

Using Mobile Technologies and Video Sharing to Engage Students

Stephen McClean

School of Biomedical Sciences
University of Ulster

s.mcclean@ulster.ac.uk

twitter.com/PlanetChemistry



BMS105 Introductory Chemistry

- Chemistry 'service teaching' module
- Provides foundational chemistry for further study in biochemistry, clinical biochemistry, molecular biology etc.
- Taken by students in Biomedical Sciences, Human Nutrition, Food and Nutrition, Dietetics & Biology
- 140 in 2007/08; 138 in 2008/09; 177 in 2009/10; 117 in 2010/11

Text Messaging for Communication

“Please switch ON your mobile phone!”

Send a message / question to

07950080268 starting with **hucbms**

Communication

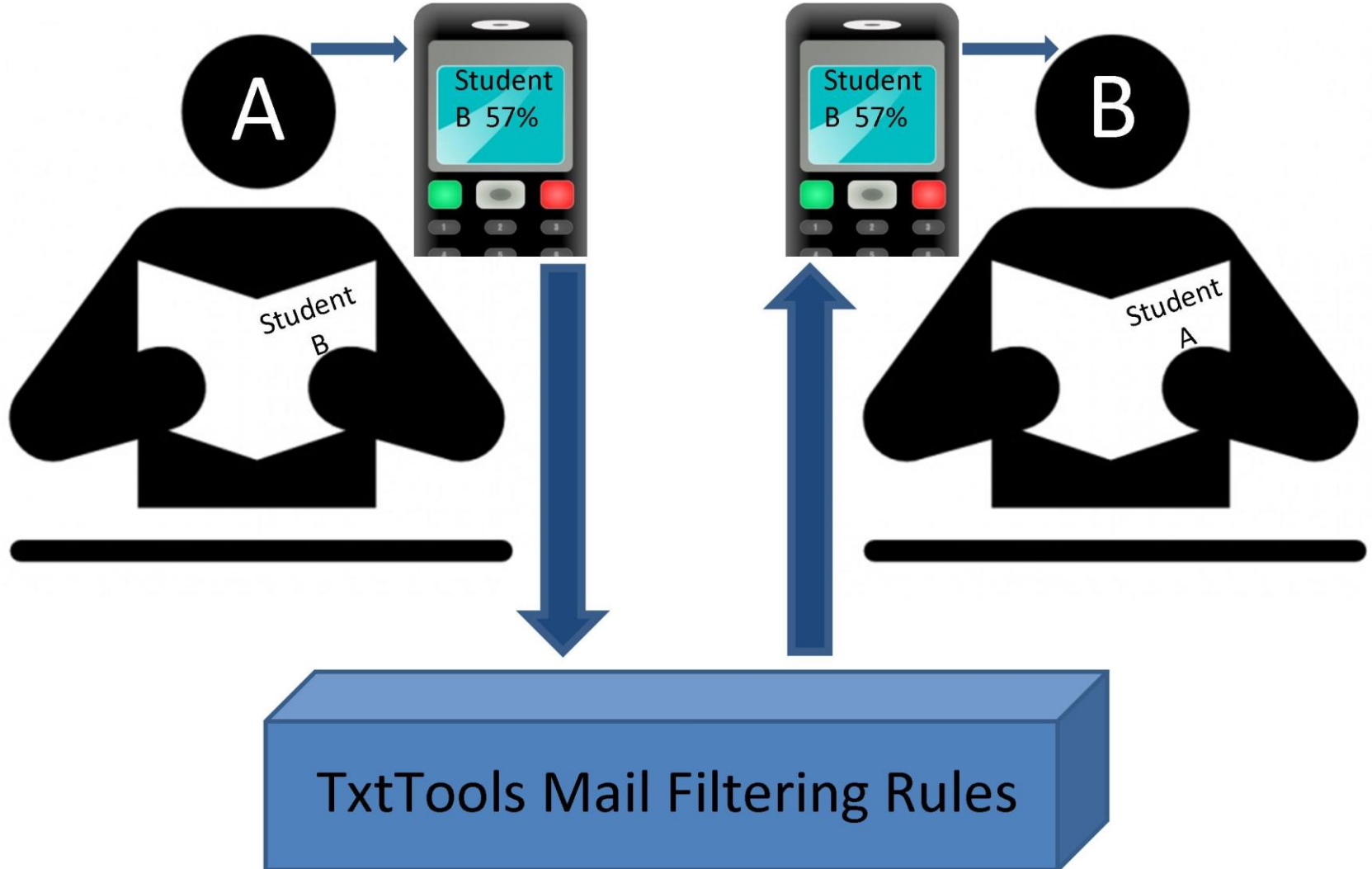
- Two-way communication; staff - student - staff
- Students may text questions during lectures
- Email to text and text to email function
- Bulk mailing to address book of contacts
- Mail merge allows personalised information to be included in bulk texts
- Mail filtering rules may also be used

