LEARNING SPACES
UNIVERSITY OF MALAYA
Transformation of Space at the Faculty of Engineering with the aim of creating to be more modern, lively, THUS conducive/attractive for students.

CUBES of Engineering

- LS Grant given by DVC A&I (RM500K)
- Managed by ADeC
- Grant allocated to 7 faculties through bidding of proposal
- 10 Projects awarded and implemented
- Cooperation between ADeC, Faculties & JPPHB

UM is making a serious effort in providing teaching and learning space conducive for student-centred learning / high impact teaching and learning practices of takes place.

The Management committee has agreed that all faculties / centres/ academy must comply to learning space (student-centred) criteria for any renovation work (excerpt Minit Mesyuarat JK. Pengurusan : 4.7.2012; Perkara : 17 ; MP75/2012). The management commitment on this matter was further reinforced with the renovation of classroom into ‘TheCUBE’ project in 2012 in several faculties (effort by DVC-Dev).

UM’s learning space policy finally instituted in 2012
The CUBE is a feature learning space as it embodies the spirit of how a room in a university should be designed and used for collaborative learning. It is a classroom when it needs to be a classroom, and it can also be a learning commons at the next minute, and a seminar room the next. The way the faculty of education designed, used and manage this room is an example for the whole campus.

The learning space or CUBE as it is endearingly called is centrally located and highly accessible to all. Students from not just the faculty of education but throughout the campus are free to use this room for collaborative study and groupwork outside of class session which is regularly schedule here. The mainstay for today’s generation of learners i.e. wifi access points and plenty of power sockets are available.

Although small, different type of space is located within the CUBE. There are mobile table and chairs for different configurations of seating, corner space for sitting, sofa and comfortable seating, and single study table for those who want to study alone.
The name Ruwaq is defined as a space for teaching and learning at the al-Azhar al-Sharif Mosque in Egypt. The concept provides a unique environment for teaching and learning where the teacher sits at a higher plane to emphasise the virtue of adab or good ethics between the teacher and student. The open plan design allows for cooperative learning through a halaqah or circle, headed by the teacher as the authority in knowledge.

The design of the room features a vast open sitting space where classes are held. Since the space have minimal furniture, it is dynamic whereby students may move and form groups freely. Two LCD projectors are provided so that the users may use each screen independently, with screen sharing software.
The learning commons is a concept where a space is used as a place for connecting learners and constructing knowledge. These spaces are normally centralised, and includes several different functions such as areas for group work, individual study spaces, instructional rooms, computer pools, multi-media labs and soft seating areas.

Services can be provided for the students at the commons such as academic advisory, technology and media support and resources, writing, library research skills etc.

Example: http://canadianlearningcommons.ca/
A makerspace is a collaborative work space designed to facilitate exploring, learning and making using equipment, tools and materials. In a higher education setting, a makerspace is a hub for student to work on their study project or to have the access to indulge in their hands-on hobby. The makerspace phenomenon which started as a contemporary DIY subculture has pervaded higher education sector. There is vast potential in the use of makerspaces as a rich learning environment that encourages a multidisciplinary and independent learning approach to education and research that benefits society directly.

In the faculty of engineering, the makerspace consisted of different bays for student projects from different departments. There is shared equipment such as rotary drill that can be used by all makerspace users. In the future, more shared equipment such as 3d printers, laser cutters, soldering irons, power tools etc can be provided for student users. There are plans to build another makerspace in the faculty of Built Environment.

Examples: https://edtechmagazine.com/higher/article/2017/07/maker-movement-poised-thrive-higher-education
https://peer.asee.org/a-classification-system-for-higher-education-makerspaces.pdf
https://www.tandfonline.com/doi/pdf/10.1080/00048623.2016.1228163