

**Department of Digital Humanities**

**University of College Cork**

**Declaration of Originality**

**DH6013: Getting Started with Graduate Research and Generic Skills**

Assignment: DH6013 Final Portfolio

Lecturer: Mike Cosgrave

In submitting this assignment, I confirm that all of the submitted materials are entirely my own original work, except where clearly attributed otherwise, and that it has not been submitted partly or wholly for any other educational award.

I hereby declare that:

- this is all my own work, unless clearly indicated otherwise, with full and proper accreditation;
- with respect to another's work: all text, diagrams, code, or ideas, whether verbatim, paraphrased or otherwise modified or adapted, have been duly attributed to the source in a scholarly manner, whether from books, papers, lecture notes or any other student's work, whether published or unpublished, electronically or in print.

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Date: 1 Jan 2026

## **Prompt:**

### **Discussion: What is Research?**

I'm going to start it off with some I think reasonably accessible presentations of material that could be quite heavy: What is the nature of knowledge? how do we know about reality? What are the different philosophical approaches to discovering or creating new knowledge?

So of the two readings one is very much presented as a textbook, and the other is more of a humanities style piece of writing. Pick which ever one you prefer, read through it noting which of the various approaches to research you most or least like. What we are trying to do here is get some idea but what approach to research you are most comfortable with: this, down the road, may affect which research methods you find most useful or interesting.

So by, say Saturday night, I'd like you all to contribute a short reaction to the ideas that you find in the Reading: it does not have to be complete sentences it can be bullet points. It may simply be a list of things which you agree with, disagree with, or find unclear, with, hopefully, a brief note of why.

## **Response:**

This week, I thoroughly read about "*ResPhilosophies*" (Saunders, Lewis and Thornhill, 2019) in this article I have some views:

Positivism prefers to use data and graphics to support some views, and it holds that there should be a maintenance of "value-free". However, in my opinion, I think this is very difficult to achieve, because in the research topic selection and the research interview, there is a researcher's subjectivity. So I think it's so difficult to achieve true positivism.

I'm just a little confused about positivism's value-free, and how we should understand true objectivism?

Interpretivism is more subjective, through the article's example, just through a telephone interview, and a certain of employees' experiences to conclude that Japanese companies have problems, but I believe that there are many factors influence people's emotions, such as salaries, welfare, and colleagues' relationships...this research is too subjective, I don't agree with it.

I like critical realism, because it focuses on multi-dimensional thinking and

interpretation of issues, rather than just focusing on humans' emotions or things' structure.

I think Pragmatism is very flexible, and it can be adapted to different research questions, making it practical.

I prefer to use mixed methods, through quantitative and qualitative research to comprehensive understanding of the research content, and the conclusion of the research will be more perfect and persuasive.

About axiology, maybe I should carefully consider what exactly I want to research and what I want to express. I think this will be a huge work.

### **Prompt:**

#### **Discussion: Seeking I**

This week there are several things to do:

1. Think about how you search for information on the web now - make some notes.

Then

2. Read two of the Biddix, Head or Colon-Aguirre articles and, compare what they have discovered to your experience - how is it different? what can you learn from these articles. These are now based on older research - how in your experience has searching changed since then? **Comment briefly. Aim to do this by Monday.**

**3 Important - say clearly what your topic of interest for searching is, and also name two other topics. List these three clearly please - I will need these to sort people into groups for the collaborative writing groups which I hope to organise very soon.**

**4. Find 10 items on your topic; capture full citations please and list them here. include a range of sources - academic and non-academic papers, powerpoints, youtube videos etc. Be creative! DO NOT USE AI! Next week we will look at how we can use AI tools to search, and compare the outcomes.**

For academic sources, use Google Scholar or the UCC Libraries OneSearch (on the front page of the library)

Consider creating a free Zotero account and capturing your search results in that.