Enhancing Feedback

- Peer assessment of written class tests (n=200)
- Student A anonymously marks Student B's test paper and assigns a mark
- Student A sends a text message to the dedicated text number starting with Student B's student number followed by the mark eg "B0012345 57%"
- The mark is then delivered via the online address book to Student B's phone.

Student A marks Student B's paper and sends result via text message to the TxtTools number

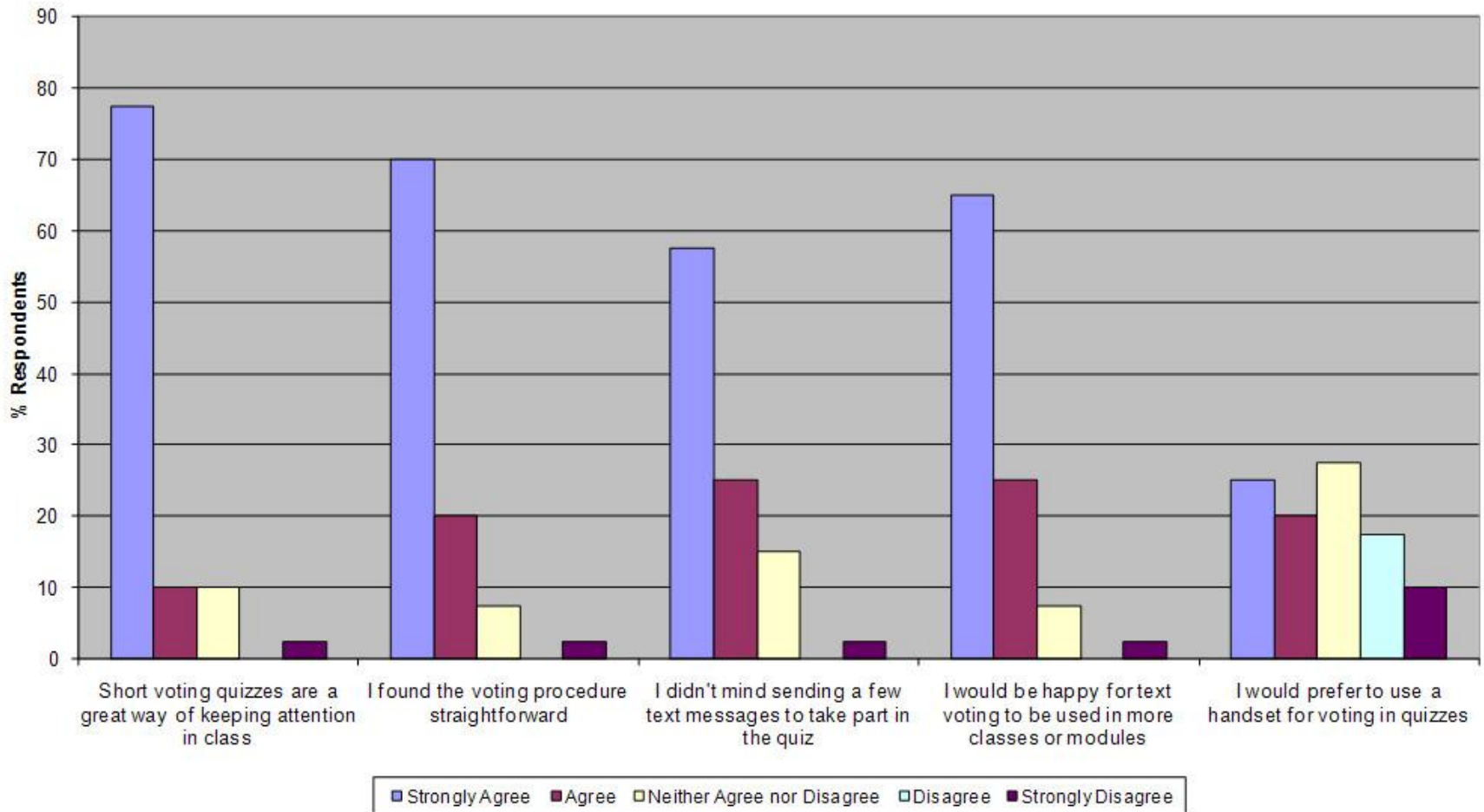
Mail filtering rules based on Student B's ID number deliver the text to Student B's phone



