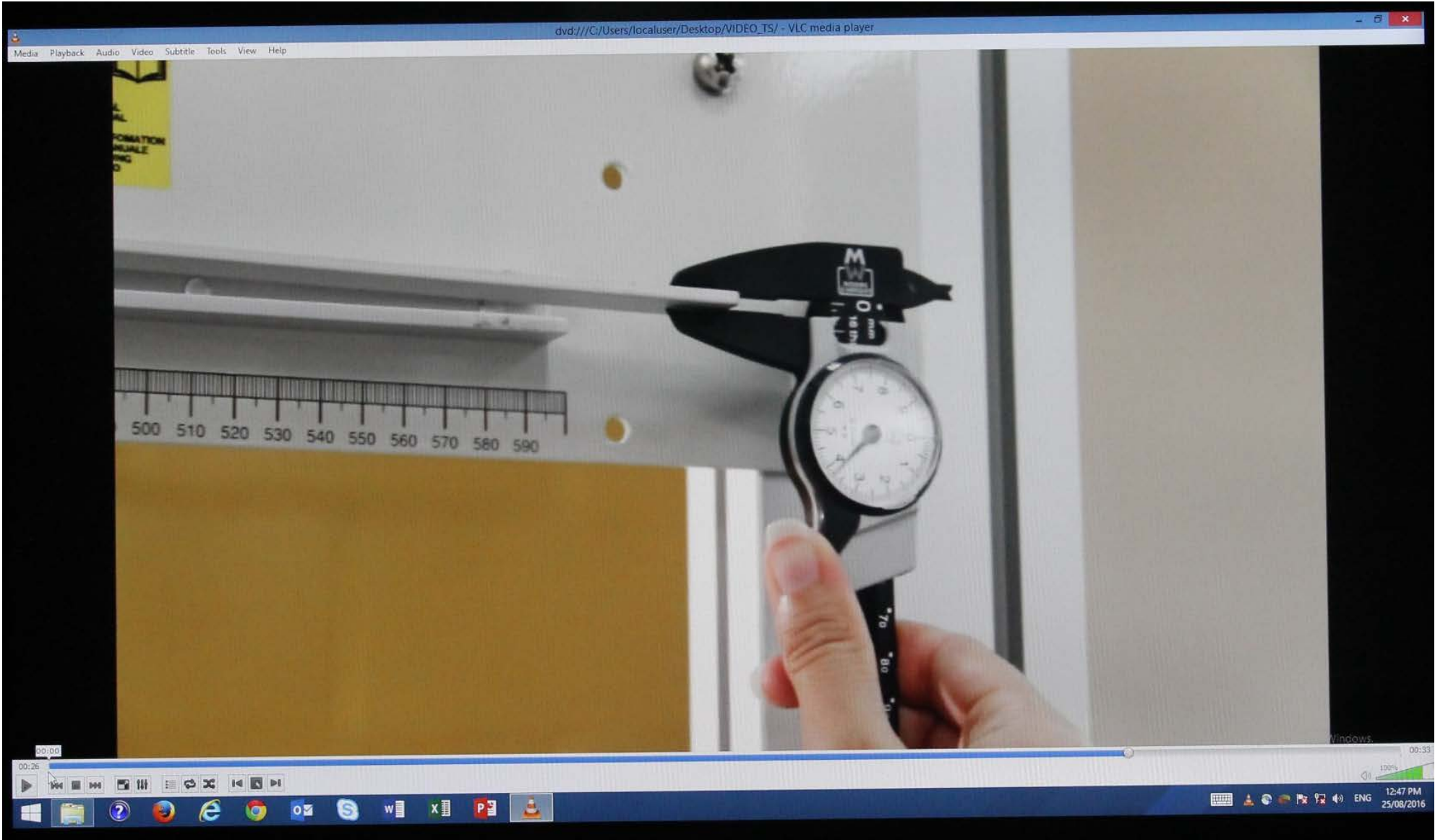
Activate Windows  
Go to PC settings to activate Windows

