Digital interaction and collaborative processes in higher vocational education

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Content

- BIM- Building Information Modeling

- ICE- Integrated Concurrent Engineering

- Our school and active learning

- New activity leads to new classrooms

BIM- Building Information Modeling

- BIM is the latest evolution of the building industry, and it refers to the process of designing, building and operating a building collaboratively using a single coherent system of 3D models rather than separate design drawings. BIM incorporates people and technology to streamline time and cost, and improve efficiency in builds including skyscrapers, hospitals, office and residential buildings. (MagiCAD2020)

ICE
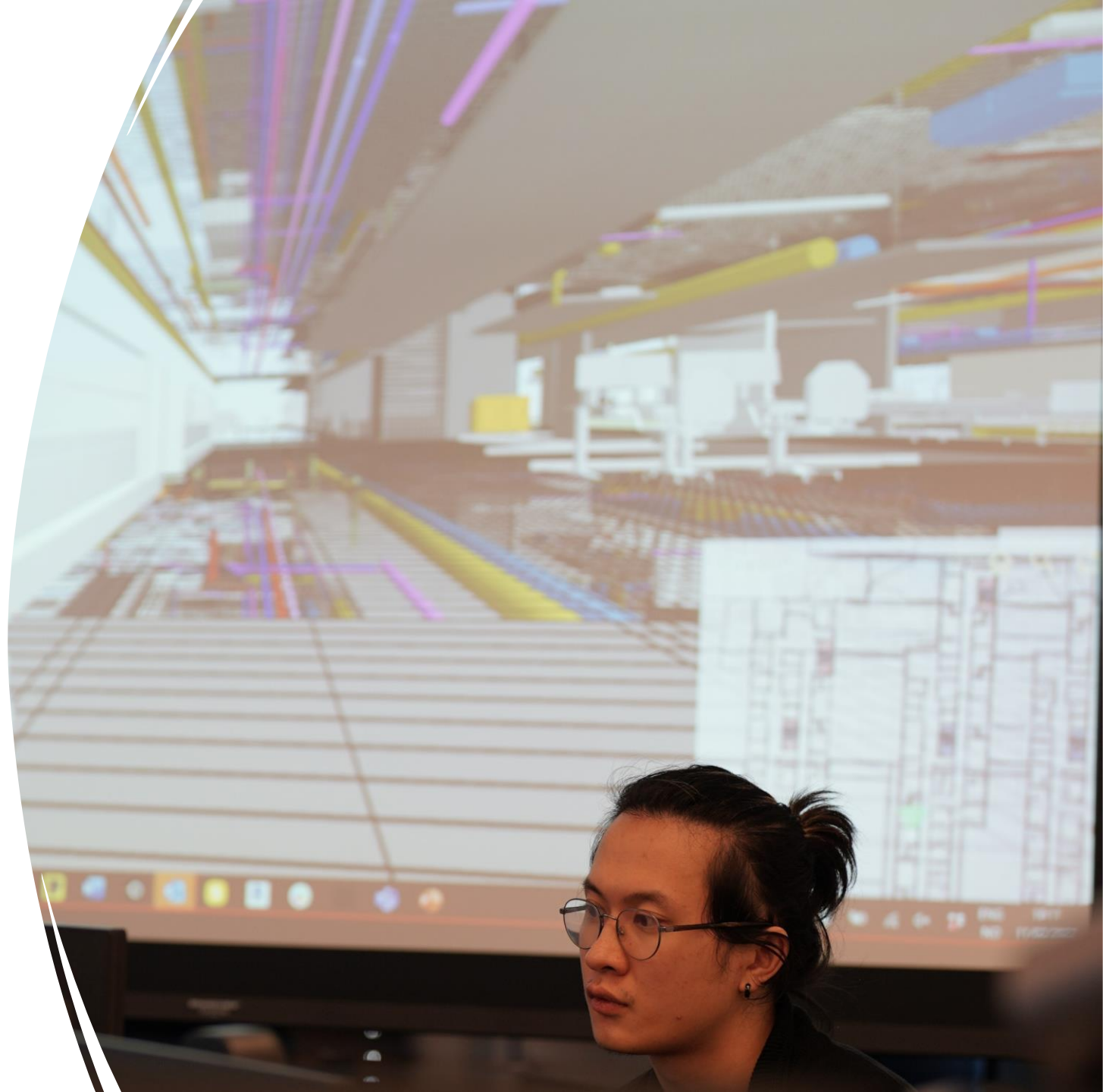
- Integrated Concurrent Engineering (ICE). ICE is a collaborative method developed to reduce building errors, shorten construction time and increase the overall quality of a construction project. An ICE meeting is an arena where participants across technical fields find solutions to challenges in their project by using information sharing, three-dimensional building models and interactive whiteboards.

