How to Calculate and Report Room Utilisation

Colleges can use these instructions to calculate room utilisation from timetabling and attendance data. The process is designed to provide a consistent, repeatable view of how teaching rooms are scheduled and used across campuses, rooms and time periods. It was developed in partnership with the Space Utilisation Short life Working group using the space utilisation methods at Glasgow Kelvin College and Ayrshire College.

Measuring frequency of use, occupancy of use, and utilisation of different rooms are all crucial to helping colleges understand how rooms in their buildings are used.

Data requirements and definitions

Before calculating room utilisation, confirm that the following data sources are available and up to date:

- **Student and curriculum data** – courses, programmes, subjects, modules and enrolments.
- **Timetabling data** – teaching events, scheduled dates, start and end times, teaching weeks, rooms and campuses.
- **Room data** – room identifiers, room names, room capacities and site information.
- **Attendance data** – register records, student marks, confirmed attendance and exceptional attendance marks.

Calculation

Utilisation % = Frequency x occupancy.

Where:

- Frequency: a percentage of hours booked compared to hours available.
- Occupancy: a percentage of enrolment/room capacity.

For example:

- If a room is available for 40 hours a week but only has bookings for 20 hours, then the frequency is 50%.
- If the enrolled class is only 25 within a room with a capacity of 50, then the occupancy is 50%.
- Therefore: Utilisation is 50% x 50% = **25%.**

Calculating occupancy %

1. **Using timetable data,** count the number of students timetabled to attend each scheduled room, date and time slot. Calculate what this is as a % of the room's capacity. This is the **planned occupancy**.

   For example, if a class is timetabled to have 25 students attend, and the room has a capacity for 50 students, the planned occupancy is 50%.

2. Count the number of students recorded as present using **attendance data** marks. **Remember to subtract agreed exception attendance** due to closures, staff absence, adverse weather, industrial action or other exceptions Subtract this from the actual occupancy figure. **This is the actual occupancy.**

   For example, if a class is timetabled to have 25 students attend, but only 20 do, and the room has a capacity for 50 students, the actual occupancy is 40%.

3. Counting should take place in an agreed week at the start of term.

Calculating frequency

1. Teaching time slots must be standardised across all rooms and buildings in order to draw comparisons. Define the teaching day into consistent AM, PM or hourly slots so that all rooms are assessed on the same basis.
2. For each room, count the number of valid teaching slots in the reporting period. **Hours available** refers to all the possible standardised teaching time slots in a given period.
3. When any teaching event is scheduled to take place in a room in one of the standard time slots, that is **scheduled hours booked.** For each room, count the number of available slots where at least one teaching event is scheduled.

   If a room is available for 40 hours a week but only has bookings for 20 hours, then the frequency is 50%.

Checking the Data

Before sharing the report, complete these validation checks:

- Check that the academic year, date range and teaching weekdays are correct.
- Check that room capacities are populated and reasonable.
- Compare a sample of sessions back to original data to confirm room, date and time alignment.
- Check that utilisation percentages are not above 100% unless the agreed methodology permits overlapping events to be counted separately.
- Check that planned and actual attendance figures reconcile with attendance registers for a sample period.