# EXAMPLES OF BEAM SHAPES

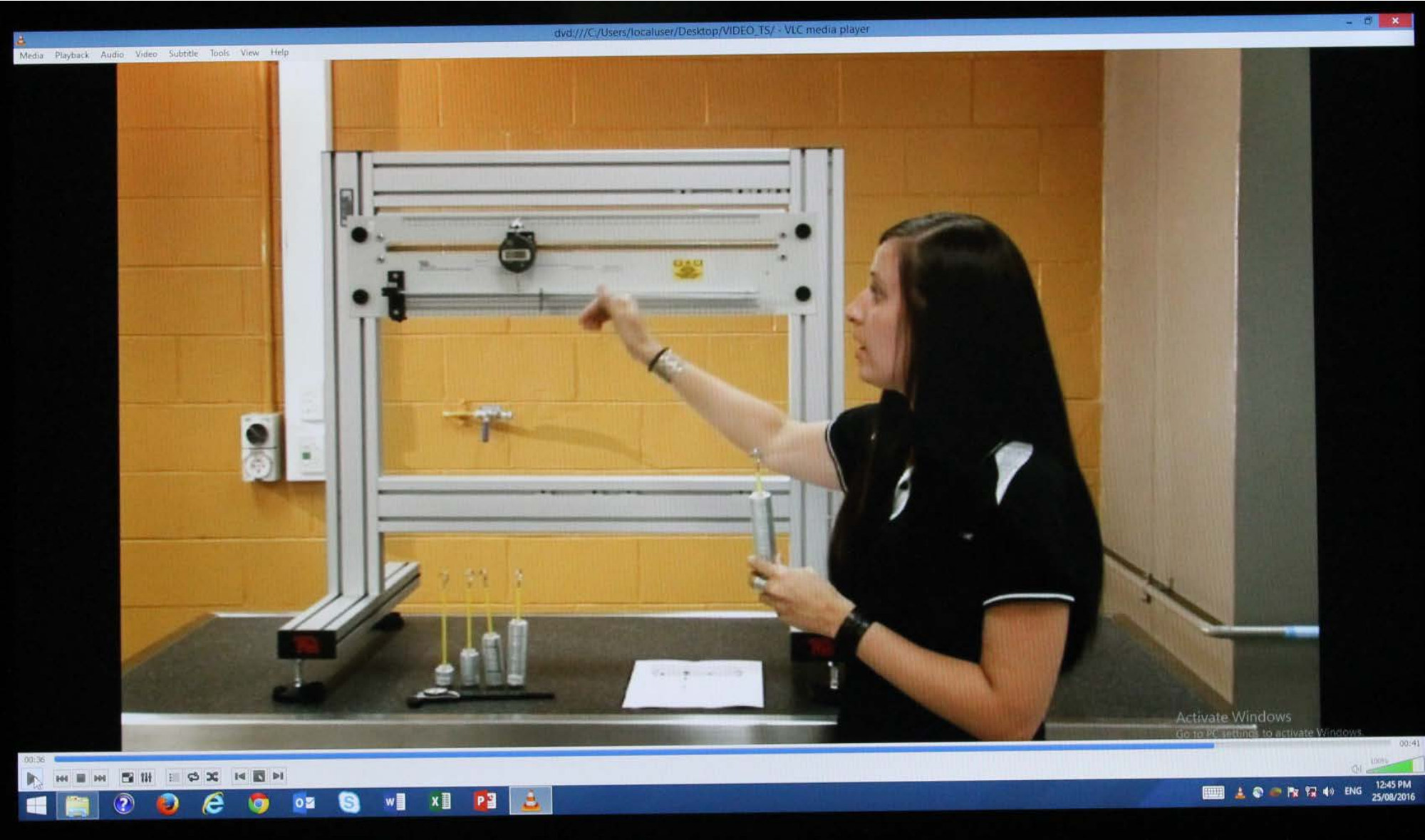