- Multi-disciplinary collaboration

- Interactive touch screens

- Physical colocation

- Huge positive effect on the overall quality of the project
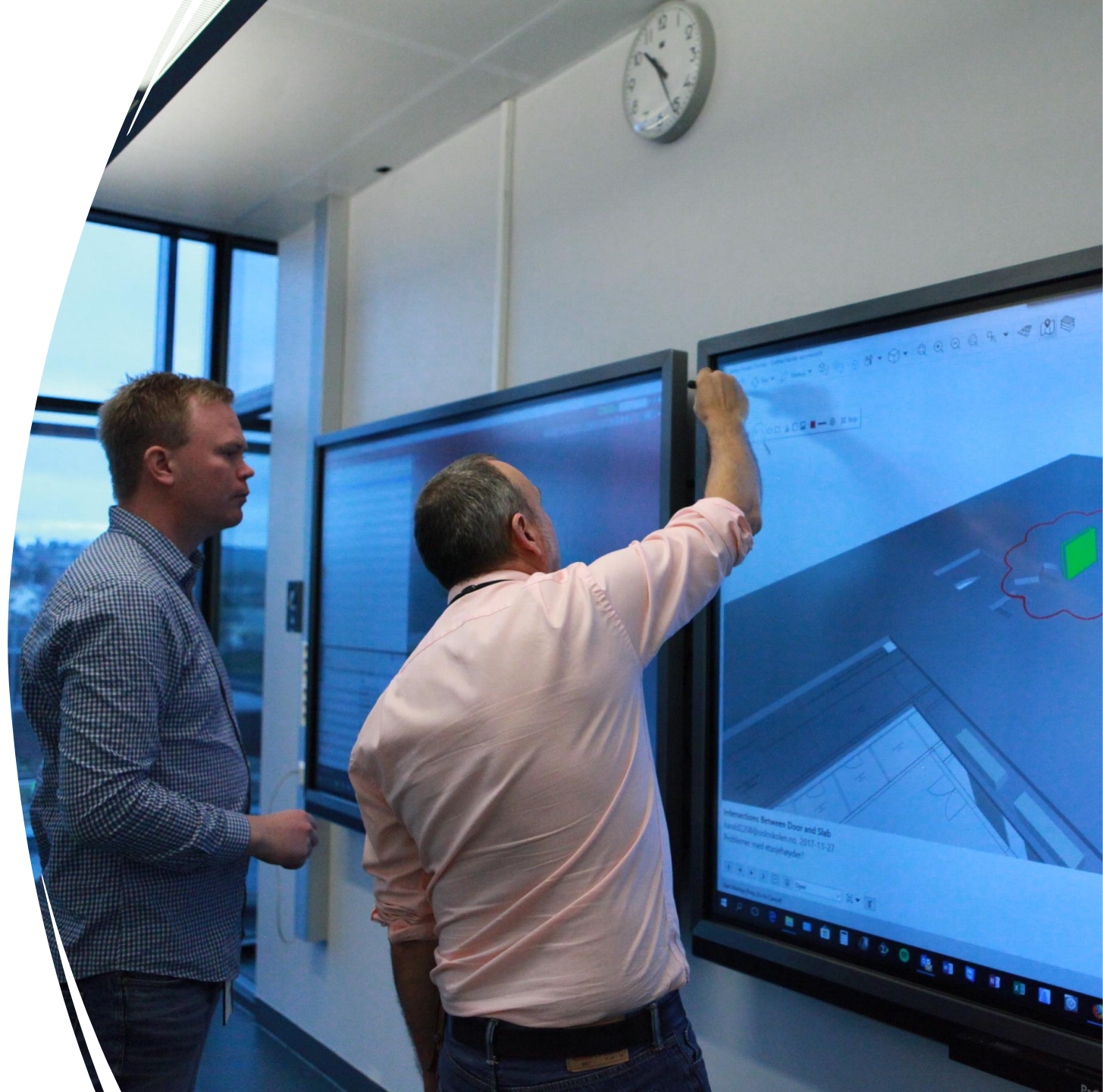
Active learning

