UNIVERSAL GRADUATE ATTRIBUTES

THE 7i MODEL

@GabiLipan

1495 UNIVERSITY OF ABERDEEN

Skills Development Scotland

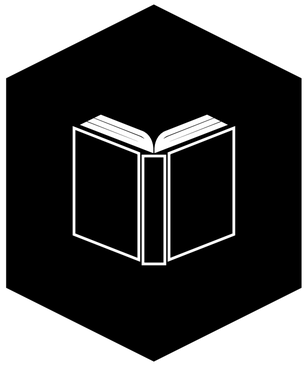
E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

Scottish Graduate School of Social Science

APHF Applied Psychology & Human Factors Group

WHAT ARE

GRADUATE ATTRIBUTES?



KNOWLEDGE

PERSONAL ATTRIBUTES

VALUES AND ATTITUDES

SKILLS

TIMELINE

THE CONTEXT OF HIGHER EDUCATION IN THE UK

There are 4 key events that influenced the graduate attributes agenda in the UK.

KEY EVENT

END OF THE BINARY SYSTEM

Dearing (1997)

Increasing overlap between universities and polytechnics.

The Further and Higher Education Act granted university status to 35 polytechnics and to other institutions.

This marked the end of the binary system.

1992

KEY EVENT

THE DEARING REPORT

Dearing (1997)

Remembered for changes in tuition system.

Encourages partnerships between universities and industry.

Discusses the importance graduate attributes.

1992

1997

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KEY EVENT

GAs INTRODUCED IN ENGLAND

By the Higher Education Funding Council for England.

1992

1997

2003

KEY EVENT

GAs INTRODUCED IN SCOTLAND

By the Scottish Funding Council: *The Scottish Quality Enhancement Framework.*

1992

1997

2003

2008

PRESENT

CURRENT SITUATION

Most universities have graduate attributes.

Most used implementation strategy: Curriculum Mapping.

A skills-gap is still frequently reported (Arslan, 2018).

Progress has been ‘slow’ and ‘patchy’ (de la Harpe, 2012).

1992

1997

2003

2008

NOW

WHY IS PROGRESS SLOW?

- STAFF’S VIEW OF GRADUATE ATTRIBUTES MATTERS (Barrie, 2006)
- UNIVERSITIES SHOULD OFFER STAFF MORE TRAINING (Green et al., 2009)
- CULTURAL DEVELOPMENT WITHIN INSTITUTIONS IS NEEDED (Green et al., 2009)