### **Response:**

## **How I search for information on the web?**

I will clear my search theme and goal before searching for information, which will improve my study efficiency. When I studying in China, I primarily use academic databases like China National Knowledge Infrastructure (CNKI), and China Science and Technology Journal Database (CQVIP), meanwhile, I also tried to use Google and YouTube to research some information before, but since I needed a VPN, so I mainly depended on Chinese local academic databases. Interestingly, I just found out that I can't access CNKI, because I'm abroad now... which reminds me that sometimes academic resources can be restricted by region. In practice, I usually search by keyword and like to filter the results by date. In my opinion, I think that materials older than 15 years are less valuable, especially in the digital arts areas, because these developments and changes are so rapidly, so I prefer more recent research results.

## **Reading**

For the reading, I chose the Biddix and Head. Both Biddix et al. (2011) and Colón-Aguirre & Fleming-May (2012). The former mentioned that college students often want to use the Google search engine, because it is very convenient, even though they know that academic databases are more academically reliable. The latter found that undergraduate students prefer to use Wikipedia as a starting point in information, because it more quickly and simply help them understand a topic.

Compared with my experience, I also tend to pursue efficiency when searching, but the difference is that when I studying in China, I more depend on local academic databases. Like the students in the article, I also will use Google or YouTube to supplement my learning, but due to VPN restrictions, these tools are not my primary choice. For me, recency is more important than source type. Especially in the digital arts areas, I am more like research outcomes from the past fifteen years. These two articles made me realize that student choose information that is often influenced by convenience. This reminds me that when I am searching, I cannot only consider convenience, but also need to consider the source quality.

These studies were published by over a ten years ago, and now, the search environment has a significant change. Nowadays, beyond databases and search engines, people also use social media and video platforms to get information. AI tools have also changed from traditional search engines to conversational communication.

## **The topics I want to search:**

- “The impact of AI tools on students’ learning and creativity abilities”
- “Learning experience in Online education platform”
- “The impact of digital marketing on sales potential”

### **AI tools impact**

#### **Academic:**

Wang, J. 2025, *Survey Study on College Student’s Acceptance and Attitude Towards Generative AI to Their Learning*, ProQuest Dissertations & Theses.

Wang, S., Sun, Z. and Chen, Y. (2022) 'Effects of higher education institutes' artificial intelligence capability on students' self-efficacy, creativity and learning performance', *Education and Information Technologies*, 28(4), pp. 4919–4939.

Available at: <https://doi.org/10.1007/s10639-022-11338-4>Links to an external site. (Accessed: 28 September 2025).

Al Mubarak, M. and Hamdan, A. (eds.) (2023) *Technological Sustainability and Business Competitive Advantage*. Cham: Springer Nature. Available at: <https://doi.org/10.1007/978-3-031-35525-7>Links to an external site. (Accessed: 28 September 2025).

Lin, H. and Chen, Q. (2024) 'Artificial intelligence (AI)-integrated educational applications and college students' creativity and academic emotions: students and teachers' perceptions and attitudes', *BMC Psychology*, 12(1), p. 487.

Wang, J. and Fan, W. (2025) 'The effect of ChatGPT on students' learning performance, learning perception, and higher-order thinking: insights from a meta-analysis', *Humanities and Social Sciences Communications*, 12(1), p. 621. Available at: <https://www.nature.com/articles/s41599-025-04787-y>Links to an external site. (Accessed: 28 September 2025).

#### **Video:**

Ray Kurzweil (2024) *The last 6 decades of AI — and what comes next*. Available at: [Ray Kurzweil: The last 6 decades of AI — and what comes next | TED Talk](#)Links to an external site. (Accessed: 28 September 2025).

Natasha Berg (2023) *Should we let students use ChatGPT?* Available at: [Should we let students use ChatGPT? | Natasha Berg | TEDxSioux Falls](#)Links to an external site. (Accessed: 28 September 2025).

#### **News :**

Kara Alaimo (2025) 'Your kid is using AI for homework this year. Now what?', CNN, 20 August. Available at: [Your kid is using AI for homework this year. Now what? | CNN](#)  
[Links to an external site.](#)(Accessed: 28 September 2025).

