



# **Consider the Current System**

***Relational Database Design***

# Session Outline

- How current systems can impact your database design

# Current System

- Often we are developing a database to replace or enhance an existing database
- Or, we could be creating it for an existing system
- We can get a lot of information from the current system to help us

# Questions To Ask

- There are many questions you can ask yourself, or others, about the current system
- Is there a current system?
- How is data stored for the current system?
- How well does it work?
- What are the problems with the current system?
- What is the data like?

# Data Problems

- A lot of systems with databases that need to be redesigned have bad quality data
- This is usually due to poor database design
- Data can be missing
- Data can be inconsistent
- Data retrieval and updating can be slow

# Designing from Scratch

- If you're designing a database from scratch, you don't need to consider the current system (as there is none)
- The benefits of a relational database mean that if it is well designed, it should have minimal data quality issues

# Using Historical Data

- If there is an existing database, that's where data will be stored
- But what about data that is not stored in a database?
- Historical data
- Does it need to be added?
- This could be definitions (such as people or subjects or products) or it could be transactions (enrolments or sales)



# Summary

- Existing systems should be considered when designing a database
- They can tell you what is currently being stored and what isn't
- They can have their own problems – data missing, inconsistent
- Historical data may need to be considered



# Actions

1. Find out if there is a current system or database
2. Find out what the problems are with the current system or database
  1. Data quality
  2. Data missing
3. Ask if there is any historical data that may need to be added to the database

# What's Next?

- How to gather the requirements for a database