WE DON’T HAVE A STANDARD FOR GAs

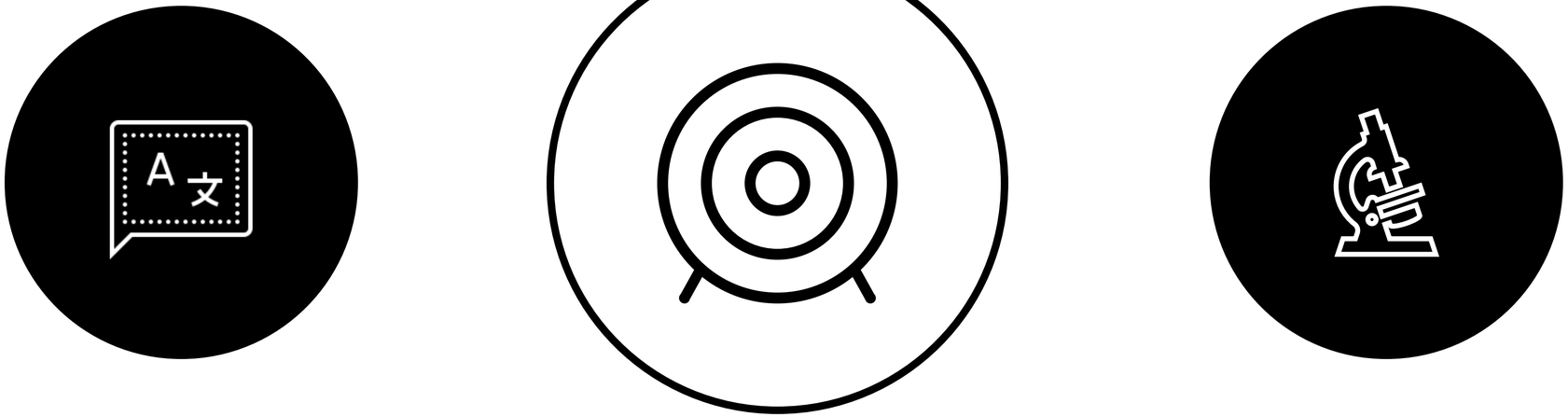
WE DON’T HAVE A STANDARD FOR GAs

Skills Development Scotland

META-SKILLS Model

STUDY 1

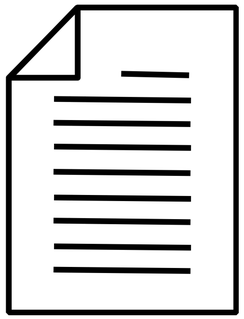
OUR AIM



DEVELOPING A MODEL OF
GRADUATE ATTRIBUTES

STUDY 1 METHOD

