

Module -	ACCA5033
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Task 1 - Q1

12 August 2025 17:13

Task 1

Q1. Create a mind map that includes **some of the areas/concepts from Topic 1** of Unit 1 on Moodle and include **some project ideas** from areas of personal interest related to your programme of study.

<https://mm.tt/map/3779265741?t=1HKNL6JULk>

Task 1 - Q2

12 August 2025 17:14

Task 1

Q2. Select a project idea that you would like to take forward and add this to the map.

I have chosen the idea of a centralised hub to conduct the businesses audit work through. This has been added to the map above

Task 2 - Q1

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Task 2

Q1. Create and document a single aim and several Objective for your project

I currently work in an Audit capacity for an insurance company. The current process is disjointed, with the use of several separate programs and methods to complete, record, manage and communicate throughout the process. There are several separate trackers which are commonly not updated on time, and deadlines missed.

The project I have chosen is to create a centralised hub which will manage the process. Allowing for the tracking of audits, communication with stakeholders, and the writing and sending of reports. The centralised hub will also allow for data to be pulled from the process and so analytics to be run much more efficiently and provided in a live environment.

Aim: To create a single centralised work product for an audit process

Objectives:

- Must have a centralised calendar to allow for work source tracking.
- Must have automated communication abilities.
- Must allow for tracking of information such as the time taken throughout the process and stages.
- Must allow for expansion / scalability.

Task 2 - Q2

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Task 2

Q2. Identify an appropriate research philosophy for your project

I have chosen an Epistemology research philosophy for my project, specifically, Pragmatism. Epistemology is derived from the Greek word 'episteme', which translates to knowledge or 'intellectually certain knowledge' [8]. Epistemology is defined as "a branch of philosophy that investigates the origin, nature, methods and limits of human knowledge" [9]. Epistemology is an applicable research approach as it 'underlies what people think, what they believe, and how they apply new information'[10]. Within Epistemology, Pragmatism is a subdivision which 'emphasises practicality and effectiveness over abstract principles, focusing on experimentation and practical application' [11]. A pragmatic approach is beneficial for the following reasons:

Adaptable – Adaptability is one of the defining strengths of pragmatism, it is not restricted to a strict methodology. Instead of defining what method is correct, it instead searches for what method works best in this situation.

Practical approach: Pragmatism emphasizes practicality and problem solving [12]. It allows for a test and learn mentality, utilizing what works. This would allow for research into databases and products that would allow for the hub to be built and ensure security as well as practicality.

Multiple approaches. Whilst pragmatism is a subdivision of epistemology it is not restricted to it. Pragmatism allows for what works in the given circumstance, meaning it can be used for qualitative and quantitative research methods. Qualitative research can be used to judge the ease of use, navigation and functionality of the system. Quantitative research methods can be run from the data stored within the hub, data analysis can be completed to ensure statistics are right and that the hub is picking up and tracking the required trends.

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Q3. Select and document appropriate search tools including specific research databases to identify research related to your project area and use search strategies to identify relevant research to your project

Given the importance of the research to the success of the project it is vital that any research used is accurate and relevant for the requirements of the project. The databases below focus mainly on peer reviewed research, offering reassurance and credibility that the reasoning and quality is sound.

Google Scholar – Free academic search engine covering a large range of disciplines

JSTOR – Archive of scholarly journals, books and primary sources, covers social sciences and philosophy.

Web of Science – Covers academic journals, conference proceedings and other documents

IEEE xlore – Digital library provided by IEEE covering scientific and technical fields, more specifically computer sciences and electronic engineering.

UWTSD Library - Onsite and online Library provided by UWTSD.

SCOPUS – Large collection of peer reviewed literature across a wide range of disciplines. Covers Science, Technology, medicine, and social sciences

SCIENCEDirect – Online library of peer reviewed articles on science, technology and health.