Lisa Eadicicco (2025) 'Google says 90% of tech workers are now using AI at work', CNN, 23 September. Available at:[Google says 90% of tech workers are now using AI at work | CNN Business](#)  
[Links to an external site.](#)(Accessed: 28 September 2025).

Paul McQuiston (2025) 'AI is changing how students learn — or avoid learning', USC Today, 18 September. Available at:[AI is changing how students learn — or avoid learning](#)  
[Links to an external site.](#)(Accessed: 28 September 2025).

### **Prompt:**

#### **Discussion: Seeking but with AI**

This week you will repeat the 'seeking' part of last weeks discussion, but using AI tools (any AI tool of your choice)

For your own future use, save the conversation with the AI, but here you only need to quote or refer to parts which were particularly useful, or which were not!

The key focus of our discussion is to reflect on how useful these tools are for searching, and how they might change your approach to locating sources for a research project.

### **Response:**

This week, I used ChatGPT to improve my search on '***the impact of AI tools on students' learning and creativity abilities***'. and this is my instruction: "I am a master student in digital arts and humanities. I am interested in researching the impact of AI tools on students' learning and creativity abilities, please help me find relevant references, reports, and videos."

Interestingly, I found that GPT found one academic article is the same as one I found, which is '***Artificial intelligence (AI)-integrated educational applications and college students***' by Lin, H. and Chen, Q. (2024).

The information I searched for last week was more focused on generative text AI (like DeepSeek, ChatGPT, etc.), while GPT search covers a wide range of information, including different types of AI tools, policies, and applications, but it is not targeted, so

I still need to filter out the information that is useful to me.

In the part of news sources, I was mainly focused on media reports, social phenomena, statistics, and hot news. But GPT helped me find news and report on education policies and educational institution analysis, which was something I didn't consider before.

Overall, through this experience of using ChatGPT, I realized that ChatGPT not only helps me to find more AI tools, policies, and cases of teaching, but also provides some methods on how to measure student creativity (like using the AUT test). This made me understand that AI's impact on student learning and creativity is multifaceted, affecting not only AI tools but also the effect on how they are used, teacher guidance, and classroom practice. Meanwhile, I also reflected on last week, I just focused on the hot topic and generative text AI, ignoring the analysis of policies and education institutions.

### **Prompt:**

#### **Discussion: Evaluation of Sources**

We are combining a couple of activities here this week.

The first is creating your own set of criteria for the evaluation of sources that you locate. It should be a set of criteria that you comfortable with using, and it should include some sort of ranking system. Share that here in this thread, although of course you will also be applying it to the sources which you locate and share in Zotero.

And look at Connected Papers for more fun!

Also look at the systematic literature review on Mindfulness - systematic reviews, often using the PRISMA methodology, are relatively new but have now become the standard practice in larger research projects (Obviously not as easy to do these if you are on your own)

### **Response:**

Actually, during my undergraduate studies, I didn't have a systematic method in source evaluation, and I also have no idea which aspect to judge source quality, which led to the whole process being a little messy. Later, I came across the CRAAP evaluate method (Blakeslee, 2004) in the UCC summer language course, and I found it very useful to me. Since then, I like to use CRAAP this method to check and

evaluate sources, and combine it with the five-star method to help me make quick judgments. I think this screening method is very direct and convenient for me.

This week, I also got to know the PRISMA (Moher et al., 2009), which is a systematic review method. I think PRISMA this method more suitable for large-scale, systematic literature collection and screening; and CRAAP this method more suitable for individual research or small-scale surveys, because it's more flexible. And then, I try to use Connected Papers, it's so fun! When I input keywords in the engine, it will automatically generate a relationship paper, it shows all the research related to topic. This was the first time I directly saw the connections between research studies, which is very novel and practical.

The following are my evaluation standards based on the **CRAAP** method:

**Currency:** this refers to the date when a source was created, either when an article or book was published, or when a website was last updated. I think it's very important, especially in the digital technology area, because in recent years digital technology has developed so fast, if we find research more than ten years ago, it may less reference value.

