# Social Interaction

**IF3151 Human Computer Interaction**

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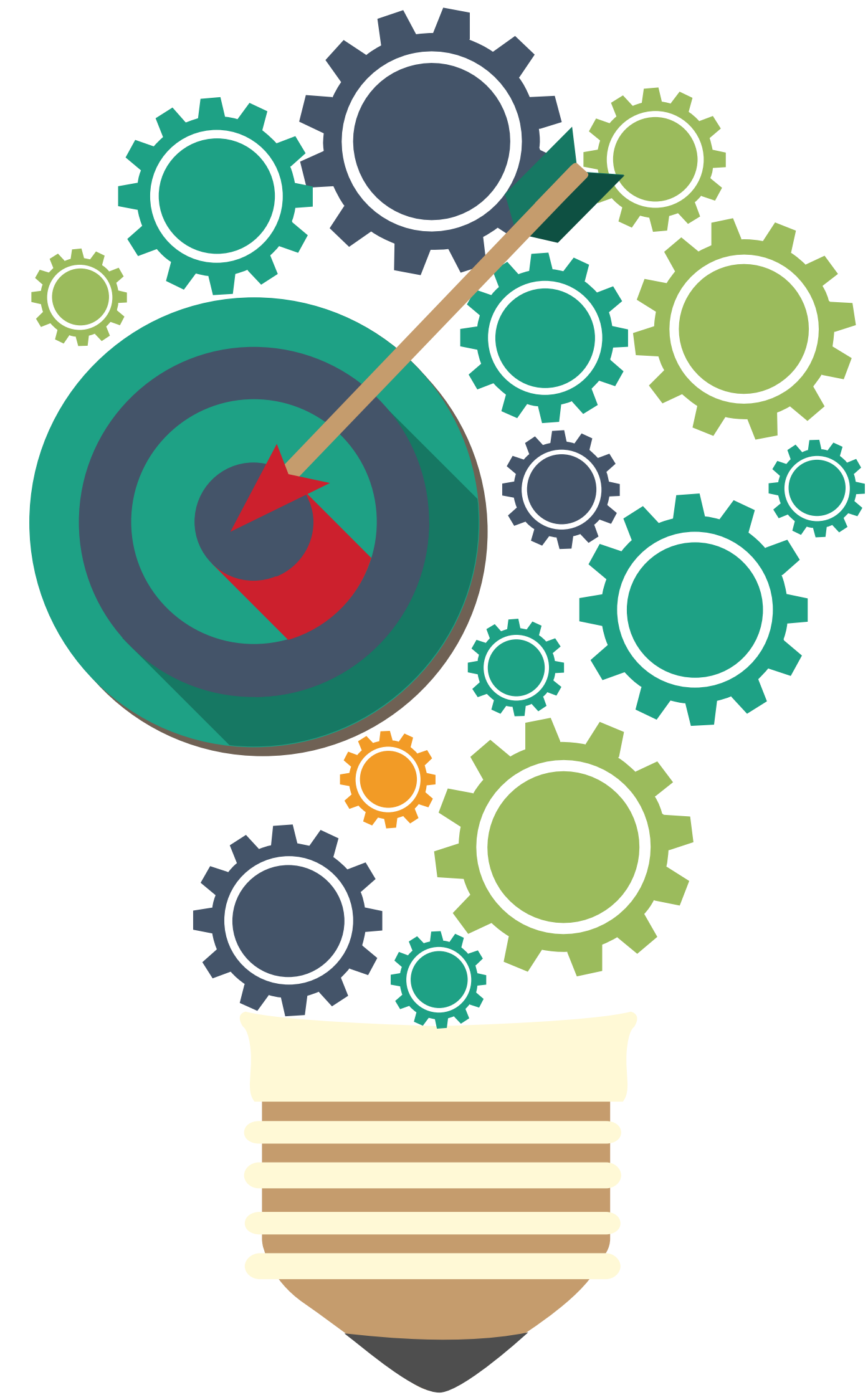
# Overview

**1**

What is social interaction?

**2**

What is social presence?