OUR DATASET



27

LISTS OF GRADUATE ATTRIBUTES

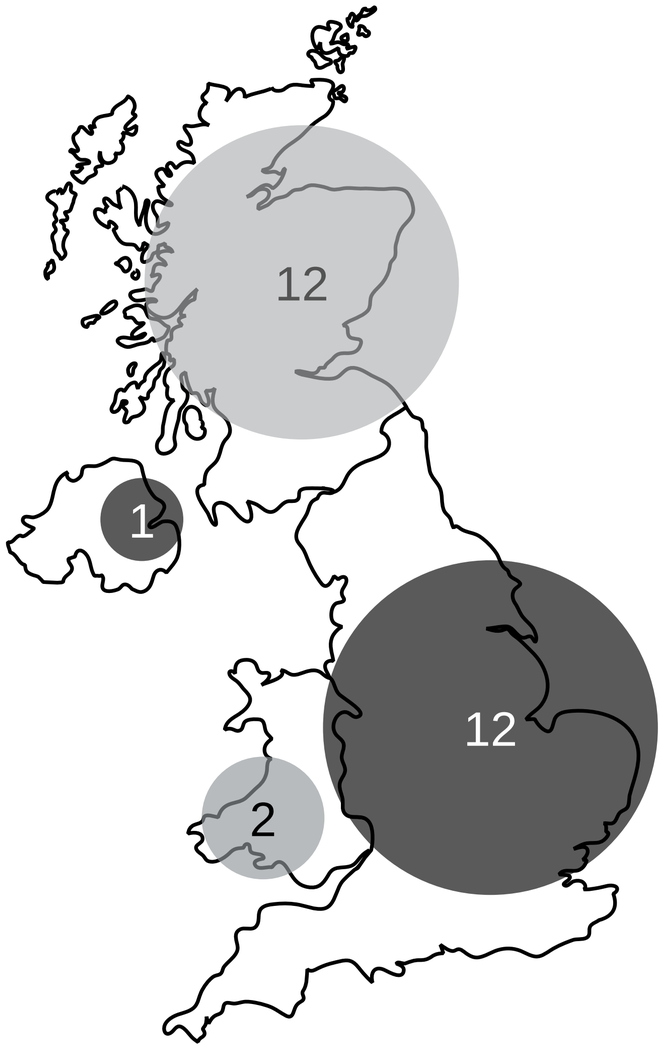
FROM ACROSS THE UK

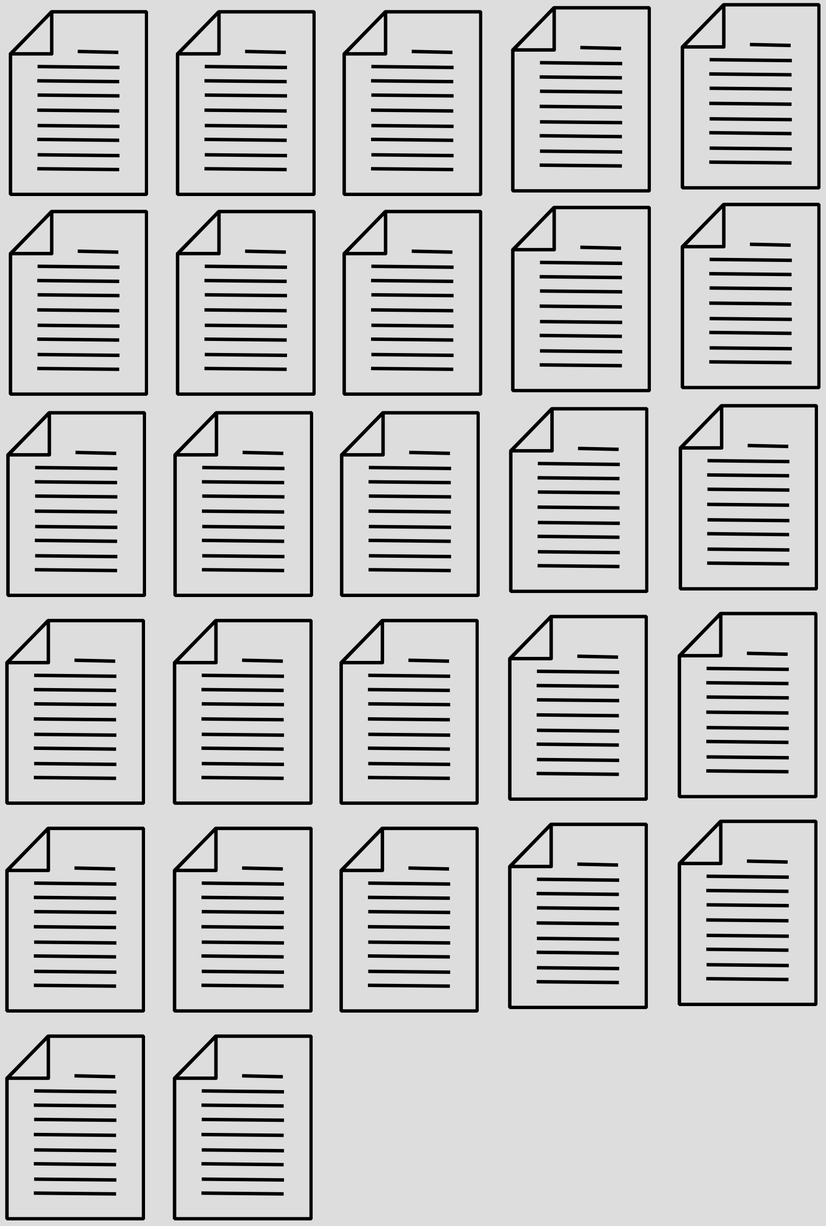
STUDY 1 METHOD

OUR DATASET

27

LISTS OF GRADUATE ATTRIBUTES
FROM ACROSS THE UK





STUDY 1 METHOD

CONTENT ANALYSIS

IMMERSION IN THE DATA