# MEASURING THE TEST SPECIMEN

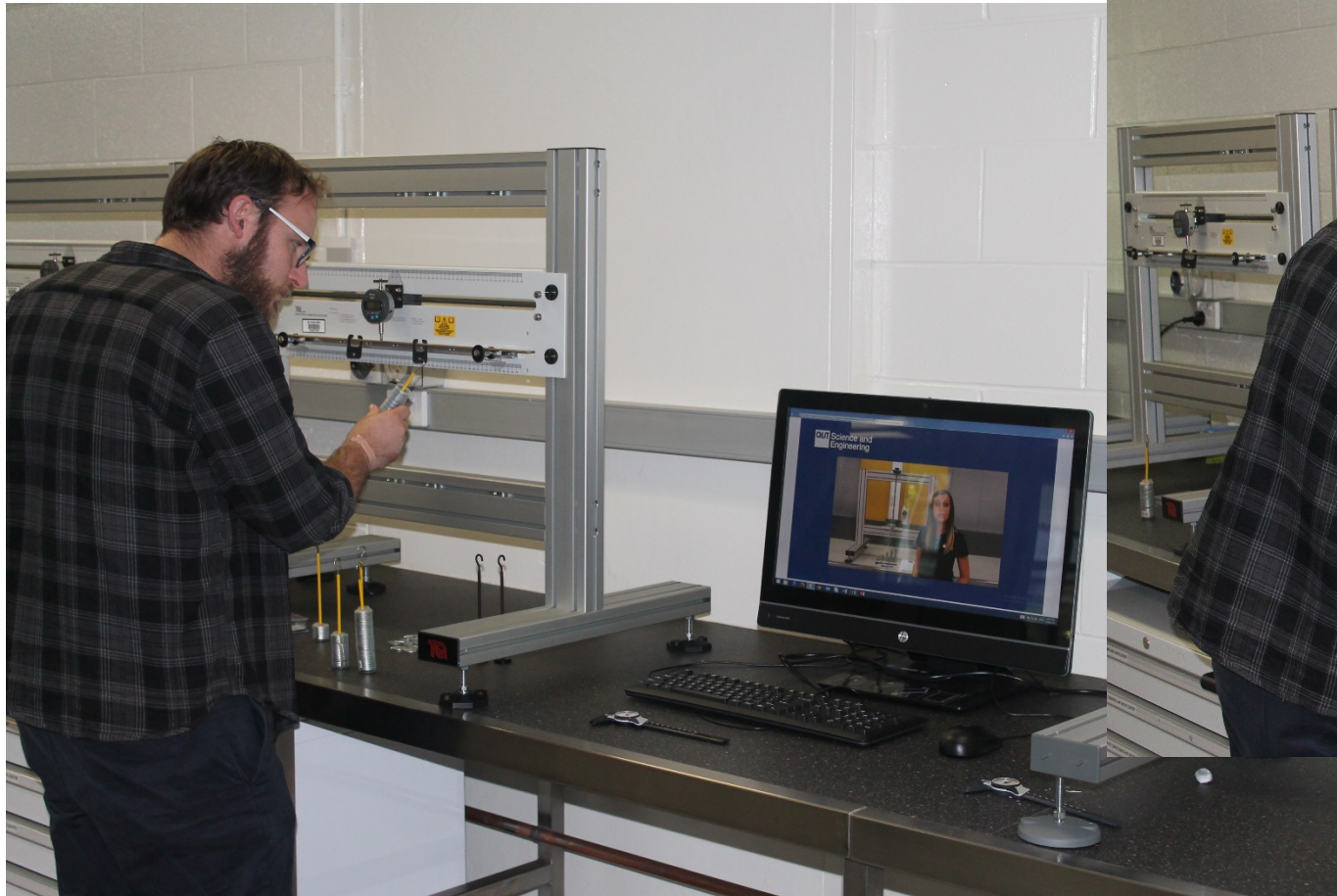