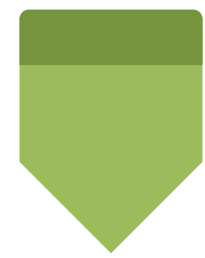**3**

Overview of technologies

**4**

Social engagement

# Social Interaction

We live together, work together, play together, talk to each other, and socialize

Social technologies developed to enable us to persist in being social when apart

- They differ in how they support us
- Some encourage social interactions (for example, family games with Alexa)
- Others have a negative impact on everyday conversations (Turkle, 2015)

# Are we spending to much time in our own digital bubbles?

# Conversational mechanisms

Various mechanisms and 'rules' are followed when holding a conversation face to face, such as mutual greetings

A: Hi there
B: Hi!
C: Hi
A: All right?
C: Good, how's it going?
A: Fine, how are you?
C: OK
B: So-so. How's life treating you?

# Conversational rules

Sacks et al. (1978) conversation analysis of conversations propose three basic rules

**Rule 1**: The current speaker chooses the next speaker by asking opinion, question, or request

**Rule 2:** Another person decides to start speaking

**Rule 3:** The current speaker continues talking

# More conversational rules

Turn-taking used to coordinate conversation

A: Shall we meet at 8:00?
B: Um, can we meet a bit later?

A: Shall we meet at 8:00?
B: Wow, look at him?

A: Yes, what a funny hairdo!
B: Um, can we meet a bit later?

Back channeling to signal to continue and following
- Uh-uh, umm, ahh

# Further conversational rules

## Farewell rituals
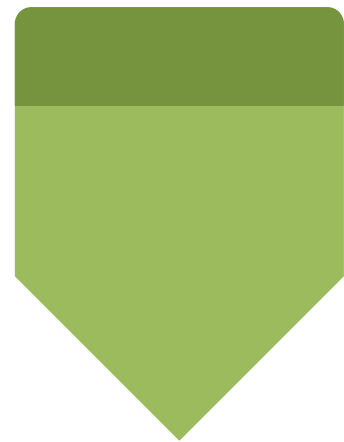- Bye then, see you, yeah bye, see you later….

## Implicit and explicit cues
- For instance, looking at watch or fidgeting with coat and bags
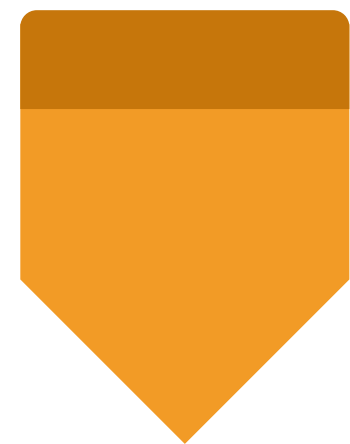- Explicitly saying, "Oh dear, look at the time, I must go, I'm running late…"

# What happens in online conversations?

Do the same conversational rules apply?
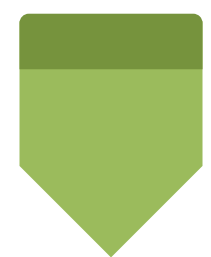
Are there different kinds of breakdowns?

How do people repair them for:
- Email?
- Chat?
- Texting?
- Video conferencing software?

# Telepresence and Social Presence

*Telepresence* refers to one party being present with another party, who is present in a physical space, such as a meeting room

*Social presence* refers to the feeling of being there with a real person when in virtual reality

# Telepresence robots



Susan Lechelt at ACM CHI

Enable people to attend events who could not do so, such as by controlling their robot remotely

- In places such as schools, conferences, and museums
- Early example: Beam+
- Often dressed up to appear like the person to others at the event
- Positive experience of being there

# Social presences



Facebook's vision of socializing in a 3D world using VR

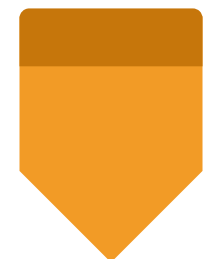Two avatars talking at a virtual table

Users experience each other through donning VR headsets

# Coordination mechanisms

When a group of people act or interact together, they need to coordinate themselves

- For example, when playing football or navigating a ship

To do so, they use:

- Verbal and non-verbal communication
- Schedules, rules, and conventions
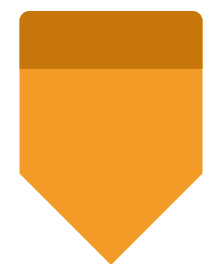- Shared external representations

# Coordination mechanisms (face to face)

○ Talk is central

○ Non-verbal also used to emphasize and as a substitute
  - For instance, nods, shakes, winks, glances, gestures, and hand-raising

○ Formal meetings
  - Explicit structures such as agendas, memos, and minutes are employed to coordinate the activity

# Shareable Interfaces

Designed to capitalize on existing forms of coordination and awareness mechanisms

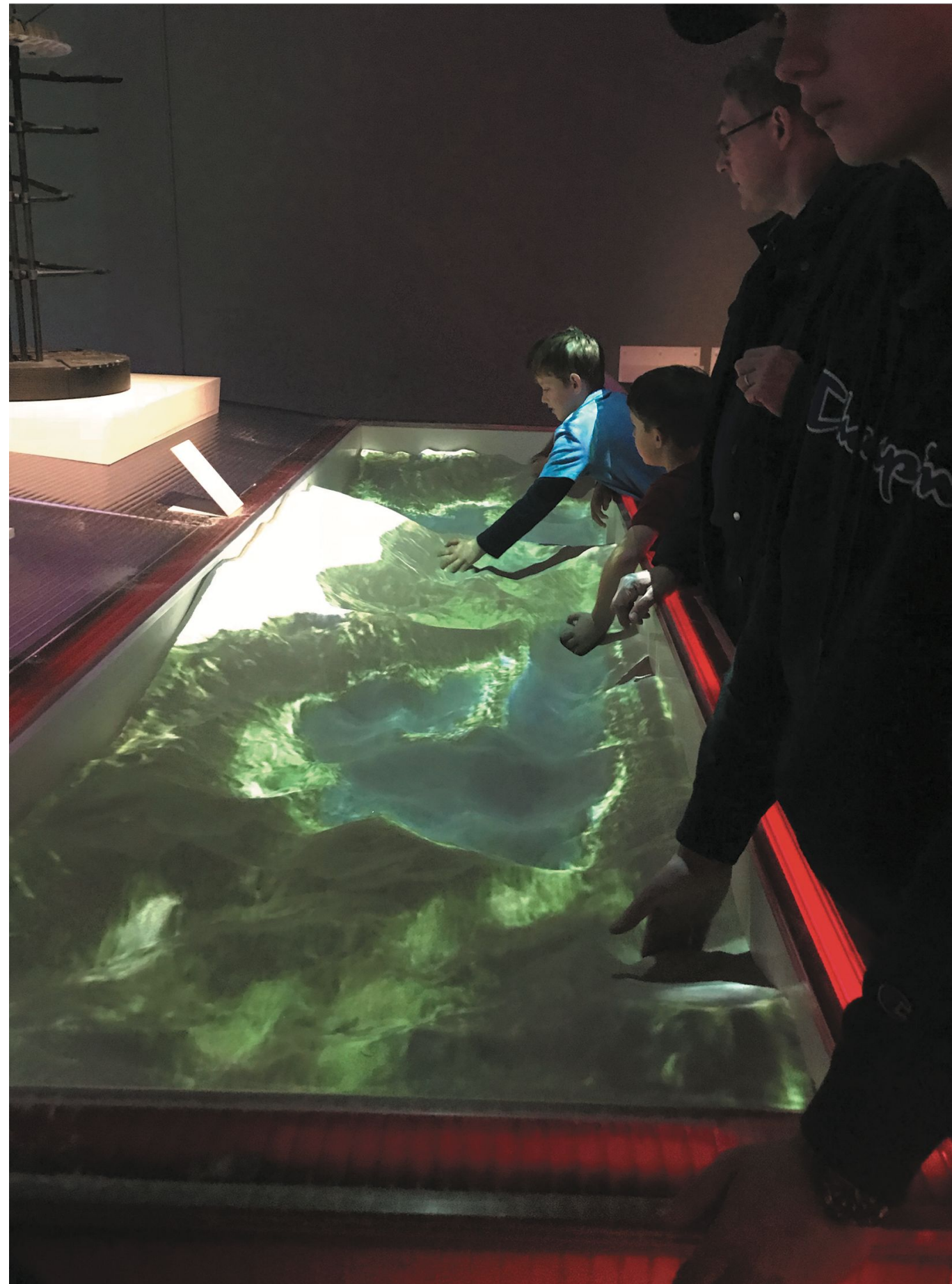Several studies investigating whether they help people to work together better, have found:

- More equitable participation
- More natural to work around
- More comfortable sitting around a table than standing in front of a display

# Some examples



Sococo floor plan of a virtual office: who is where and who meeting with whom

# Some examples



Playing together in same space using AR

- Visitors using an AR sandbox at the V and A

- Visitors sculpt landscapes out of sand

- System reacts with changing superimposed digital colored landscape

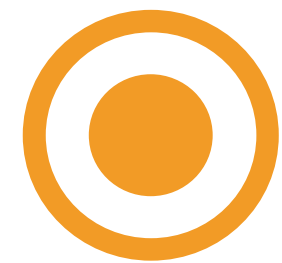- Enables creative forms of collaboration

# Social Engagement

- Refers to participation in activities of a social group
- Social exchange where people give or receive something from others

- Voluntary, unpaid and often altruistic (in the sense of sharing and doing good for others)
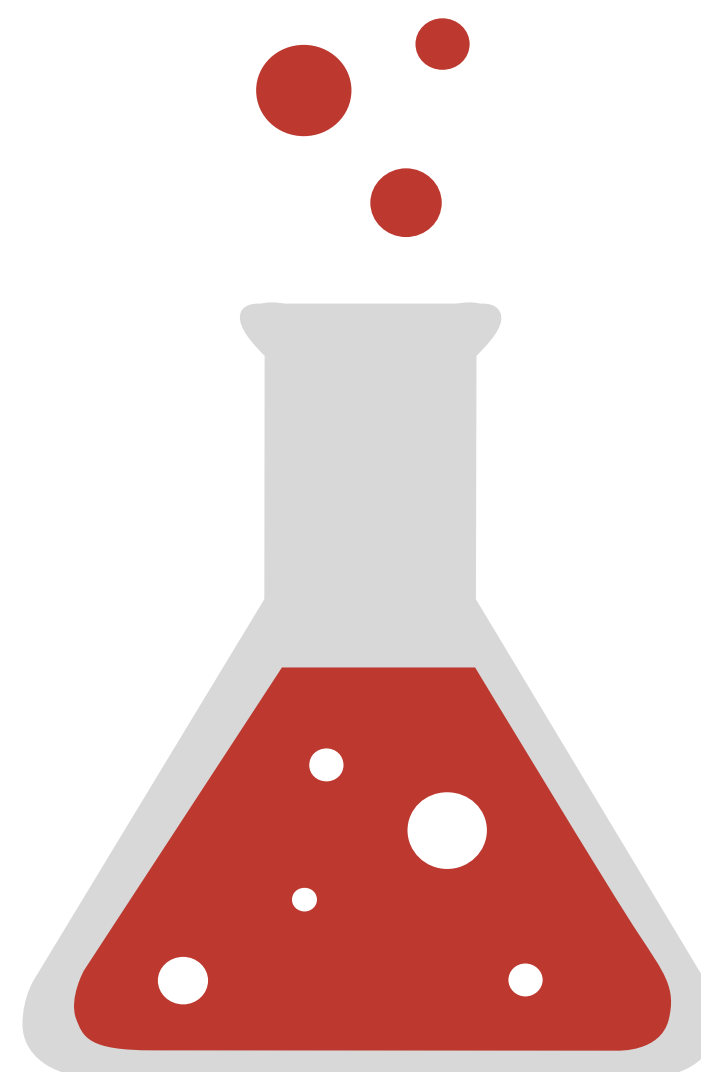
- Websites often used as hub to connect people
- Retweeting is a powerful way of connecting millions of people

# Retweeting goes viral

- The epic Twitter battle between Ellen DeGeneres and Carter Wilkerson

- Millions retweeted in the space of hours

- Connected millions of people for a fun cause

- Many people found it amusing to join in and watch the numbers grow

*Creativity is the key to success in the great education*

# Terima Kasih

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