Wiley online Library - multidisciplinary library that provides access to scholarly content from John Wiley & Sons. The range covers journals, books, reference works, and more. It's a platform for research and information across various disciplines, such as health, and physical sciences and social sciences.

Boolean operators are utilised in specific search terms which can narrow or increase your search, include or exclude specific terms or ensure both are included in the search [13]. The main operators are:

OR – Used to find articles that mention either of the terms.

And – Used to find articles that mention both of the terms.

Not – Used to exclude the term.

In addition to the core Boolean operators there are also parentheses () and quotations ("") which can be used for grouping specific terms.

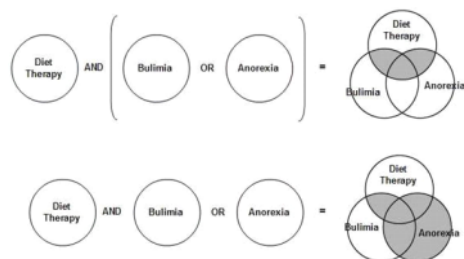


Figure 1 – Boolean parentheses explained

CRAAP evaluation tool. CRAAP is an abbreviation of the 5 stages of the test or evaluation – Currency, Relevance, Authority, Accuracy, Purpose. The tool is designed to cause critical analysis and provide a worklist of relevant measures to evaluate the information found [14].

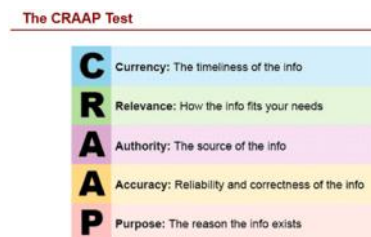


Figure 2 – The CRAAP test

Concept map – Provides a visual representation of thought sessions. These are a powerful tool for people who digest information better visually [15]. Allow for ideas to be broken down from core concepts or high level ideas into smaller stages all the way down to individual concepts such as standard operating procedures etc. Concept maps will be critical for the process of mapping how the proposed hub will work and be navigated by its users.



Figure 3 – Example of a Concept Map

Scope – Creating a detailed scope confirming what is and is not to be included is vital for keeping the project on track, ensuring it hits the core requirements and progresses in a timely manner. A scope provides a checklist to ensure the key requirements needed are met by the project but also helps to prevent the workload from creeping and including additional features which were not part of the original brief.

Utilising the above databases and methods will allow for known-knowns to be planned and considerations made for known unknowns. In this instance a known-unknown would refer to an element such as specific findings for audits completed within the hub and how those findings will be recorded and feedback. Whilst some provision can also be made for unknown-unknowns this is limited to things such as additional resource and time buffers as, by default, the issue is unknown and so difficult to plan for.

References

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Figures

- Figure 1 – Boolean Operators: A cheat sheet, University of Minnesota, Nov 15 2024, Available: <https://libguides.umn.edu/BooleanOperators>, Accessed 12/08/25
- Figure 2 - Evaluating resources and misinformation: The CRAAP test, University of Chicago Library, Available: <https://guides.lib.uchicago.edu/c.php?q=1241077&p=9082343> Accessed 12/08/25
- Figure 3 – Example of a Concept Map, The Learning Centre: Concept Maps, University of North Carolina, Available: <https://learningcenter.unc.edu/tips-and-tools/using-concept-maps/> Accessed: 12/08/25

Course Engagement

27 May 2025 14:38

5 Things which would not have existed 10 years ago

Microsoft Teams
Mainstream electric cars
Online Learning / Moodle
Mainstream remote working
Gym booking services

Working remotely has had a massive positive influence on my life. It removes time for the commute, increases productivity and allows for additional chores to be completed throughout the day allowing for more free time. It also allows me to attend a gym in my lunch break - something not possible when working from the office. I play a much more involved role with my children now I am more available.