PRELIMINARY CODE LIST

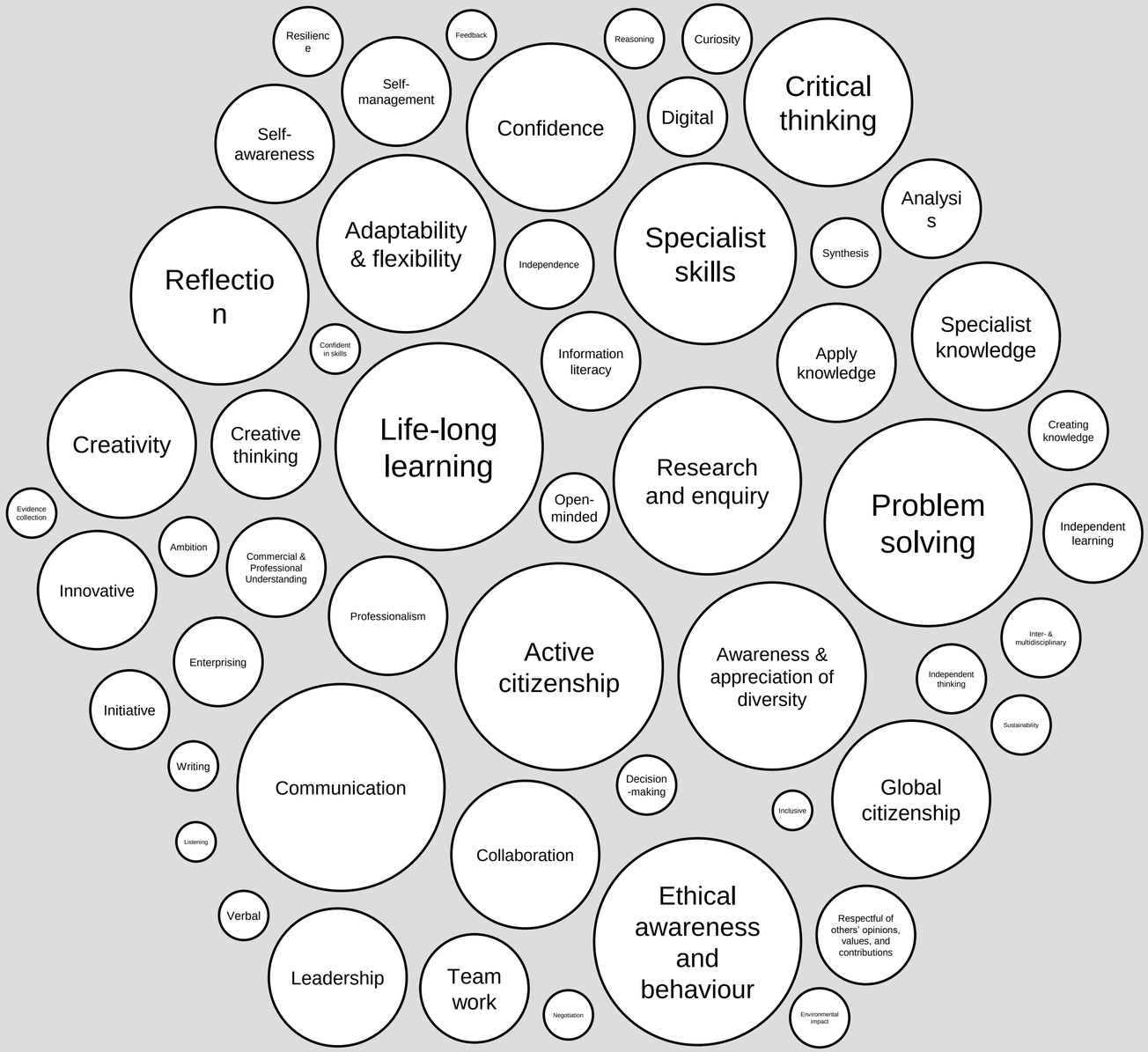
“An openness to, and an interest in, life-long learning through directed and self-directed study.”

“Be equipped and motivated to continue learning and professional development throughout their careers.”