**Relevance:** we should ensure that the information is connected to our research theme and consider content has reached an appropriate academic level, and whether the target readers are in line with my research purpose.

**Authority:** we need to check who wrote and published the article, video, or magazine; it will be helpful for judging source reliability.

**Accuracy:** the source content should be reliable, and all arguments should be supported by evidence. The simplest way is to check source references, and ensure all sources cited are legitimate.

**Purpose:** we need to consider the author's intention in the article; some articles may only present one side of the argument, which can be biased.

In the final scoring, I will star each of the above five aspects ( 1-5), and then calculate a total score to judge this source worth using. In my scoring standard, Currency is a very important index, because relevant research of digital humanities and digital technologies is developing so fast; many research outcomes may be replaced by new technologies or viewpoints within just a few years. So, when I evaluate the reference, I will prioritize articles published within the last five years, especially research on new trends, or the newest methods. I think it can promise that I

find these sources to be the latest and most valuable reference.

I plan to use the CRAAP method to evaluate some resources I found in week 2:

Academic sources: Wang, S., Sun, Z. and Chen, Y. (2022) 'Effects of higher education institutes' artificial intelligence capability on students' self-efficacy, creativity and learning performance', *Education and Information Technologies*, 28(4), pp. 4919–4939. Available at: <https://doi.org/10.1007/s10639-022-11338-4>Links to an external site. (Accessed: 28 September 2025).

Currency:

This article was published in 2022, not the latest, but still in five years, the data is more newer.

Relevance: This article's research theme connected with my focus on "The impact of AI tools on students' learning and creativity abilities.

Authority: Three authors come from China's public university, and their article was published in SPRINGER NATURE, so I think this article has high authority.

Accuracy: This research uses the questionnaire method to obtain outcomes, conclusions reliable.

Purpose: This article focuses on academic research, which already doesn't have any business or personal trend.

Total: 4.6

Video: Natasha Berg (2023)*Should we let students use ChatGPT?* Available at:[Should we let students use ChatGPT? | Natasha Berg | TEDxSioux Falls](https://www.tedxsioxfalls.com/talks/natasha-berg/should-we-let-students-use-chatgpt)Links to an external site. (Accessed: 28 September 2025).

Currency: This video was published in 2023, it discusses the newest topic on ChatGPT education application.

Relevance: This lecture focus on " should we let student use ChatGPT", relevance I am interested in AI tools on students' learning and creativity.

Authority: Natasha Berg, M.Ed., works as the Multimedia and Technology

Integration Specialist at a local high school in South Dakota, and this video was published in TED.

Accuracy: This video mainly presents the speaker's personal opinions, and doesn't have many research methods.

Purpose: This video purpose is to inspire public thinking.

Overall: 4.0

News: Kara Alaimo (2025) 'Your kid is using AI for homework this year. Now what?', CNN, 20 August. Available at: [Your kid is using AI for homework this year. Now what? | CNN](#)  
[Links to an external site.](#) (Accessed: 28 September 2025).

Currency: This news was published in August 2025, and it reflects AI's newest developing trends in education applications.

Relevance: This news discussed students' use AI tools in daily studies. relevance I am interested in AI tools for students' learning and creativity.

Authority: This news was published in CNN.

Accuracy: This news content depends on interviews and reports, some of the viewpoints are quoted from educational experts, but lack a strict research method, so this news accuracy is limited.

Purpose: This news is mainly to tell parents about AI's effect on student study, the whole opinion is neutral.

Overall: 4.2

This is my evaluation process. Overall, I think the CRAAP method is more suitable for personal research or small-scale projects, it makes me more clearly evaluate sources quality, but it takes more time to operate.

### **Prompt:**

### **Discussion: Annotation - Highlight with meaning**

This week we have a very practical task, without a major discussion question. For

most of you, this will be familiar, for others it will be new, some of you will find it very useful, others less so - its a question of thinking about how we read serious materials which make an argument and offer evidence to support it, and how we might move it from huge chunks of text to reusable visual formats.

Of the readings, the book preface is a good introduction to the area. The others are interesting, but you need only do those if you have time. We'll include them in our discussion.