# LOADING THE TEST SPECIMEN

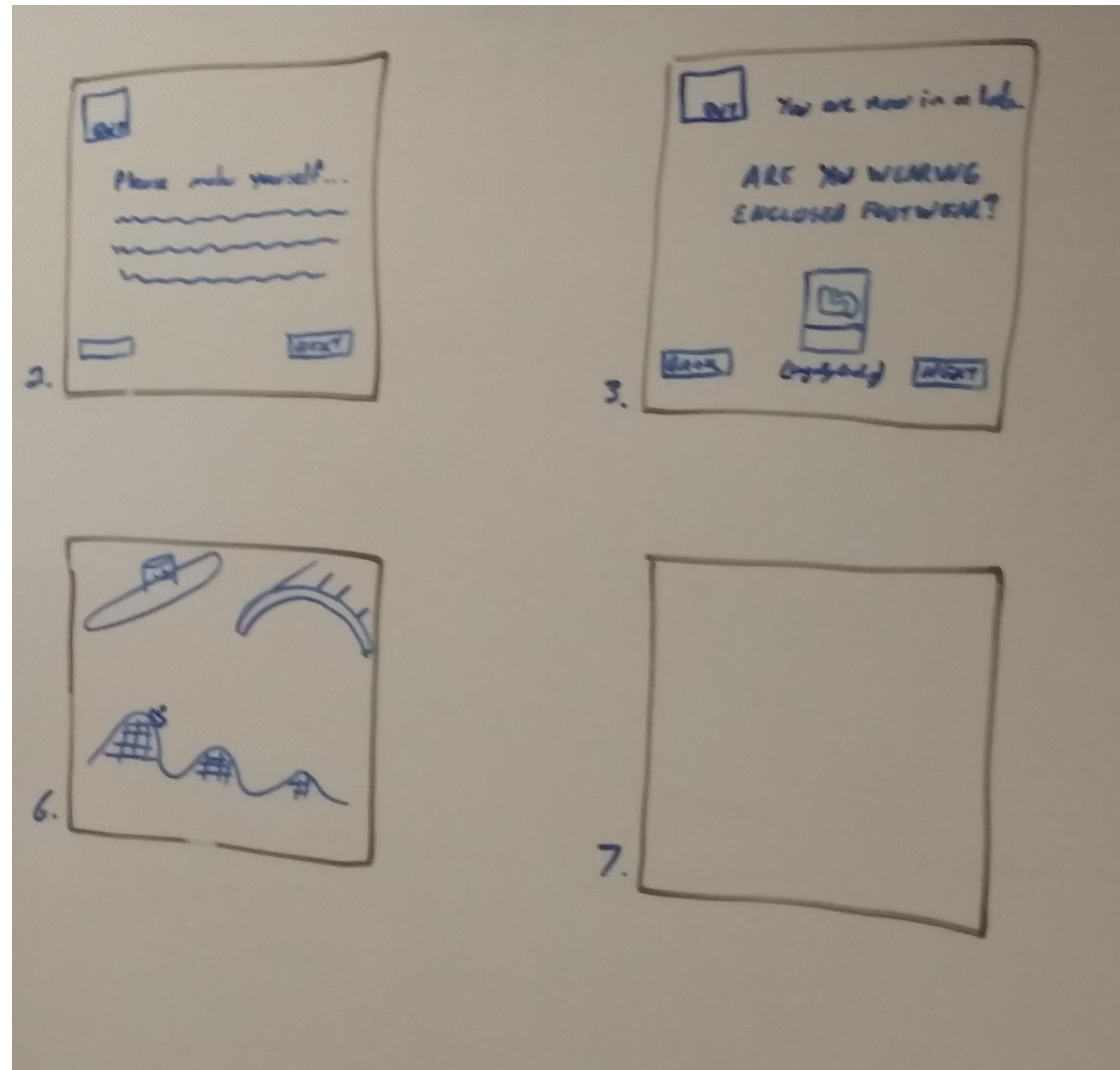