Biggest impact on society

The invention or discovery which had the biggest impact on the development of society must be the ability to create and utilise fire at will, leading to the process of cooking meat. The timeline of human history places this discovery immediately before the rise of the earliest homo sapiens. By the process of cooking calorie absorption becomes much more efficient allowing for less time per day to be spent consuming food, which in turn allows for the body to sustain the increased number of neurons, allowing for a bigger brain which in turn developed and allowed humans to evolve and create society.

Review response - Still believe it is one of the most important discoveries, from this original discovery stems almost all others, steam, petrol, diesel power and most electronic generation are not possible without the knowledge of this original principal.

Is innovation changing things for the better?

Answer the following three questions.

Click next once you have chosen.

Across the world, how did deaths per year from natural disasters change in the last century?

- A. More than doubled
- B. Remained about the same
- C. Decreased to less than half

Is innovation changing things for the better?

Answer the following three questions.

On average, women aged 30 have spent how many years in school? (Men of the same age have spent 8 years)

- A. 7 years
- B. 5 years
- C. 3 years

Is innovation changing things for the better?

Answer the following three questions.

In the last 20 years the percentage of people living in extreme poverty worldwide has...

A. Almost doubled

B. Remained about the same

C. Almost halved

What is the fourth Industrial Revolution?

Revolution		Year	Information
	1	1784	Steam, water, mechanical production equipment
	2	1870	Division of labour, electricity, mass production
	3	1969	Electronics, information technology, automated production
	4	?	Cyber-physical systems

Computing capabilities
 Big Data
 Digital Health
 Digitisation of matter
 Internet of things (IoT)
 Blockchain

Of the above technologies I believe Big Data will have the biggest affect. Data science is the process of extracting knowledge and insights from data through various processes and scientific methods. The ability to use large if not huge data sets and be able to cross reference and clarify for variables and isolate different group sets is huge. The increase in the size and availability of data will only increase the prominence and accuracy of data science as a whole. University of Pennsylvania have conducted research on the effect of big data on scientific research and it is interesting to note that it covers almost all of the technologies above - computing capabilities increasing allows for the processing of larger data sets than ever before and more accurate and complex modelling, digital health is essentially the same as big data, simply restricted to the area of health, digitisation of matter will require the product of intense modelling and analytics for it to become successful, the IoT is essentially a data repository of live data sensors which collect data to be used in the future. Analysts utilise big data to predict and purchase or sell block chain currency in an attempt to make a profit.

<https://lpsonline.sas.upenn.edu/features/impact-big-data-scientific-research>

Check

Drag the revolution to the correct definition.

- | | |
|--|------------------------------|
| a. Steam, water and mechanical means of production | First Industrial Revolution |
| b. Division of labour, electricity and mass production | |
| c. Electronics, IT and automated production | |
| d. Cyber physical systems | Fourth Industrial Revolution |

Check

By 2025, what percentage of people are expected to be wearing clothes connected to the internet?

- ☐ 5% ☒ 10% ☐ 15%

Within the next decade, how many sensors are estimated to be connected in the Internet of Things?

- ☐ One billion ☐ One million ☒ One trillion

Describe a time in which you were encouraged or discouraged from being creative and how this might affect how you feel about creativity.

Why is creativity important in your subject area?

In work a lot of processes and procedures are followed as rote. Questions are discouraged and seen as an annoyance rather than a positive. As such processes are followed without the understanding of what it is they are attempting to achieve, review or check. Initially I was discouraged from questioning and trying to understand the process. As time passes and situations change, it became apparent that we were following processes which no longer applied, or were needed. This increased handling time, slowed production, slowed payment to customers and lead to a poor customer journey.

Creativity is important as technology is not static. Things will change, it is not enough that something has always been done this way, to continue to do it that way. An atmosphere of continual development should be encouraged and fostered to ensure people feel safe to be creative.

3 forms of research philosophy ontology, epistemology axiology

Ontology - greek - study of being. Research into reality of existence. Researcher assumes knowledge on what exists has already been created and asks what the world must be like with this assumption

Broken into 2 separate areas - objective ontology subjective ontology

Objective ontology - reality is controlling the person

Subjective ontology- the person is controlling reality

Objective ontology - in an example of customer service, objective ontology research will see that the personalities involved are separate from the fields they are studying - the system is fixed and separate to the entities who are delivering it.

