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## Getting Your Data Right for Learning Analytics

Jisc Learning Analytics Network Panel November 23<sup>rd</sup>, 2017

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# Better, Good Enough Getting Your Data Right for Learning Analytics





## Issues



#### Idea #1: Legacy

## Well... if I was going there, I wouldn't start from here at all

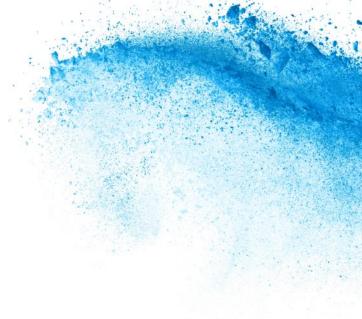
## **Examples: Legacy**

- Joining data in new ways identifiers for core entities
- Systems store data for what they were built for Are they storing what is pertinent to LA? Is history preserved?
- Useful data is off-grid
- Data may not be timely Formal process or working practices may cause delay

## Idea #2: GIGO Meets Rumsfeld

There is data we know is not garbage

There is data we know is garbage



BUT

There is garbage data but we don't know it is garbage

## **Examples: GIGO Meets Rumsfeld**

- Quality derives from valued process
- IT systems are used in unexpected ways
  - (but usually someone knows about this)
- "Right" is not easily spotted
  - (or even defined)
- An analyst, developer, or data scientist who asks no questions, or finds no garbage, is almost certainly processing unknown unknowns

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## **Tactics and Strategies**

## Things to do now (or soon)

 Make sure someone takes a critical-analytical view on data who has:

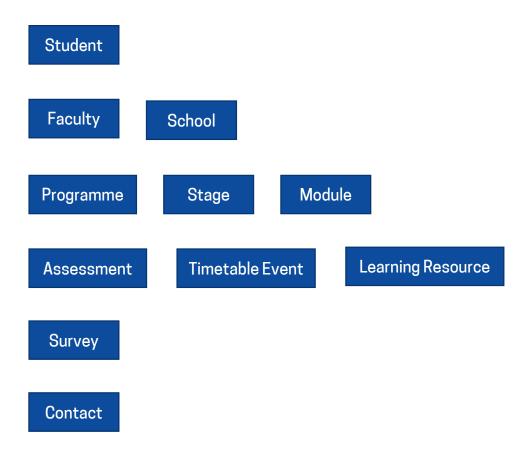
Good attention to detail Domain knowledge

- Secure access to expert knowledge
  Someone who knows what the data means in each system
- Plan for an iterative approach
- Create/use good written data definitions (and improve them)

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A data warehouse project would start to address this post-facto, but you don't need to wait...

## **Think About Data Architecture**



A simplified representation of the core concepts and their relationships\*.

For each IT system, consider what it covers, and the extent to which its data could be related to other systems.

Could any low cost changes or practices help to join things in?

e.g. consider a "careers application" not only as such, but also as a participant in a data economy

#### \* - relationships not shown

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I'm always happy to receive questions, even if you were not present at the meeting where this presentation was given.

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