Life-long learning

STUDY 1 METHOD

CONTENT ANALYSIS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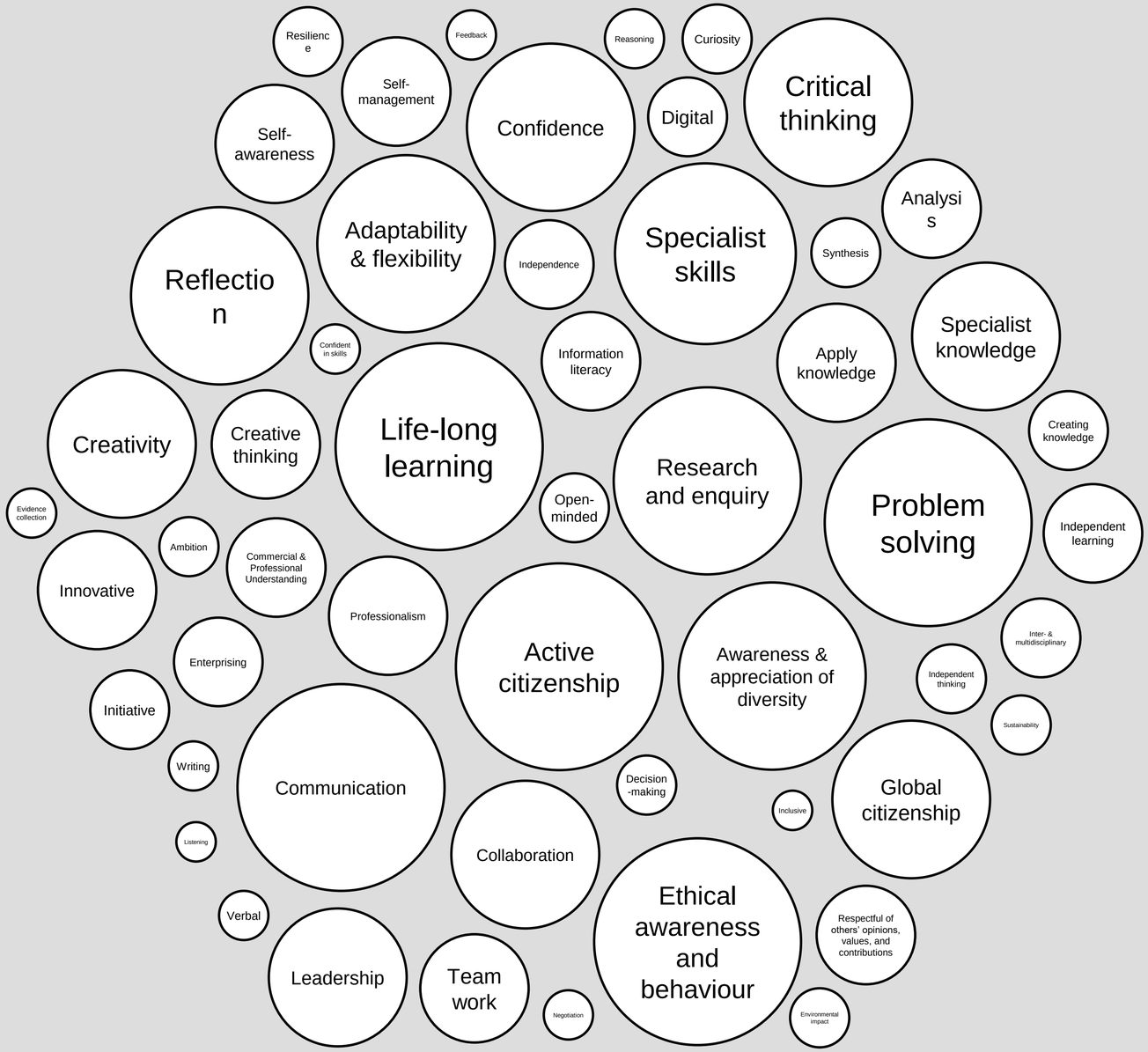
Feedback
Reasoning
Curiosity
Critical thinking
Self-management
Confidence
Digital
Self-awareness
Analysis
Adaptability & flexibility
Specialist skills
Synthesis
Reflection
Independence
Specialist knowledge
Confident in skills
Information literacy
Apply knowledge
