Building your technology map: an alternative approach

How technology can help

When you work in a group, you need to think about the different tasks you will need to undertake, and plan how you are going to tackle them. For example, throughout the project, you need to keep in touch with all members of your group. While you are on-campus, this can be done face-to-face by meeting during classes or arranging to get together at other convenient times. You might agree to follow up with each other outside of university agreeing on a space to do this. All members of the team should consider each other's personal circumstances. Some members may commute to university or have caring/paternal responsibilities meaning that in-person meetings outside of university hours are not convenient.

This is where the use of technology can benefit all members of the group enabling them to engage in communications asynchronously as well as online in real time. As well as using email, you have an increasing choice of apps and groupchat facilities. These include WhatsApp, Discord, Snapchat, Facebook Messenger, Twitter group messages, and Microsoft Teams. It is important for all members of the team to agree on the communication channels you will use for your group, to ensure they are accessible to everyone.

Specific benefits

Learning to use technology confidently and appropriately to support groupwork is a key workspace skill. In work you will be expected to communicate and collaborate effectively both in-person and online. Utilising technology that is used in the workplace will give you the opportunity to become competent and confident using these tools. The capability to work across time and space has become increasingly more important in the workplace with an increase in homeworking and/or the need to interact globally with international clients or business partners. For a very readable discussion of the ways that many organisations are redesigning work in order to meet these new challenges, see Gratton (2022).

A key issue we hear from students when working in groups is limited interactions because they have different work schedules or outside commitments. Learning to use a range of technology both in real time and/or asynchronously can be useful. Keeping a record of what you have planned and what you have created is also very important. You can use technology to support both the process (communication) and the product (the group assignment and team outputs). Interactions online can be saved and referred back to. Taking time to discuss contributions and to coordinate efforts will ensure that everyone's contributions are considered and neither ignored nor duplicated.

Your ultimate goal is to work towards an assignment which meets the deadline. Working together to set tasks and milestones for completion can be monitored using technology. Consider how you will take individual accountability for the tasks you are responsible for. Use alerts on your calendar as a reminder to complete the work by the set deadlines.

How to decide what to use

You can use a range of technologies to support your studies and groupwork. These technologies include the systems which your University or College has invested in such as the VLE through to all the apps and software on your laptop, tablet and smartphone. Your group needs to decide which combination of these technologies you are going to use. For example, if you rely on University systems, will everyone in the group have equal access to these when they are off-campus?

We recommend that you discuss and agree your technology map at the start of *every* project. Technology develops very quickly these days so you might find useful new software which was not available last semester, or even last week. If you have a large group and need to split into small sub-groups for a while, this is easier in some software. For example, we have recently used Wonder.me for our group meetings as an alternative to Zoom or Teams. At the time of writing this article (March, 2022) we are looking at announcements about Microsoft Loop which claims to offer "an entirely new way to work together – designed for the hybrid world." (https://www.microsoft.com/en-us/microsoft-loop?ms.url=microsoftcommicrosoft-loop – last accessed, 6/3/22). An important feature of this new system is the way that it keeps documents up to date.

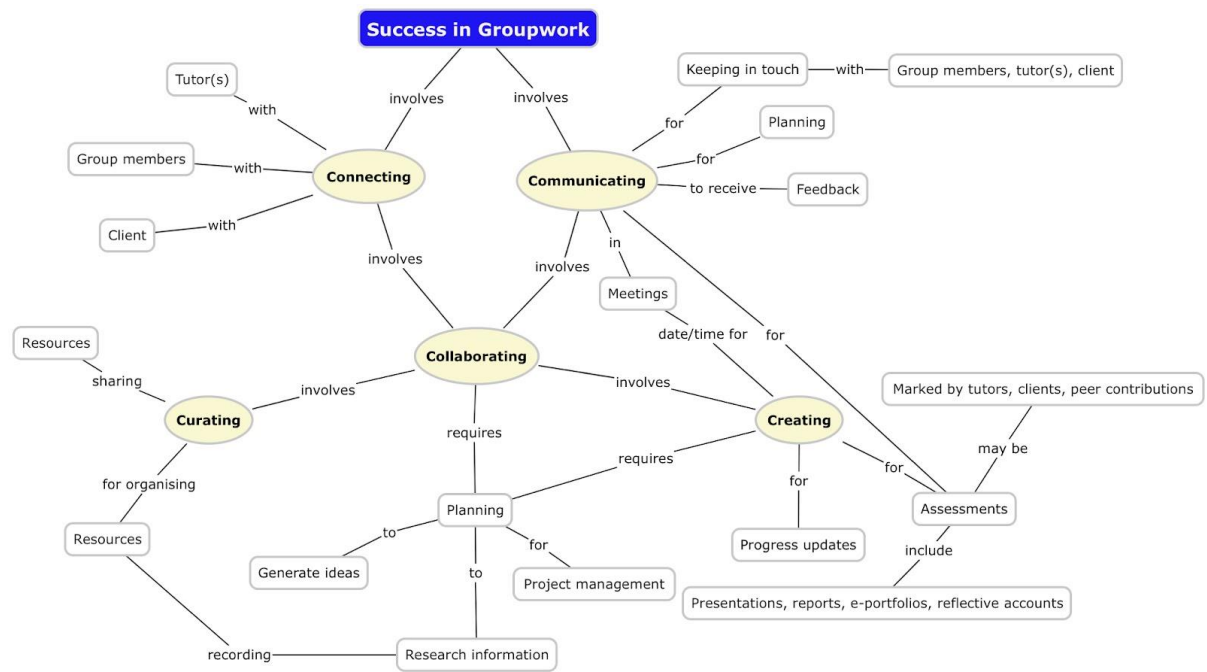## *The approach we introduce in the book*