# A STUDENT USING THE VIRTUAL DEMONSTRATOR







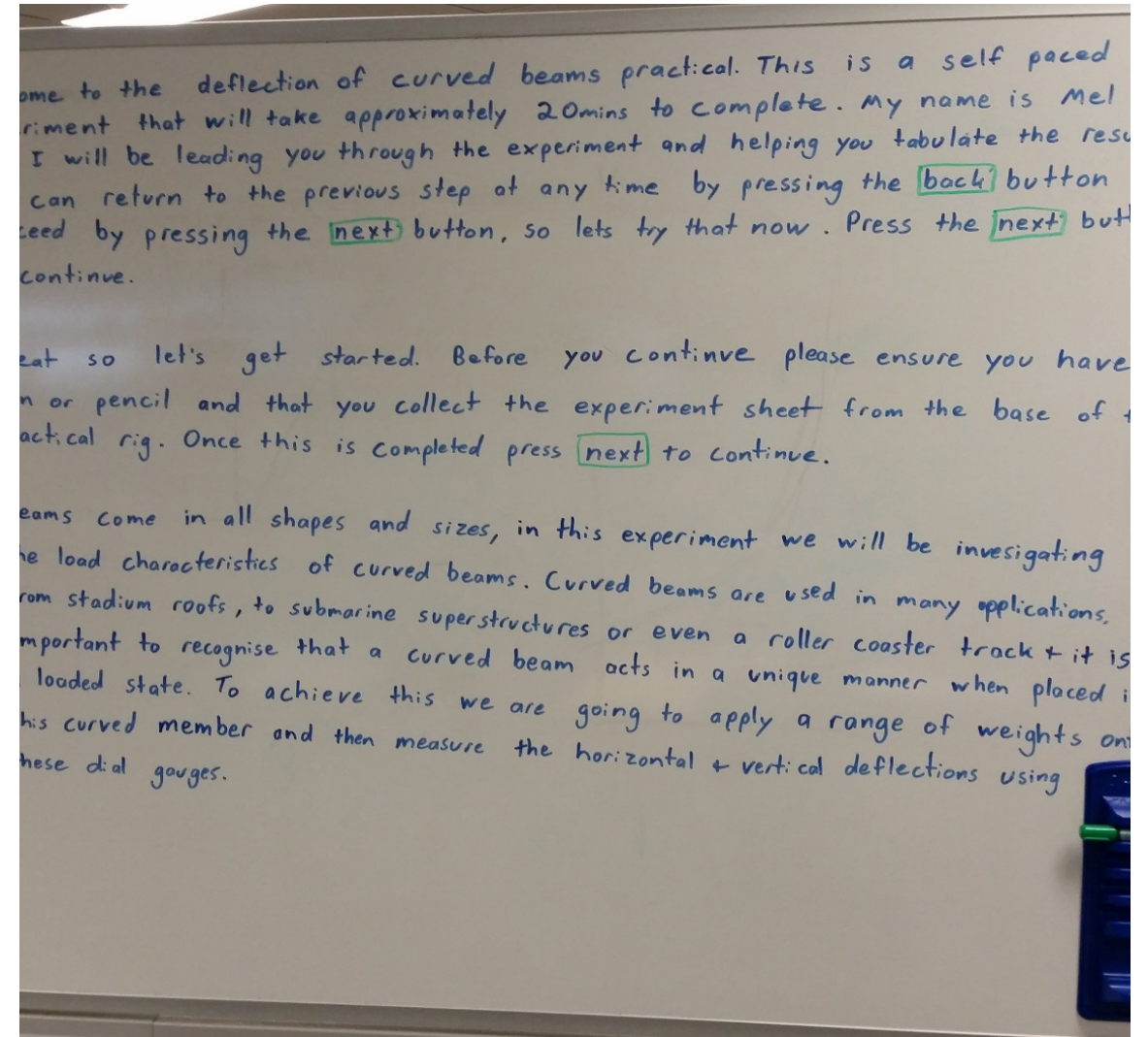
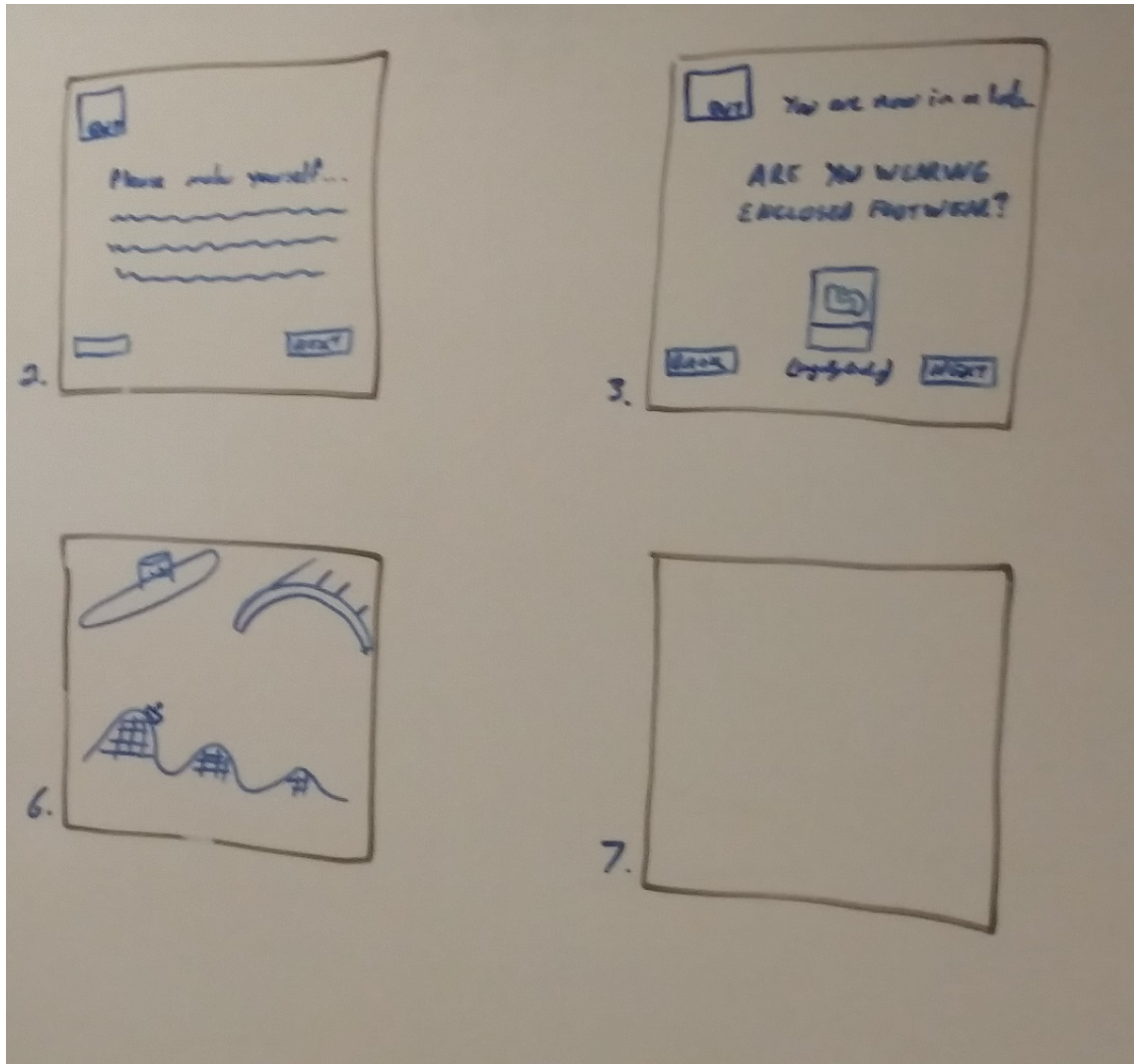