Creativity
Creative thinking
Life-long learning
Creating knowledge
Research and enquiry
Problem solving
Evidence collection
Open-minded
Independent learning
Ambition
Commercial & Professional Understanding
Innovative
Professionalism
Active citizenship
Awareness & appreciation of diversity
Inter- & multidisciplinary
Enterprising
Independent thinking
Initiative
Sustainability
Writing
Communication
Decision -making
Global citizenship
Inclusive
Listening
Collaboration
Ethical awareness and behaviour
Verbal
Respectful of others' opinions, values, and contributions
Leadership
Team work
Negotiation
Environmental impact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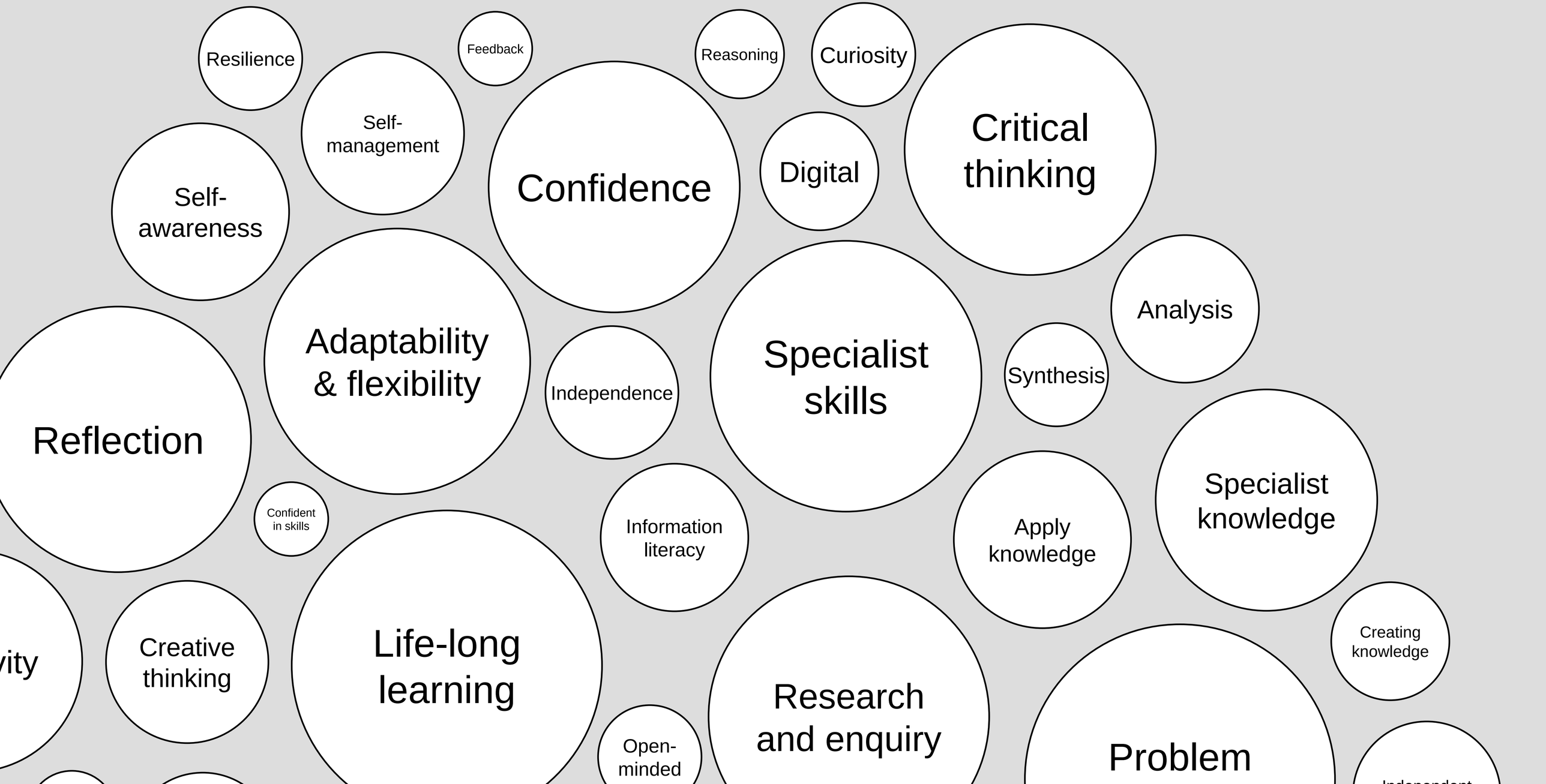
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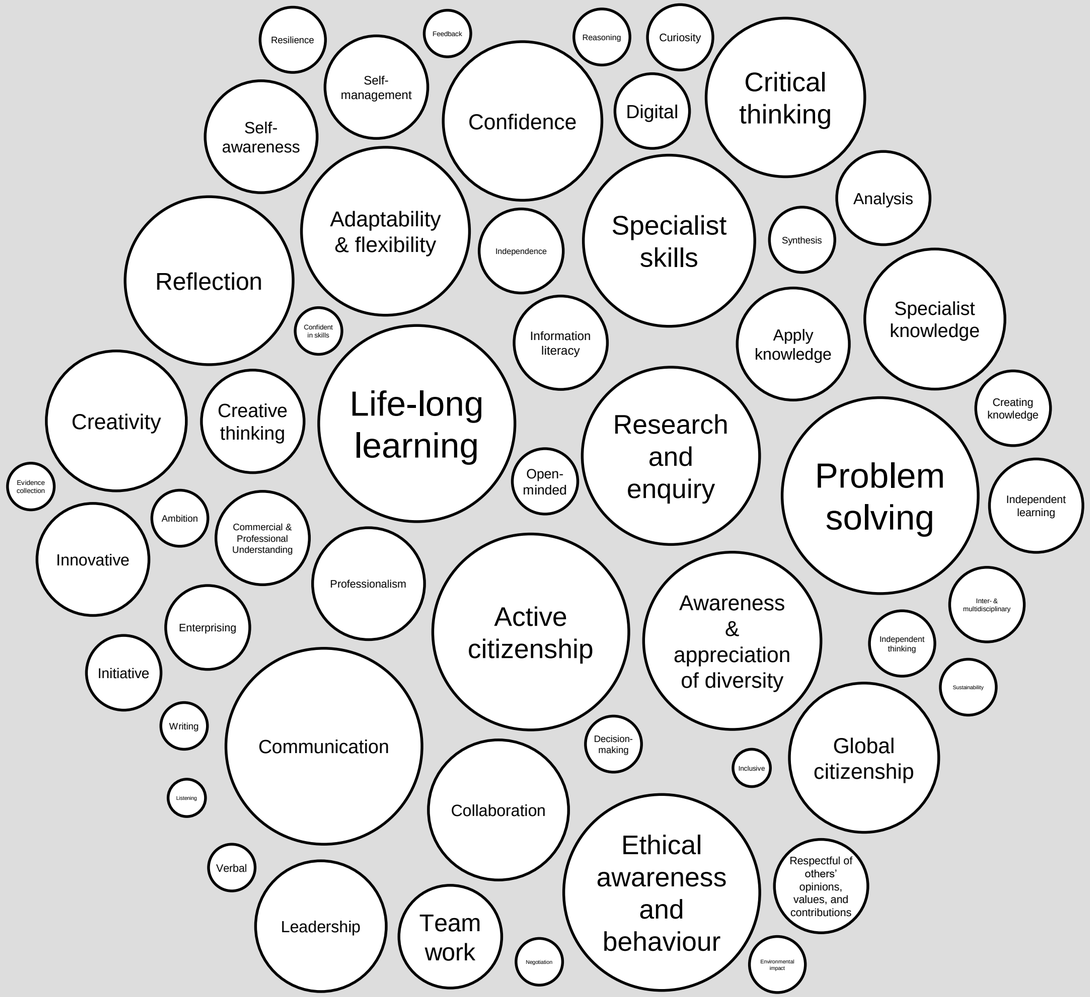