The technology map presented in the book provides a list of key steps you will undertake when working in groups. It is useful to start by reviewing the systems your university provides, but then discuss with your group members any alternative systems or apps which are available. You may have a suggestion that is new to the group. Taking responsibility to demonstrate the tool, and explain the benefits of using this for groupwork, can demonstrate your leadership skills. You can download a blank version of this table on this website.

An alternative approach

Here is another approach you can use as a starting point.

The 5 Cs

Consider the 5Cs: connecting, communicating, curating, collaborating and creating, as specified below. These are important in all/any project work. The concept map below gives you the 5Cs in a diagram and there is also a table you can use.

Success in Groupwork

Connecting
- Tutor(s) — with — Connecting
- Group members — with — Connecting
- Client — with — Connecting

Success in Groupwork — involves — Connecting
Success in Groupwork — involves — Communicating

Communicating
- Keeping in touch — with — Group members, tutor(s), client
- for — Planning
- for — Planning
- to receive — Feedback
- in — Meetings

Connecting — involves — Collaborating
Communicating — involves — Collaborating

Meetings — date/time for
for

Curating
- Resources — sharing — Curating
- Curating — involves — Collaborating
- Curating — for organising — Resources

Collaborating — involves — Creating

Collaborating — requires — Planning

Creating
- Marked by tutors, clients, peer contributions
- Creating — for — Assessments
- Assessments — may be
- Creating — for — Progress updates
- Assessments — include — Presentations, reports, e-portfolios, reflective accounts

Planning — requires — Creating
Planning — to — Generate ideas
Planning — for — Project management
Planning — to — Research information

Resources — recording — Research information

Using the 5Cs - in table format

Using the 5 Cs	What your group will do	Technology	Things to consider
Connecting	Make connections with group members, tutors, clients. Keeping in touch.	Email, text, chat groups and social media	What is the preferred space for your group to connect? Are you happy to share personal phone numbers?
Communicating	Schedule meetings, plan, Q&As, receive and act on feedback	Organising meetings e.g Doodle, Google Calendar. Online meetings e.g. Skype, Zoom, Google Hangouts, VLE web conferencing, discussion boards	When it is hard to meet face to face, what online space is most accessible and reliable in your context?
Curating	Gathering, organising and sharing resources	University Library search and databases or Google Scholar. Social bookmarking tools e.g. Diigo. Curation tools e.g. Padlet, Pinterest, Wakelet, YouTube playlists.	Choose the tools that align with what you are intending to curate.
Collaborating	Generating ideas, planning, project management, storing and editing.	Concept and mind mapping tools, collaborative tools e.g. Trello, Slack, Microsoft Teams, Google Drive.	How easily can you access these via mobile devices? What will you need to keep long-term after the project?
Creating	Preparing drafts for walk throughs/progress checks and what's required for assessment	Shared working spaces e.g. Google Drive, Office 365. Presentation software e.g. PowerPoint, Google slides, Prezi, Powtoon. Poster software e.g. Publisher, Canva, Piktochart, ThingLink. E-portfolios and reflective spaces e.g. PebblePad, Mahara, WordPress.	What will you have to produce for the assessment? How will you evidence peer contribution? Where will you gather reflections during and post project?

And finally

You should always:

- Critically evaluate *both* the spaces you use and the information you gather.
- Identify what was most useful in the apps/software you used (and anything which did not help).

If you have to write a reflective account of the project this could be a useful addition.

Reference

Gratton, L. (2022) *Redesigning Work: How to transform your organisation and make hybrid work for everyone.* Penguin Random House.