

Innovative E-learning Approach to Enhance Energy Efficiency Learning

Manila, June 2023





E-learning brings a lot of benefits





How to design an Energy efficiency training?



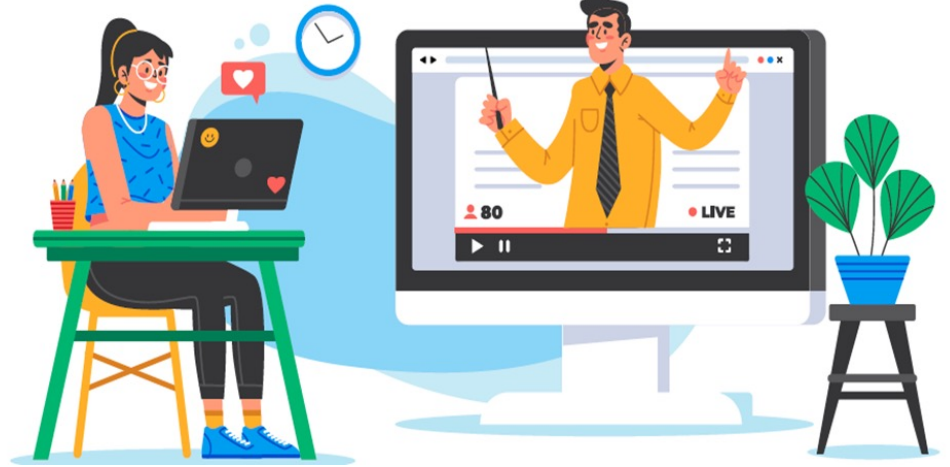
Gamification & Serious game

June 2023



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2021 - TUEWAS pilot project



Instructional design

THE CONE OF LEARNING

After two weeks, we tend to remember..






Immersive experience

June 2023

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**Lina, who will
support learners
in the course**



Trigger ownership

June 2023



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Personal learning log

June 2023

Excel spreadsheet interface showing a welcome message and instructions for a course. The spreadsheet has a grid with columns A-I and rows 1-28. The content includes a profile picture of a man, a name field containing 'Willi', and instructions on how to unlock tabs and collect items. There are also small images of a ribbon and a task bar.

Dear Energy Efficiency Expert,
Welcome to our Master-Excel-Sheet
Throughout the course you will be referred to working with this Excel Sheet, so have a look at the following Excel Sheets. [On the second page you can find a blueprint of the textile industry](#)
The following Excel Sheets contain tasks, that will be explained in the respective chapter
After completing each module, you will receive a small prize: an important element for your blueprint
You can easily drag & drop these items into the blueprint to realize more efficient action
Once you completed the whole course you can use the calculations of this Excel workbook

Name:
Willi

How to unlock tabs?
To start working on the tasks within the different chapters of the course you need to unlock the tabs separately.
To do this, follow the steps:
1. open the **Review** tab, and click **Unprotect Sheet**
2. Enter the **password** of the task in **A16** & click **OK**
3. Start working on the task - Enjoy!

How to collect your items?
When you finish an assignment correctly, you will be given the password to unlock the item tab e.g. "compressor"
1. The item tabs are colored **green**
2. You can then copy & paste (Ctrl + C, Ctrl + V) these items to your blueprint and collect them until you have collected all of them