Voting / Quizzes

- Student text responses to in-class quizzes
- Pie-chart of responses may be generated
- No need for a separate voting handset
- Is not restricted to students just in the lecture theatre

Student Responses to the Use of In Class Voting via Text Messaging



Reflections

- Powerful and rapid communication tool
- Utility beyond a uni-directional channel



Text Messaging for Communication

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More about the project here: <http://bit.ly/g5aZUq>

Student Engagement in the Lab

I hope he read the protocol before lab because I didn't!

I hope she read the protocol before lab because I didn't!



Student Engagement in the Lab

- Social interaction was recently highlighted by students as one of the better features of university laboratory classes
- Students claim they sometimes do not see the relevance of practical sessions
- Practicals are time & resource-intensive teaching sessions
- *How can we add value to the lab experience? Can we “extend the lab experience?”*

Collis et al 2007 Report: The Student View of 1st Year Laboratory Work in Biosciences. Centre for Bioscience.
Collis et al 2008 Bioscience Education electronic Journal, volume 11.

You  **Tube**

Broadcast Yourself



TestTube.com

an online science video resource

Materials & Methods

- 3 x Canon FS11 Video Cameras
- 1 x Toshiba Laptop
- 1 x Webserver [i](#)
- Vidiscript.com software (to make You Tube clone site)
- Video conversion software (www.any-video-converter.com)
- Domain name (YouTestTube.com)
- 160+ eager year-one students



Materials & Methods (continued)

- Students (in groups of 3 or 4) make a short (10 minutes duration) video about their practical
- A “reflective prompt” sheet is provided to each group as to what should be included in the video
- Final video is published “uncut” onto the YouTestTube.com website

Materials & Methods (continued)

- Students “join” the Chemistry Practicals Group on YouTestTube.com
- Students may then view, rate & comment on their colleagues’ videos
- Students may ‘make friends’ as part of the social networking aspect of the site.
- A prize for the most ‘Popular’ and ‘Highly Rated’ videos. A few coursework marks are also awarded for engagement

Reflective Prompts

- What is this practical all about?
- What skills have I developed?
- How does this practical tie-in with the lectures?
- How will this be important for other parts of my course?

Reflective Prompts

- What parts of the practical were difficult?
- What was most/least enjoyable about the practical?
- If someone else was about to conduct this experiment; what advice (about the practical) would I give them?