Subjective ontology - in an example of customer service, subjective ontology states there is no such thing as definitive customer service, it is all dependent on the subjects perception. Subjective ontology sees the system as dynamic and evolving

Epistemology - greek - study of knowledge. Objective to understand how we think about reality. Can be argued it can be split into infinite number of nuanced sorts. For module will split into
Foundationalism, coherentism pragmatism

Foundationalism - example study causes of divorce

Foundationalist researchers take a scientific view as an observer who looks for principles first. They build their argument from an existing statement that cannot be doubted. Researchers may find existing material suggesting a hypothesis and then use quantitative analysis to deduce if that theory fits the reality as they view it.

Coherentism - example study causes of divorce

Researcher may find several versions of the reality before them. Someone with the coherentist tendencies is not wed to any one theory so if it does not fit it can be discarded. This usually means getting close to the research. In the example it would possibly mean interviewing divorcees

Pragmatism - Example study causes of divorce

Pragmatist believes what ever works is fit for the purpose of describing reality. Using their logic they believe an arguement can be true and false at the same time. They would suggest something could be correct for now but in the future would be incorrect.

Axiology - greek - trying to find value, why something is said to be valuable.
Generally can be split into 2
Ethics
Aesthetics

Ethics - Moral Principles or dilemmas. An example to this is why do you need to obey social norms.
Term ethics can also apply to the rules and guidelines on what conduct is appropriate for groups and individuals and covers morality

Aesthetics - Theory of beauty is not as easy to pin down - different approaches depending on discipline

SCIENCE - Sensory emotional value - judgement of sentiment and taste
SOCIAL SCIENCE - Critical reflection on art, culture and nature.
ART - Branches of art, art theory , literary theory, film theory and music theory.

Epistemology - foundationalism -
Pro - precise appreciation of reality. Clear line between right and wrong
Con - what happens when axiom is not true? Works well with absolute issues such as mathematics but not so well with biological systems in the real world

Epistemology - coherentism -
Pro - if theory proves to be wrong but does not contradict itself have flexibility to dismiss this. Allows for a part of a theory to be wrong but still to process the rest of the theory
Con - difficulty in judging peoples claims - conspiracy theorists use this principle. Build arguments which do not contradict but do mislead.

Epistemology - Pragmatism
Pro - realises that at many points in time what is considered to be true has changed. Example, humans have limits to understanding such as technology.
Con - what works is a poorly defined construct. What might be considered right might later be incorrect is a weak argument

Correct

That's right! You selected the correct response.

Axiology is the study of what is valuable.

Epistemology is the study of knowledge.

Ontology is the study of being.

Continue

Positivism - approach led by science. Assumption there is only one truth that is considered as a given or posited. Positivist is looking for factual knowledge gained by observing phenomenon, collecting data and interpreting in strictly objective ways.

Critical Realism - same approach as positivism - i.e scientific, but is nuanced in that it doesn't require restrictions of science to be proven. Knowledge is real if it can be experienced by the senses - what you see is what you get - then explained using thought. Also need to accept can be fooled - optical illusions etc.

Interpretivism - Assume access to reality is only through social constructs. Cannot use science to understand people. People they study may not be aware of the ideas they action. Qualitative methods to analyse language consciousness and shared meanings

Postmodernism - Goal to challenge established thinking. Expose ideas embedded in the way we use language to explain the reality in which we exist. Believes it can expose marginalised and accepted perspectives that may have been excluded.

Pragmatism - Only considers concepts relevant if they support an action. Recognise many ways of viewing the world and no single point will give entire picture.