Locate a scholarly article on your topic of interest, ideally one with good section headings, including a Literature review and a discussion or conclusion section.

Annotate it, either using a pdf reader or, if you prefer, print and highlight manually. Use multiple colours to highlight - distinguish argument and evidence, and also highlight interesting or unclear points.

Then attach the highlighted pdf to a reply here here.

### **Response:**

I was impressed by this article about the impact of AI on the learning of college students. I used the colour separation labelling method to analyse its structure:

Purple - Background: The beginning of the article clearly explains that it is becoming more and more common to use AI tools to learn in schools, which must have both advantages and disadvantages.

Blue - Purpose: The purpose of the research is very clear, just want to figure out how AI affects the creativity and academic emotion of college students when learning. At the same time, the author also asked about the attitude of students and teachers towards AI

Pink - Finding and Process: One of the highlights of this article is the use of a mixed method, which increases the objectivity and credibility of the article. The article found that AI has both advantages and disadvantages for students, and summarises seven advantages and seven disadvantages through qualitative research, which is also my favourite part.

Yellow - Conclusion and Suggestions: The conclusion of the article is objective and fair, and also provides some suggestions for the future application of AI in education.

[artificial+intelligence \(1\).pdf](#)

## Prompt:

Discussion: Mindmaps - Share map Images here

Attach mind map images here please

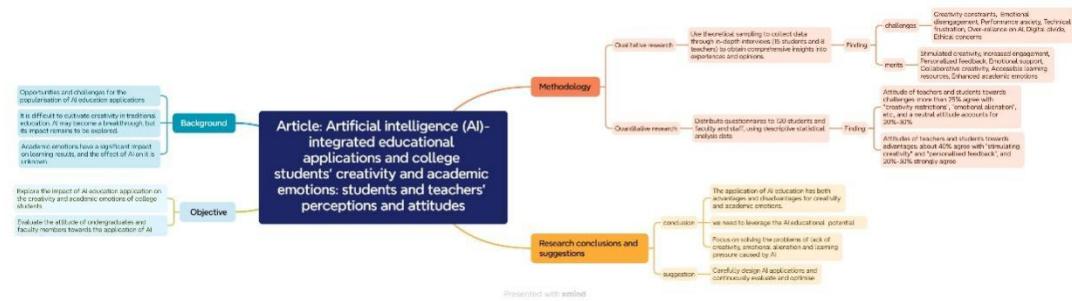
Possible mindmapping tools include free versions of

XMind

Simplemind

## Response:

This is my mind map about reading the article: Artificial intelligence (AI)-integrated educational applications and college students' creativity and academic emotions: students and teachers' perceptions and attitudes.



## Prompt:

Discussion: Ethics - your thoughts?

As we see from the readings this week, ethics plays a major role in the research process. It needs to be integrated into every project with careful thought and adequate planning so that we are able to be our best selves and deliver ethical, honest work. Failing to do so can result in a lot of awkward and potentially dangerous issues, so it is important to get into the detail and understand the process early on.

For this topic, I want you to look at the sample ethics form from UCC. It is a good example of what you need to consider when planning a project, and it really helps us to think about all the different variables included in research planning. Keep in mind also that included with the link to the universities research ethics website is a standard policy and the different types of forms are needed for research projects. Again, have a

browse over this and also the research ethics book, which you'll find helpful later on in the course.

I'd like you to share your thoughts on two areas. Firstly the ethical issues involved in the huge amount of personal information on the web, and how it is used; and how it shouldn't be used\*! (try to be brief) Secondly consider the potential ethical issues you might face in your dissertation research.

\*two really good books on this are *Weapons of Math Destruction* by Cathy O'Neill, and *The Age of Surveillance Capitalism* by Shoshana Zuboff

### **Response:**

In the era of highly developed information, our personal data is almost collected everywhere. When we go to the supermarket, we may be required to register as a member to enjoy a lower "membership price"; a shopping website will recommend products based on our consumption record; in China, many restaurants need customers to scan the code to order, and in this process, our personal information has been collected. Although these behaviours seem to be "voluntary" (the customer can continue to use the service after clicking "accept all cookies"), however, in fact, if the customer disagrees with these privacy policies, we often cannot continue shopping or ordering, which also makes "accept" passive.