Home

Top Rated

Popular

Members

Groups

Log Out

Upload



Newest Members

[more members >>](#)



Latest Media



office

office

views: 4

Not rated yet



The Biomed Christmas Factor

Our Christmas Sin...

views: 102



Benzophenone BiomedPharmBio Video 2

Made by Declan, D...

views: 115



Benzophenone BiomedPharmBio Video 1

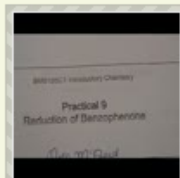
Made by Amy, Stac...

views: 57



Benzophenone Nutrition Video 2

Made by Caoimhe, ...



Benzophenone Nutrition Video 1

Made by Orla, Joa...



Ethyl Ethanoate BiomedPharmBio Video 2



Ethyl Ethanoate BiomedPharmBio Video 1

Menu

Logged in as smclean

- **Account Management**
- Inbox : 1 (0 new)
- Outbox : 3 (0 unread)
- My Friends : 13
- Received Requests : 10
- Sent Requests : 0
- Blocked Members : 0
- Subscriptions : 0
- Favorites : 0
- My Media : 40
- My Groups : 2
- My Profile
- History
- Profile Views

Admin Menu

- **New Uploads (1 New)**
- Manage Media
- Manage Users
- Manage Video Ads
- Manage Site Ads
- Manage Categories
- Manage Email Text
- Manage Menus
- Bad Words Filter
- Site Settings
- Buy & Manage Extras
- VidiScript Forums

But Was it Any Good...?

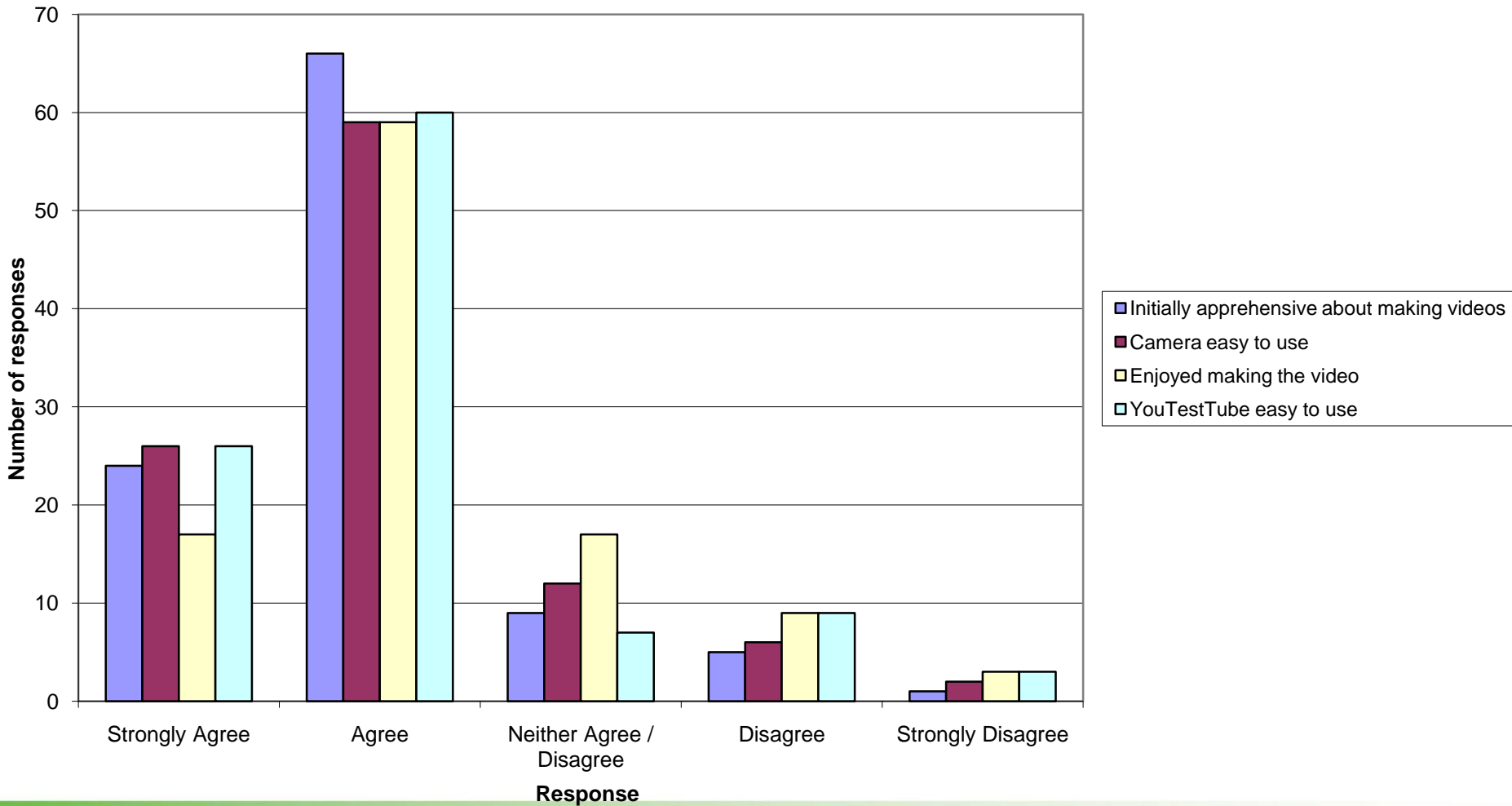
- Feedback received from students via anonymous questionnaire
- Via staff-student consultative meetings
- Via evaluative comments when completing their assignment on “The YouTestTube.com Experience”
- Feedback from the Ed Wood Award (Bioscience Teacher of the Year) process in 2009/10