Reflect

As you are reading each of the different sorts of research philosophy, it is likely you will be drawn to it or not. Choose how you feel about the following research philosophies. **Is there an outright winner for you?**

	Support	Indifferent	Against
Positivism	☒	☐	☐
Critical Realism	☒	☐	☐
Interpretivism	☐	☐	☒
Postmodernism	☐	☒	☐
Pragmatism	☐	☒	☐

What aspects do you agree with? Why do you support these choices over others.

I like the organised and scientific approach to a problem, along with the ability to support and track or trace your findings back, so if an error occurs you can repeat and learn from the experience, I feel the other methods can be hard to pin down on a point as to why something is wrong or right.

Yes, I use this	Name	Information
☒	ERIC: Education Resources Information Center	
☒	Google Scholar and Google Books	
☐	Internet Archive Scholar	
☐	JSTOR	
☐	Project Gutenberg	
☐	PubMed	
☐	ResearchGate	
☐	Semantic Scholar	

Reflect

Here is a list of some of the **most popular databases** for academic study.

Which ones do you use? **Select the buttons** of that you do use.

For databases that you don't know, **click their name to see more**.

Can you think of any other databases? Share any that aren't listed here on your **Moodle** forum.

You can also share any comments about the websites here and how you find their usability.

Reflect

Consider your research assignment.

Can you think of a **focus question** that you could outline what is going to be in or out of scope for your research?

Write it down using the Notes icon down below or elsewhere.

Apply

After watching the video, **create your own concept map**.

Use whatever you feel most comfortable with – an application like Microsoft Whiteboard, or a real whiteboard, or just pen and paper.

Try and identify **propositions** and **crosslinks**, and how these would apply to how you research.

Reflect

At the beginning of this section you said your area of interest was:

Data

Thinking about what you have learnt throughout this section and **applying** it to your area of interest, what is it that will make your research at university meaningful?

Take a few minutes to identify those key points.



Reflect

Think back to when you made a purchase of something valuable. Maybe it was a pair of glasses, a car, a prom dress or suit. Reflect on the process that makes you decide whether to purchase it or not.

What did you do before parting with your money?



 Submit your answers to the Word Cloud.



 Review all answers on the World Cloud.



Check

Take a few moments to answer the following four questions to help reinforce your understanding of this section.

Question 1 of 4

True or false? A hypothesis is really a question that can be used to predict the outcome of your research.

✓ True

☒ False

Correct!

A hypothesis is really a question that can be used to predict the outcome of your research. Just like the example of buying a car, it frames an answer with a question that can be tested. As we have seen above, you may have several hypotheses that address different parts of your research.

Check

Question 2 of 4

A good hypothesis should have the following:

- ☐ Relevant variables.
- ☐ A specific group.
- ☐ A predicted outcome.
- ☒ All of the above.

Correct!

A good hypothesis should have a way of approval or rejection with a test, that answers positively or negatively. A test could be an experiment, observation or using statistics. When using a statistical hypothesis, we weigh up the odds and come to a balanced conclusion.

Check

Question 3 of 4

One way to phrase a hypothesis is to:

- ☒ Phrase it as a correlation.
- ☐ Phrase it as a corporation.
- ☐ Phrase it as a relation.

Correct!

In this approach, you spot a correlation where you state the predicted relationship between the variables.

You can also phrase your hypothesis as an IF_THEN statement or compare and state the differences between two groups.

Check

Question 4 of 4

When you see a question with the letters (H0) before it you know it is the:

- ☒ Default position if the subsequent hypothesis tests fail.
- ☐ Hypothesis that has null values associated with it.
- ☐ Hypothesis that is the first one in the list.
- ☐ All of the above.