# STORYBOARD PLANNING





# STORYBOARD AND SCRIPT INTEGRATION





# RELATED PEDAGOGICAL THEORY

- According to Holtzblatt et al (2004, pg. 229) the purpose of storyboarding is defined as ensuring “that the team does not overlook any intents and steps that are critical to the work.” “Using a combination of pictures and text, it is a great technique for working out the details of how a user will accomplish specific tasks in a new design.”

# FILMING





# FILMING BREAK



# GAGNE'S NINE EVENTS OF INSTRUCTION

*GAGNE (1965)*

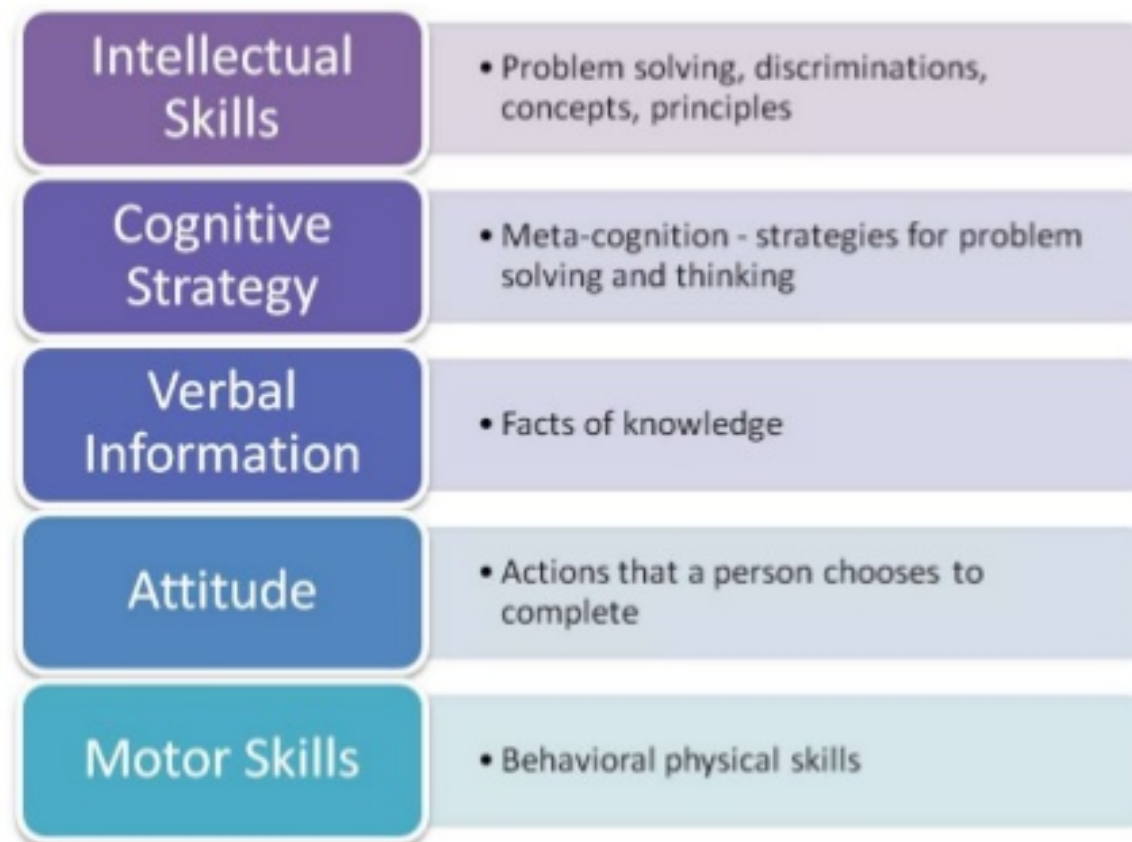




# RELATED PEDAGOGICAL THEORY CONT.

## Gagne's Domains of Learning

GAGNE (1965)