Personal information on the web: how it is used?

1. The collection of information must ensure users are fully informed and clearly agree, and the company or organization must clearly introduce the collection purpose, scope of use and shelf life.
2. The collected data should only be used to improve user experience and optimize system services, such as improving system safety or improving product recommendations, instead of expanding commercial use.
3. Users should be given control over their information – including the right to view, modify, download and delete their data.

How it shouldn't be used?

1. The company cannot sell, disclose or share users' personal privacy information without authorization.
2. Personal data should not be used as trading chips, such as providing privacy information in exchange for discounts or services, which will force users to make an unfair choice between privacy and convenience.

In my dissertation research's potential ethical issues:

1. How should the sensitive data collected during the research be stored safely? Who

has the right to access?

2. How can I ensure that the quoted or collected data is accurate and reliable?
3. Consider researching whether it may have negative impacts on society.

### **Prompt:**

#### **Discussion: Coding Interviews**

Good Morning

I have three faked up interviews on the topics of the collaborative writing groups for you. Pick the one which aligns with your group. Before starting, outline some thematic codes which you are going to look for in the interview, and then code it using those. Be alert also for other topics which emerge as you work through it., and add those.

You can add the codes as highlights with comments, or import that transcript into a Google Sheet and mark them in extra columns if you prefer. when you are done, attach the coded interview to a reply in this thread with brief comments.

This might take a lot of time so limit this to about 2 hours. If you don't code the full text in that time, that's ok - this is just to see how it works and experience it.

### **Response:**

I used 5 colors to highlight this interview. In the end, I tried to make a coding table to exhibit:

Yellow: The impact of AI technology

Blue: The artist's feelings

Pink: Prospects for the future

Green: Ethics and responsibility

Red: Public and social reactions

[Interview AI-1.pdf](#)

### **Prompt:**

#### **Discussion: Curation Plan**

This week is slightly lighter - all you need to do is review some of the resources here,

particualry the Data Curation Centre from the UK, and write a short Data Management Plan for you MA research project

It can be in bullet point format. Consiier what types of data you will gather; what file formats it will be in, how will you label the file and how will you label the data inside the files and how to make it accessible to other users. You may describe the Dublin Core metadata for the data if you wish.

### **Response:**

Thesis topic: In the digital age, the necessity of offline libraries: around user experience, library value, and resource allocation's multi-dimensional analysis.

#### 1. Data types

This research will collect and use three categories of data:

(1). Qualitative data (this kind of data is used to deeply understand why users still need or no longer need offline libraries, and behind their experience and attitude) includes:

- Semi-structured interview recording (MP3)
- Interview transcripts (DOCX/ PDF)
- Personal description related to the use of the library (users' experience, motivation, preference, needs, etc.)

(2). Quantitative Data (this kind of data is used to measure user behavior patterns, usage frequency and attitude trends) includes:

- Survey Data (like frequency of use online vs offline library)
- Simple statistics (such as usage ratio...)

(3). Publicly Accessible Data

- Related to library policy documents and institutional reports
- New reports, academic web page information
- Online public discussion's screenshots

#### 2. Metadata

- Title
- Creator

- Date
  - Type
  - Participant ID number
  - Format
  - Description
  - Keywords
3. File Naming  
data type + participant number + data + version number

for example:

interview\_P01\_2025-11-18.mp3

surveyresults\_V1\_2025-08-08.xlsx

4. Storage & Backup
- Main storage location: Google Drive
  - Local storage: research laptop
  - External hard disk backup: updated once a week

5. Access

(1). Restricted access (only the researcher herself and the project tutor can access):

- Interview recording
- Word-by-word manuscript (before anonymization)
- The original data of the questionnaire

(2). Public access (it will not include any personal identification information):

- Anonymous interview citation
- Data analysis chart
- The final essay content

(3) closed access: my own reflection or notes, coding memos...