Evaluation Statements 2008/09 Academic Year

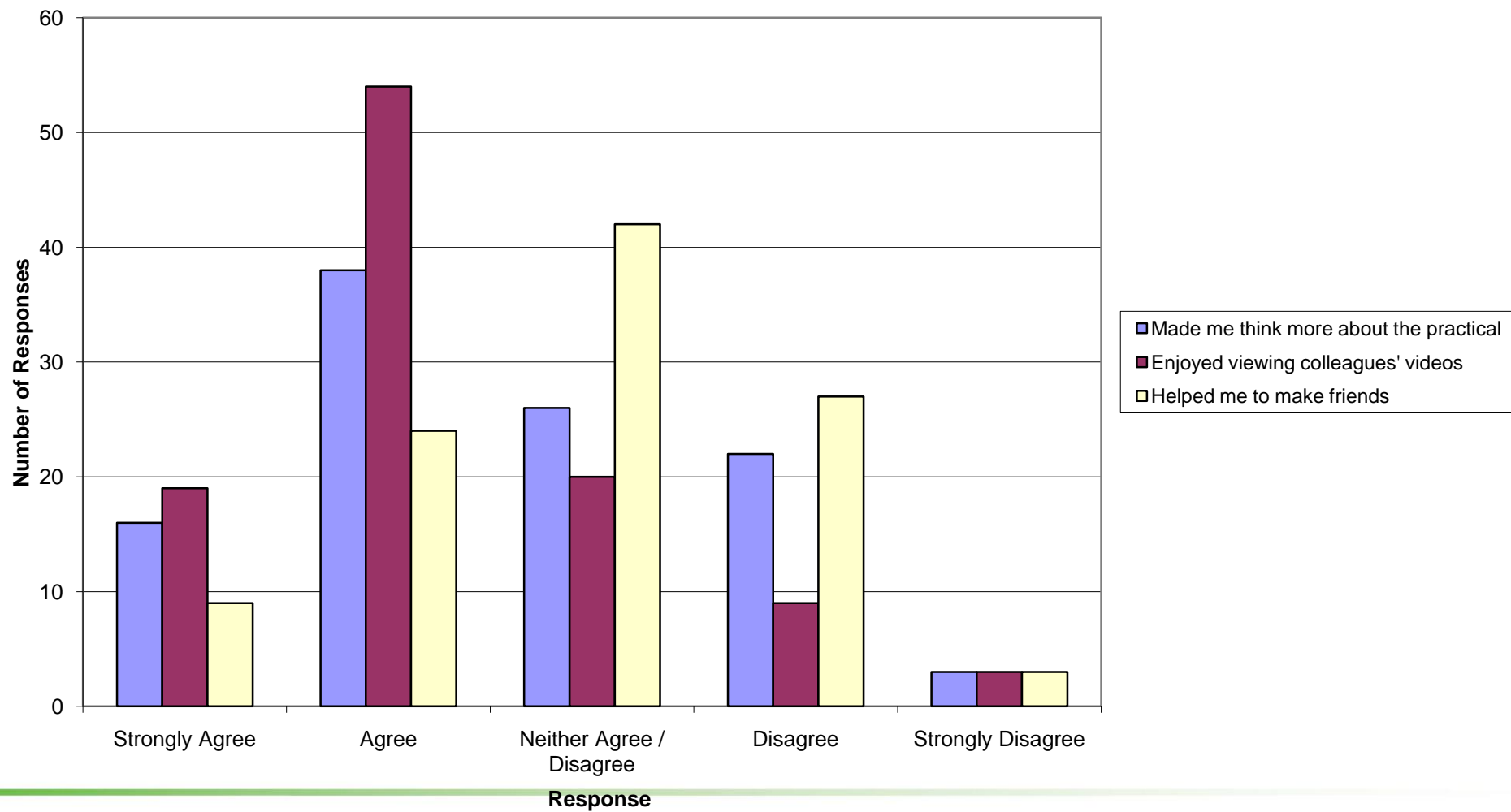
Total respondents n = 105

<i>Evaluation Statements</i>
Were You Initially Apprehensive About Making Videos?
Was the Camera Easy to Use?
Did You Enjoy Making Video?
Did the Process Make You Think More About the Practical?
Did You Enjoy Viewing Colleagues' Videos?
Did You Find the YouTestTube Site Easy to Use?
Did the Exercise Help You to Make Friends?