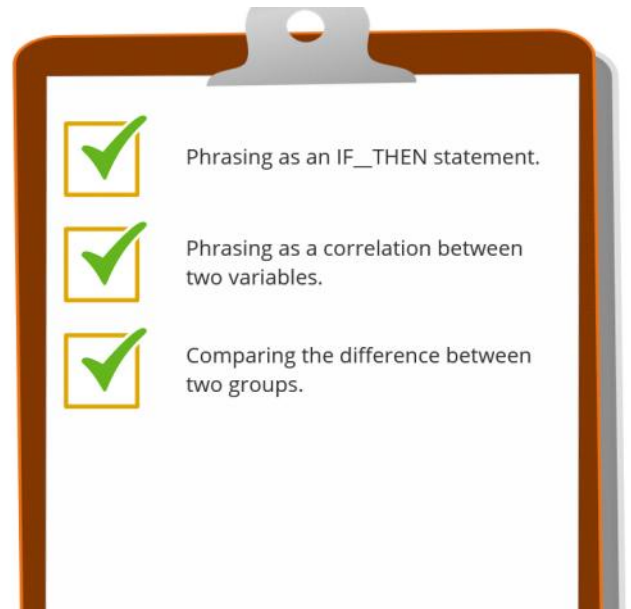
Correct!

If your hypothesis is using some statistics to analyse the question being answered, you will also have to write what the answer falls back to if no association is found. This default fallback position is called the null hypothesis and it is written with 'H0' before it. The subsequent tests are written with the number after it, (H1, H2, H3...).

Apply

To summarise. The key points to formulating your hypothesis is (Select each of the checkboxes to reveal key elements):

Use these approaches in an order that you think is appropriate for your study. **Apply** what you have learnt in this section to **phrase a hypothesis** on your chosen subject.



Reflect

Before you dive into this section, take a few minutes to reflect on these questions:

- How do you **truly** feel when you learn something new?
- How do you **truly** feel when your told that you're wrong?

Happy if I have learnt and understood fully. I enjoy the process of learning

If I am told I have done something wrong or incorrectly then I want to learn how to do it correctly so I wont make the same mistake in the future.

Check

Question 1 of 2

Which **two instincts** are in conflict when we are learning from feedback?

- ☐ The worry of not finishing on time.
- ☒ The joy from learning something new.
- ☒ Fear of being shown up for being wrong.
- ☐ The feeling of success from completion.

Correct!

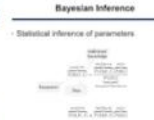
Most people will say that learning new things results in a feeling of joy. They will also report that when someone tells them that they are wrong they feel uncomfortable or upset. Overall, feedback is a vital conversation you must use to improve your ideas, but the process is not naturally joyful.

Question 2 of 2

According to Heen's TED talk, the people who actively sought critical feedback were:

- ☐ Less successful.
- ☒ More successful.
- ☐ Very upset.
- ☐ Ignorant.

Bayesian inference is a statistical method that updates the probability of a hypothesis as more evidence or data becomes available, using Bayes' theorem. It combines prior beliefs about a hypothesis with new data to form a more informed understanding. Essentially, it allows for the revision of probabilities based on new information.



Here's a more detailed explanation:

1. Bayes' Theorem:

- Bayes' theorem is the foundation of Bayesian inference. It provides a way to calculate the probability of a hypothesis (or event) given some prior knowledge and new evidence.
- The formula is: $P(A|B) = [P(B|A) * P(A)] / P(B)$, where:
 - $P(A|B)$ is the posterior probability of hypothesis A given evidence B.
 - $P(B|A)$ is the likelihood of observing evidence B given hypothesis A.
 - $P(A)$ is the prior probability of hypothesis A (before considering any evidence).
 - $P(B)$ is the probability of observing evidence B.

Question 1 of 3

Zeeta is really interested in fast cars. She can test several sorts of alloy wheels at a racing circuit before concluding which ones to use. What sort of research is she doing?

- ☒ Inductive
- ☐ Deductive

Question 2 of 3

Austin researches the performance data for a particular brand of soap powder. It provides evidence that in their research it makes shirts whiter than white. He decides to try out the powder on his white tablecloths and concludes that it makes them whiter too. What sort of reasoning is he using?

- ☒ Deductive
- ☐ Inductive

Correct!