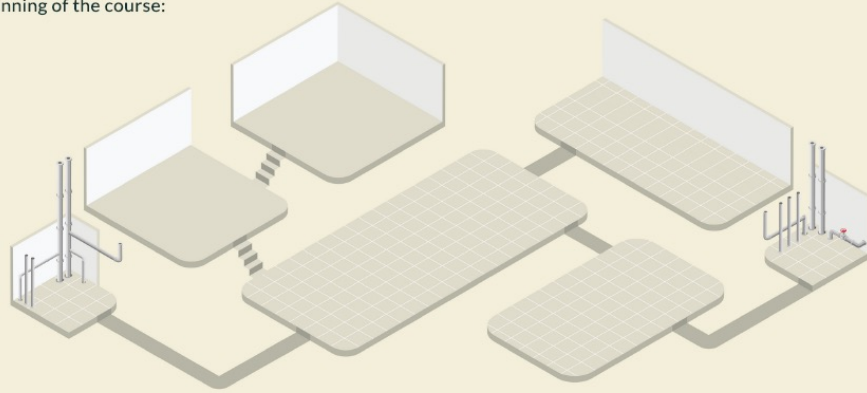
Excel ribbon: File, Home, Insert, Page Layout, Formulas, Data, **Review**, View, Help
Review ribbon: Spelling, Thesaurus, Check Accessibility, Smart Lookup, Translate, New Comment, Comments, Notes, Protect Sheet, Unprotect Sheet, Locking/Unlocking Cells, Hide/Unhide Rows/Columns, Show/Hide Formulas, Show/Hide Objects, Show/Hide Comments, Show/Hide Hyperlinks, Show/Hide Comments, Show/Hide Objects, Show/Hide Formulas, Show/Hide Comments, Show/Hide Hyperlinks

Task bar: eat Compressor, Compressor, Lighting

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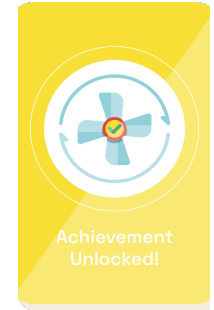
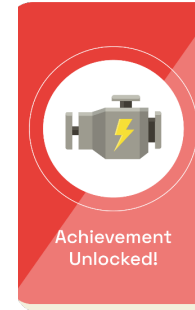
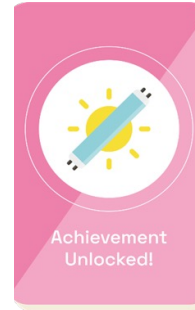
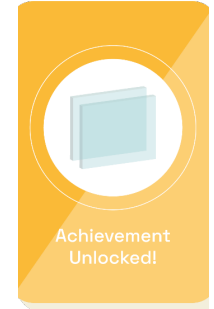
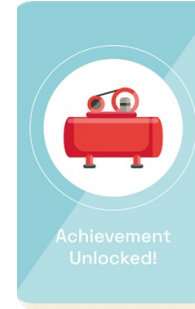
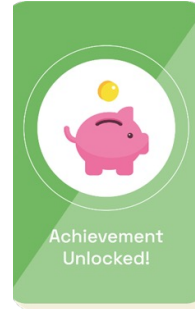
Beginning of the course:



End of the course:

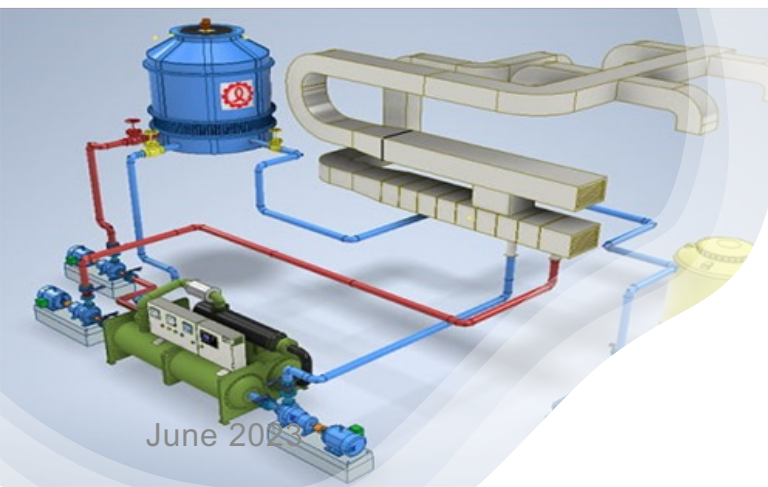


Collection completion motivation



> 1000 learners
99% positive
feedback





June 2019

Virtual reality & 3D metaverse

How to continue to trigger interest?



OPEN *Innovation*



Thank you