Student Responses to Technical Aspects of the YouTestTube.com Project



Student Responses to Reflective Aspects of the YouTestTube.com Project



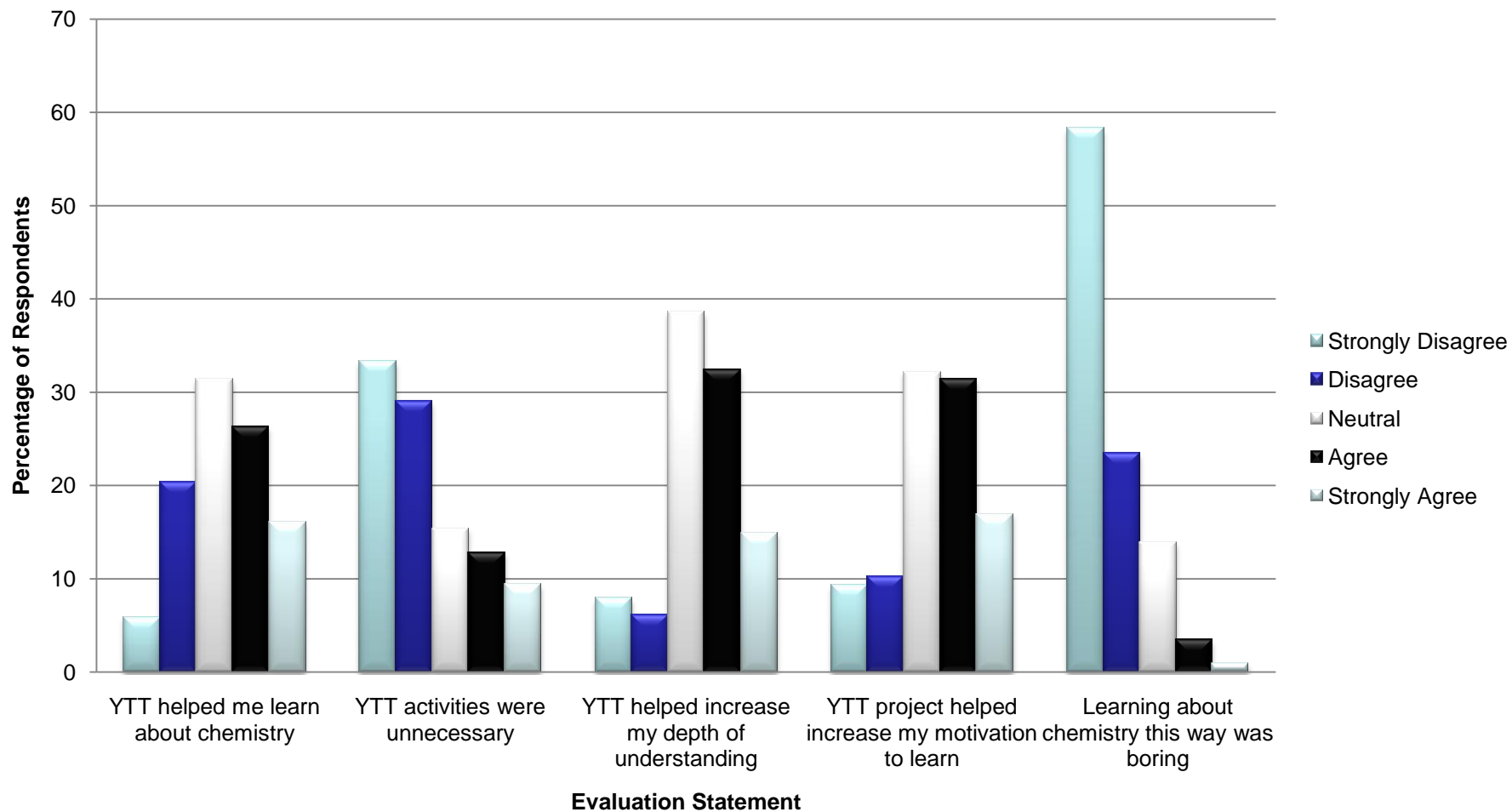
Comments from 2008/09 Cohort

“Good way to make friends within class.”

“www.youtesttube.com is a great way to interact with the class as well as learn from the practicals completed throughout the semester. it is a great idea!”

“Found youtesttube.com to be quite useless. Although it was good craic making the videos i still dont see the need for it at all!!!” (‘craic’ = ‘fun’)

Student Evaluation of Reflective Video Impact on Learning



Comments from 2009/10 Cohort

“It was very helpful when doing the practicals. I watched the videos first and then when i went to the lab it was much easier.”

“..was a great way of finding out information about the practicals and after viewing some of the videos I was able to carry out my practical more (confidently)”

Feedback in the 2009/10 Year

- Some students (panel group and surveyed) would have liked to view the previous year's videos.
- Student panel members were hesitant to provide critical comments in a public forum but said if they privately viewed a video they would.

Feedback in the 2009/10 Year

- Students wanted to protect the **‘fun’ aspect** of the exercise since an assessed video would become more of an exercise about **‘getting it right’**.
- Only a few of the surveyed students listed **reflective skills** as an identified skill learnt.
- *First year students did therefore extend the practical experience.*

UK Centre for Bioscience Case Study Concluded:

“The YouTestTube reflective videos successfully served many purposes: social function, engaged learning, and use of reflective practice to both inform current understanding and future work.”

(Meskin, S; 2010)

Read More About YouTestTube

JISC – Emerging Practice
in a Digital Age

www.jisc.ac.uk/digiemerge



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www.ulster.ac.uk/star



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