# SUMMARY OF ADVANTAGES

- INCREASED FLEXIBILITY IN DELIVERY TIMES TO STUDENTS.
- ALLOWS STUDENTS TO LEARN AT THEIR OWN PACE.
- REDUCES THE WORKLOAD FOR DEMONSTRATOR STAFF.



# CONSTRAINTS AND LIMITATIONS

- DESIRED ACADEMIC CHANGES TO CURRICULUM NECESSITATE THE CREATION OF A NEW INSTRUCTIONAL MOVIE.
- UNABLE TO ANSWER SPONTANEOUS STUDENT QUESTIONS.

# FUTURE DEVELOPMENTS

**AVAILABLE  
ONLINE 24/7!**

- ADDITIONAL INSTRUCTIONALS
- 'ON DEMAND' ROOM INDUCTIONS
- ON LINE AVAILABILITY
- ANIMATED PRESENTERS
- FACIAL RECOGNITION



**ROOM INDUCTION**  
**GP O-116**

This document outlines the induction process for entry into a room or laboratory, and forms a record of training.

**Technical Custodian for this room: DEN BROWNLEE B1128**

**Room Entry Requirements**

☐ STAFF - Have you completed the QUT ELMU General HSE Induction? Signed: \_\_\_\_\_

☐ STUDENT - Have you completed the QUT General Safety Induction (and have the Silver Sticker)?

☐ Covered footwear MUST be worn at all times in this room

☐ No food or drink to be consumed in this room

**Emergency Details**

☐ In the event of an emergency call 00 000 or QUT Security on 8888

☐ In the event that security is required for non-emergencies call 80305

☐ In the event of an evacuation, exit the laboratory via the front or rear door and assemble in the garden/park area on the western side of G Block

**First Aid Details**

☐ A First Aid Kit is available in the Lab/Custodian located near the entry

☐ Eye and ear protection are available in the Lab/Custodian

☐ First Aid Officer for this level: Melissa Johnston B2040 (Phone 0201)

**Room Details**

☐ Lights and air conditioning are controlled via the switches near the front door

☐ O-116 contains remote activated high-power machinery that may start suddenly - be aware of crash hazards!

☐ Do not use tools in the lab unless you have done the appropriate induction

☐ Do not borrow anything in the laboratory without prior consent from the owner and technical custodian!

☐ Compressed air is refilled to the room. Exercise care and treat injury as any other medical emergency

☐ Any alterations to permanent fixtures within the room are to be completed by Facilities Management only

☐ Please inform the Technical Custodian prior to bringing visitors into the room

**Housekeeping**

☐ Tables are labelled on level 1

☐ All bags must be hung on bag racks provided

☐ O-116 is a flexible research area with many activities - ensure area is thoroughly cleaned after each activity

☐ Report any breakages or injuries to the Technical Custodian immediately

**Name of Inductee:** \_\_\_\_\_ **Name of Trainer:** Benjamin Brownlee

**Staff/Student #:** \_\_\_\_\_ **Title of Trainer:** Senior Technician

**Signature of Inductee:** \_\_\_\_\_ **Signature of Trainer:** \_\_\_\_\_

**Email Address:** \_\_\_\_\_ **Date of training:** \_\_\_\_/\_\_\_\_/\_\_\_\_

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# REFERENCES

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- Reinert, Hugo; Reinert, Erik S. 2006. *"Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter"*
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