

Research Question Builder

DESN2003: Research for Innovation

Research Question Builder — Blank Template

Your Name: _____ Date: _____

1. Start With Your Gap

What's the gap you identified from your Landscape Intelligence?

2. Question Type — Pick One

Type	Template	Check
Descriptive	“What is happening with [phenomenon] among [population]?”	<input type="checkbox"/>
Relational	“What is the relationship between [X] and [Y] in [context]?”	<input type="checkbox"/>
Causal	“Does [intervention] cause [outcome] in [population]?”	<input type="checkbox"/>

3. Build Your Question — Fill In The Blanks

Component	Your Answer
WHO (population)	<hr/>
WHAT (phenomenon/intervention)	<hr/>
WHERE (context)	<hr/>
OUTCOME (what you're measuring)	<hr/>

Draft Question:

4. FINER Criteria Check

Criterion	Question to Ask Yourself	Pass?
Feasible	Can I actually do this in one semester with my resources?	<input type="checkbox"/>
Interesting	Do I genuinely care? Would others care?	<input type="checkbox"/>
Novel	Does this add something new (not already answered)?	<input type="checkbox"/>
Ethical	Can this be done without harming participants?	<input type="checkbox"/>
Relevant	Does answering this matter to the field/industry?	<input type="checkbox"/>

If any box is unchecked, revise your question before proceeding.

5. Scope Check — The Goldilocks Test

Too Broad	Just Right	Too Narrow
Can't answer in a lifetime "How does technology affect society?"	Answerable in one semester Your question here	Answer is trivial/obvious "Is button A 2% better than B?"

Is your question "just right"? ☐ Yes ☐ No — needs scoping

If too broad, narrow by: _____

If too narrow, broaden by: _____

6. Method Reality Check

Based on your question type, what method would you likely use?

Question Type	Typical Methods
Descriptive	Surveys, interviews, observation
Relational	Correlational surveys, analytics
Causal	Experiments, A/B tests

My likely method: _____

Can I access the data/people I need? ☐ Yes ☐ No ☐ Need to figure out

7. Final Research Question

Write your refined, final research question:

Credibility Check: Could a stranger understand exactly what you're studying, who you're studying, and why it matters? ☐ Yes ☐ No

Research Question Builder — Worked Example

Your Name: Alex Chen Date: Week 4

1. Start With Your Gap

What's the gap you identified from your Landscape Intelligence?

Instagram tested hiding likes in 2019, and research shows social comparison causes anxiety, but no study has measured whether hiding likes actually reduces anxiety — especially not in Asian contexts where social pressure dynamics differ.

2. Question Type — Pick One

Type	Template	Check
Descriptive	“What is happening with [phenomenon] among [population]?”	[]
Relational	“What is the relationship between [X] and [Y] in [context]?”	[x]
Causal	“Does [intervention] cause [outcome] in [population]?”	[]

Note: I chose Relational because I can't run a true experiment (can't actually hide likes on Instagram). I can study the relationship between like-checking behavior and anxiety levels.

3. Build Your Question — Fill In The Blanks

Component	Your Answer
WHO (population)	HKU undergraduate students aged 18-24 who use Instagram daily
WHAT (phenomenon/intervention)	Frequency of checking like counts on own posts
WHERE (context)	Daily Instagram use over a 2-week period
OUTCOME (what you're measuring)	Self-reported anxiety levels (using validated GAD-7 scale)

Draft Question:

“What is the relationship between frequency of checking Instagram like counts and self-reported anxiety levels among HKU undergraduate students during daily use?”

4. FINER Criteria Check

Criterion	Question to Ask Yourself	Pass?
Feasible	Can I recruit 50+ HKU students? Yes. Can I run a 2-week diary study? Yes.	[x]

Criterion	Question to Ask Yourself	Pass?
Interesting	I use Instagram daily and feel this anxiety. My classmates talk about it.	[x]
Novel	Existing research is Western-focused; HK/Asian context understudied.	[x]
Ethical	Observational only, no manipulation, participants can withdraw anytime.	[x]
Relevant	Mental health + social media is a major concern; designers need this data.	[x]

5. Scope Check — The Goldilocks Test

Too Broad	Just Right	Too Narrow
“How does Instagram affect mental health?”	“Relationship between like-checking frequency and anxiety in HKU students”	“Do students check likes more on Tuesdays?”

Is your question “just right”? [x] Yes [] No

6. Method Reality Check

My likely method: Mixed methods — diary study (quantitative: daily anxiety ratings + like-checking frequency) + exit interviews (qualitative: why do you check?)

Can I access the data/people I need? [x] Yes — I can recruit through HKU student groups and my own network

7. Final Research Question

“What is the relationship between Instagram like-checking frequency and daily anxiety levels among HKU undergraduate students (aged 18-24), and what motivations drive this checking behavior?”

Credibility Check: [x] Yes — A stranger knows: who (HKU undergrads), what (like-checking vs anxiety), and why it matters (mental health + design implications)