6. Long-term Preservation: All important files will be saved in one backup on Google Drive and on the external hard disk to ensure that they are not lost due

to device problems.

## 7. Dublin Core Metadata

Title: interview transcript P01 – users' views on offline libraries

Creator: researcher name

Subject: In the digital age, the necessity of offline libraries: around user experience, library value, and resource allocation's multi-dimensional analysis.

Description: This is an interview record about in the digital era, the respondents' views on the value of offline.

Date: 2025

Format: PDF, DOCX, MP3

Type: Qualitative interview

Rights: only for academic research use

### **Prompt:**

### **Discussion: Research Plans**

Forum for sharing outline, rough research plans. Ideally 1, not more than 3 pages, with some indicative dates and key milestones. There are a few possible things you could plan, but if you are stuck, see "*The Show must go on*" below

- Dissertation planning
- Plan to create a digital archive
- Plan to create a digital exhibition
- Plan to create a hybrid event
- Theatre or other performances?
- Plan to move any activities online
- Plan to move any activities hybrid

### ***The Show must Go on...***

Your local community group has --always-- put on a Christmas Panto in the Village

Hall for one night only. Everyone participates - most classes in the local school do a 5-10 minute act; and there are some regular adult performers. It is usually video recorded, but up to now that has been for later sale to raise funds for charity. There is also a charity auction and a short quiz. Under current restrictions the hall will only hold 50 people, of whom 20 places are committed to disabled people and their helpers. You can assume sufficient broadband connectivity. This means you cannot have more than 30 student performers (effectively one class) in the hall at the time

Can you come up with a brief first draft of plan to run this as a **hybrid** event? (Remember, limit this please - 3 pages or maybe one mindmap? Whatever you can do in under 2 hours. ) The key thing is that it needs to be streamed, recorded and archived for the future.

### **Response:**

I used 5 colors to highlight this interview. In the end, I tried to make a coding table to **Research Plan**

In the digital age, the necessity of offline libraries: around user experience, library value, and resource allocation's multi-dimensional analysis.

### **Project overview**

In the digital age, e-books, databases, and online searches are becoming more and more popular. Some people think offline libraries are no longer necessary; however, some people also think offline libraries still have irreplaceable value, such as study space, community functions, cultural activities, and fair access etc. The goal of this research is to understand how different users view the offline libraries' future and function.

### **Research questions**

- In the digital age, which offline library functions are still irreplaceable by users?
- Are offline resources and online resources relationship is complementary or competitive?
- How do different users view the offline library and digital resources?

### **Methods**

I plan to use **Mixed methods**, combining qualitative and quantitative methods.

The **qualitative** part: Semi-structured interview with 6-10 people, including different users, like students, researchers, and public.

The **quantitative** part: Design a 40 to 100 questionnaires, collecting users' learning

and reading habits, and their attitudes towards the offline library.

The **public data**: Related to library policy documents and institutional reports; New reports, academic web page information; Online public discussions' screenshots

### **Data collection**

This research will use qualitative, quantitative, and public data to collect resources in order to comprehensively understand users' perceptions of the necessity of offline libraries in the digital age. Firstly, I plan through a semi-structured interview to collect user attitudes to offline libraries, and record necessary observation notes. Second, I may use an online questionnaire to collect data, which will let me know different users' habits and views in offline libraries. Finally, I will reference public data, like Zhihu, Redbook or some public discussions to supplement a more social perspective.

### **Artifact**

The artifact of this project will be a **digital mini-exhibition**.

I chose this form because I hope my research outcome can be more direct, simple, understandable, and an attractive way to present to readers, not just stay on a word level. This online exhibition covers several core elements, such as the Questionnaire statistical charts, a comparison chart of the functions of offline libraries and digital resources, and selected anonymous quotes from interviews. I will also add a reflective summary to express my own understanding of offline library value. I hope the whole exhibition not only shows the data itself, but also enables readers to feel some real emotions or a complex attitude to the library.