According to Heen (2014), those who sought critical feedback are said to adapt more quickly to new roles, they report higher satisfaction, they get higher performance reviews, and they accelerate their own learning. This also changes the way other people see them.

Correct!

Inductive reasoning is the mutual opposite of deduction. In our research, we observe a pattern of 'special cases' and 'increase' this to become a larger general principle, that can be applied universally to other phenomena we or the reader of our assignment have yet to see.

Question 3 of 3

When Aneka reads the horse racing tips from her newspaper, what sort of reasoning is she hoping they have done before advising her?

✓ Abductive

✗ Logic

Reflect

Look back at a piece of work that you have received a **good mark** for. **Re-read it**. Is this work a shopping list of facts and statements that you have learnt in class, or have you **applied your knowledge** to a problem you have observed?

I scored well for Networking and Cyber Security module ACCA4024 - Reflecting on this it is both a list of referenced facts which have been used to apply logical reasoning

Correct!

Abductive reasoning recognises the chance that a particular conclusion is, on balance, true or false.

Question 1 of 3

Do students who engage in the additional revision classes perform significantly differently on tests than students who do not participate?

✓ Good

✗ Bad

Question 2 of 3

Why do students seem so apathetic? Select whether the question is good or bad.

✗ Good

✓ Bad

Correct!

This is not specific or clear, nor does it reflect an intervention, if one is planned, or a target group of participants. Better questions might be: Are science students more engaged in class discussions when a response strategy is used? What are the reasons for apathy among various groups of high school students?

Question 3 of 3

Do general education teachers evaluate student homework differently than special education teachers, based on five criteria? Select whether the question is good or bad.

✗ Good

✓ Bad

Not quite...

It has some clarity, and the problem is evident, but there is not enough detail in the five criteria.

Reflect

Having read the descriptions and thinking about the course you are attending, spend a few moments contemplating these questions:

- What do you think is the **predominant method of research** in your subjects: quantitative or qualitative?
- Now think of the **alternative method**. What subjects would favour that sort of research?

Predominant method of research as an auditor is qualitative, but it does also include quantitative research as well. An audit will require a good mix of both types to document and demonstrate controls are being met and are effective in mitigating the risks they are implemented to reduce.

Quantitative drop zone

Experiments

Observations recorded as numbers

Surveys with closed-ended questions

Qualitative drop zone

Observations described in words

Interviews with open-ended questions

Literature reviews that explore concepts and theories

Apply

Take sometime to think of **appropriate questions** to this scenario. Keeley is attending an interview for a job at UWTSD as a trainee librarian. Imagine that you are the person interviewing her. Can you...

- Think of a **qualitative question** that would give you some data on her librarian skills?
- Think of a **quantitative question** that would reveal relevant data on her suitability as a person who knows about books?

Qualitative - If a student asks for help in researching a topic how would you go about approaching the task, and how would you help them?

Quantitative - How would you go about auditing the library contents, indexing and numbering all entries?

Check

In this knowledge check activity you will be presented with three research questions.

Question 1 of 3

What do we call it when we reduce the data of the population into a smaller manageable unit? We call it a...

 Sample

 Snowball

Question 2 of 3

Which of the following are relevant reasons for why we have to reduce the data we research into a smaller unit? (Choose which ones you think apply)

- ☒ Your time and resources may be stretched
- ☒ There are limited people who have experiences you are studying
- ☒ There are limited people/results with the relevance to the area you are studying

Question 3 of 3

When you select a sample from the population by picking the names out of a hat, what type of sampling are you conducting?

- ☐ Unusual sampling
- ☒ Random sampling
- ☐ Stratified sampling

Question 1 of 2

If you wanted to understand the general characteristics or opinions of a group of people you would use a...

- ☒ Survey
- ☐ Interview
- ☐ Experiment

Question 2 of 2

A 'Likert scale' is?

- ☒ Respondents specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements
- ☐ A way of confirming the validity of experimental research invented by Donald Likert in 1967