Active learning can be enhanced by interactive and digital tools

The layout of the classroom can support activity

Technology can support activity and collaborative processes.

New methodology- new class room

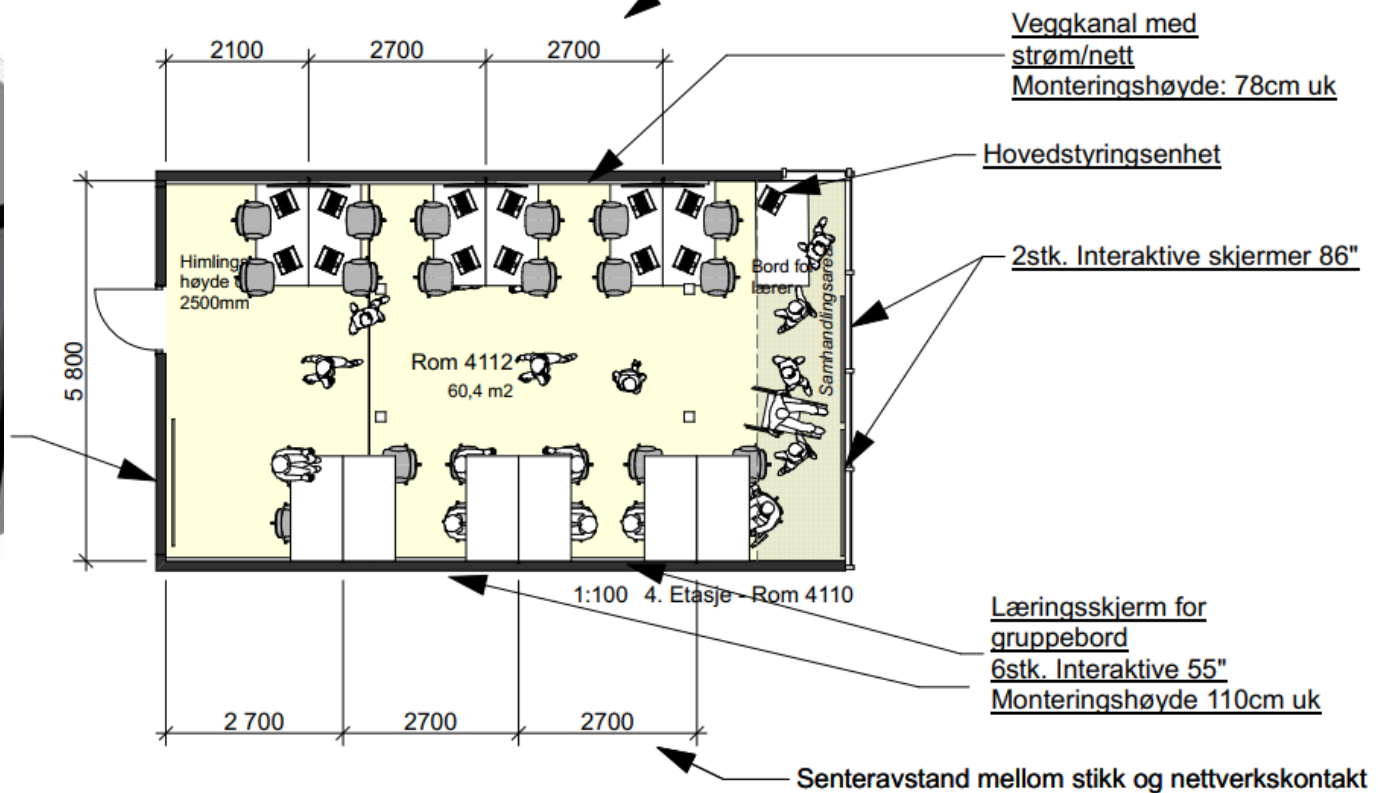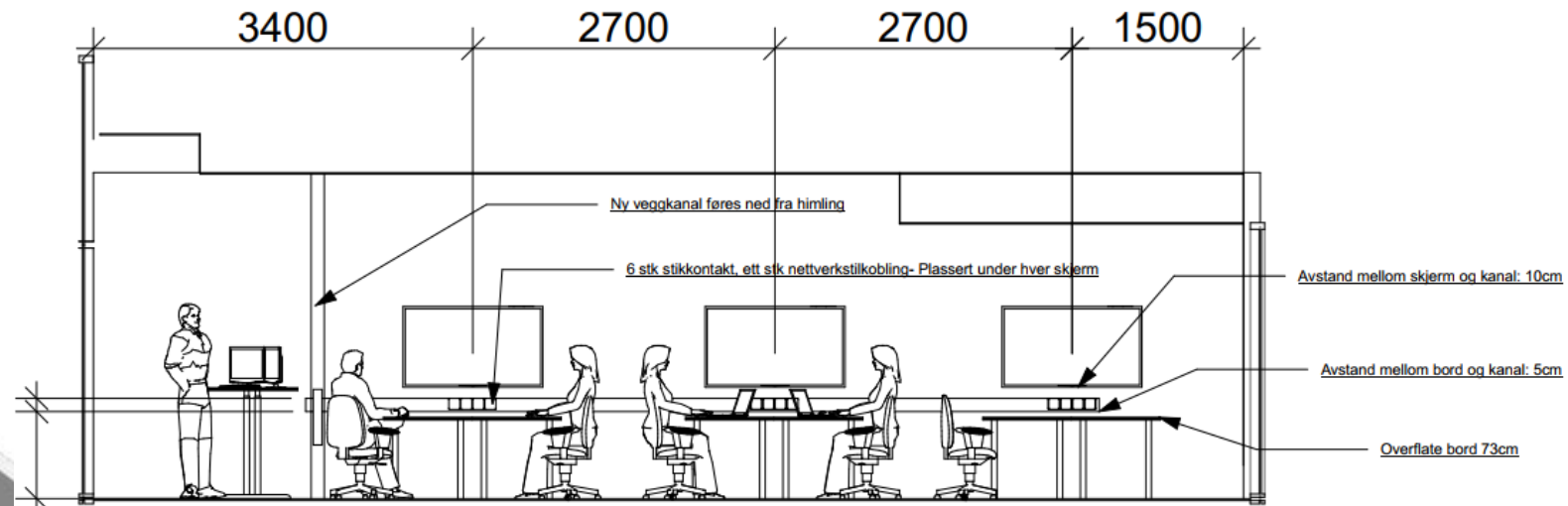# Old layout

Traditional production of drawings and blue prints

Does the modern work place bear resemblance to this? If not, why should our classrooms do?

New layout

Benefits?

- Students become more active

- Collaboration is the Go-To solution in the classroom. (Groups instead of rows)

- Multiple interactive screens give the students a physical closeness to the presented material. (High resolution is important)

- Students prefer the classroom for group activity (New)

- Collaboration between groups (New)

- Technology supports and enhances active learning and collaboration (Conclusion ☺)