### **Potential challenge**

This research may face the following challenges:

Recruiting participants from different ages or backgrounds may be somewhat challenging, especially for non-student groups.

The recovery rate of questionnaires may be unstable, which may affect the representativeness of the data.

Interview analysis requires spending more time, which may influence my research plan.

### **Timeline**

week1-3

Conduct a literature review to clarify the research background and theoretical framework.

The first draft of the design questionnaire and the interview outline.

Begin to continuously record research notes and sort out preliminary research ideas.

#### Week4-5

Distribute questionnaires and start collecting questionnaire results  
Preliminary analysis of the recovered questionnaires  
Adjust the interview outline appropriately according to the trends and questions in the questionnaire.

#### Week6-8

Carry out and complete semi-structured interviews  
Synchronously sort out interview records and research notes  
Start building a digital small exhibition website to record the research process and preliminary findings.  
Start writing the thesis draft (mainly with notes and ideas)

#### Week9-10

Integrate questionnaires and interview data  
Carry out further data analysis and thematic induction  
Continue to improve the content of digital exhibitions  
Gradually transform research notes into thesis paragraphs

#### Week11-12

Complete the first draft of the thesis  
Organize research data and related materials  
Optimize the structure and display logic of digital exhibition

#### Final

Modify the content of the thesis according to the feedback  
Complete the final submission  
Archive and sort out the digital exhibition

#### **Reference:**

1. Blakeslee, S. (2004) 'The CRAAP test', *LOEX Quarterly*, 31(3), pp. 6 – 7.

2. Biddix, J.P., Chung, C.J. and Park, H.W. (2011) 'Convenience or credibility? A study of college student online research behaviors', *Internet and Higher Education*, 14(3), pp. 175 – 182.
3. Colón-Aguirre, M. and Fleming-May, R.A. (2012) "You just type in what you are looking for": undergraduates' use of library resources vs. Wikipedia', *Journal of Academic Librarianship*, 38(6), pp. 391 – 399.
4. Head, A.J. and Eisenberg, M.B. (2009) *Finding Context: What Today's College Students Say about Conducting Research in the Digital Age*. Project Information Literacy Progress Report. Seattle: University of Washington.
5. Moher, D. et al. (2009) 'Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement', *PLoS Medicine*, 6(7), e1000097.
6. Saunders, M., Lewis, P. & Thornhill, A. 2019, Research methods for business students, Eighth edn, Pearson, New York; Harlow, United Kingdom.

### **Final Reflection:**

By completing the course DH6013, about the philosophy concept, I have more stranger. Like ontology, epistemology, value theory, methodology, and other words, in the past, I just stayed at the status of having heard about them, but I couldn't clearly interpret them, and also, it's hard to imagine what the relationship is between them and actually writing papers. Through studying this course, I generally realized that these looks abstract theory actually impacts how to understand the world, how to ask questions, and how to choose research methods. Actually, this process needs continuous reading, discussion, and practice to understand it. It made me realize that research requires thinking and patience, and directly feeling the real depth of thinking behind "research", research is a process of continuous thinking and repeatedly scrutinizing.

In this course, I have more clearly understood in "what is research". Through learned about qualitative and quantitative research methods, and how they are used in combination in actual projects, I gradually realized that a reliable research outcome needs multiple methods to complement each other. Quantitative research can go through a large amount of data and statistics to help us see the overall trend of the research results. However, the qualitative research focused more on the specific personal voice, understanding their experience and feelings. If researchers only use one of the methods, they will easily ignore the complexity of the research problem. Through this methodology layout learning it very helpful to my writing essay and designing a research question.

And then, this course has a big impact on the practice layout for me. It's my first time exposed to the concept of coding, studying how can I extract keywords and topics from interview texts or materials, and organize seemingly messy or huge information into meaningful data. It made me understand that research is a process of continuously recording, sorting out, and reflecting. Through studying this course, I have clearly understood the framework of essay writing, and helped me construct more rational research mentality. This content is not only helpful to my current study, but also has a long-term impact on my future research and academic writing.