STUDY 1 METHOD

CONTENT ANALYSIS

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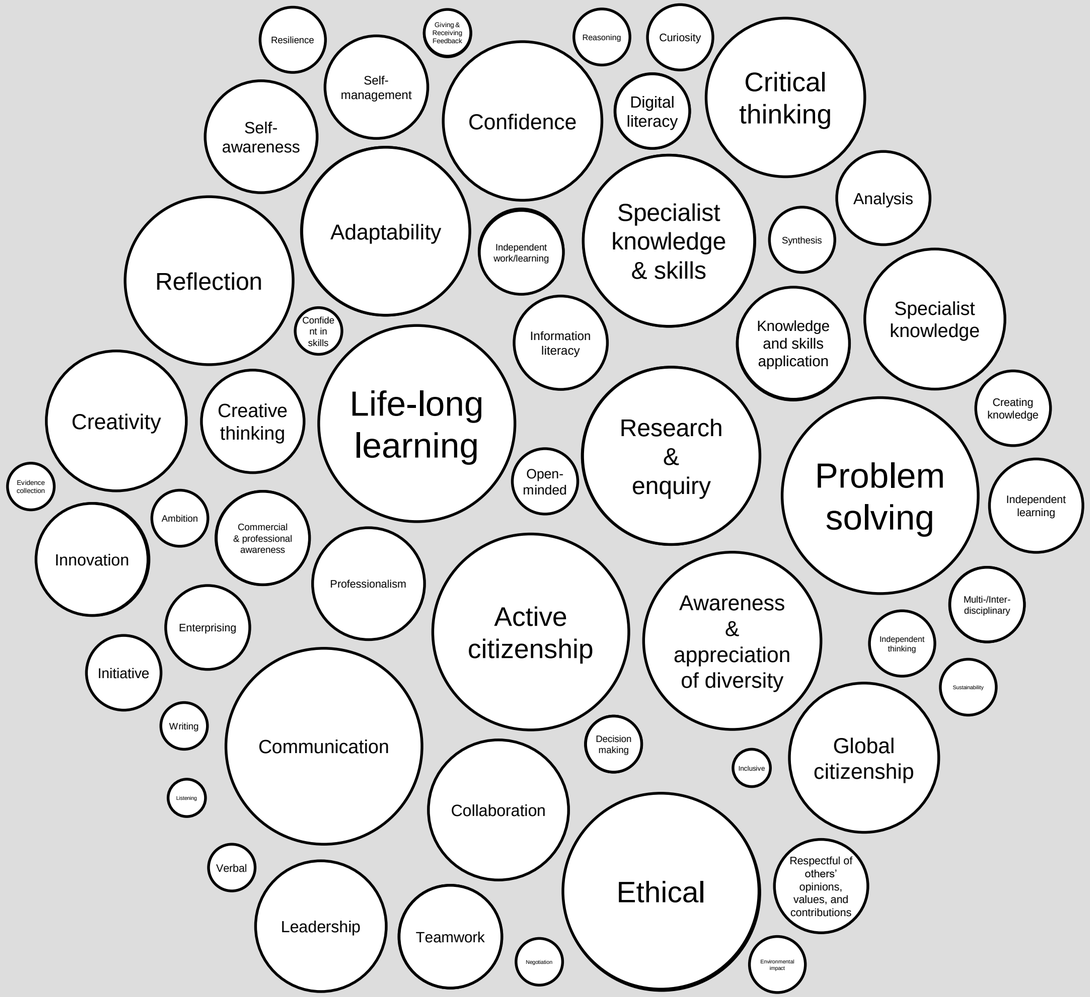
SEMANTIC CODING



STUDY 1 METHOD

CONTENT ANALYSIS

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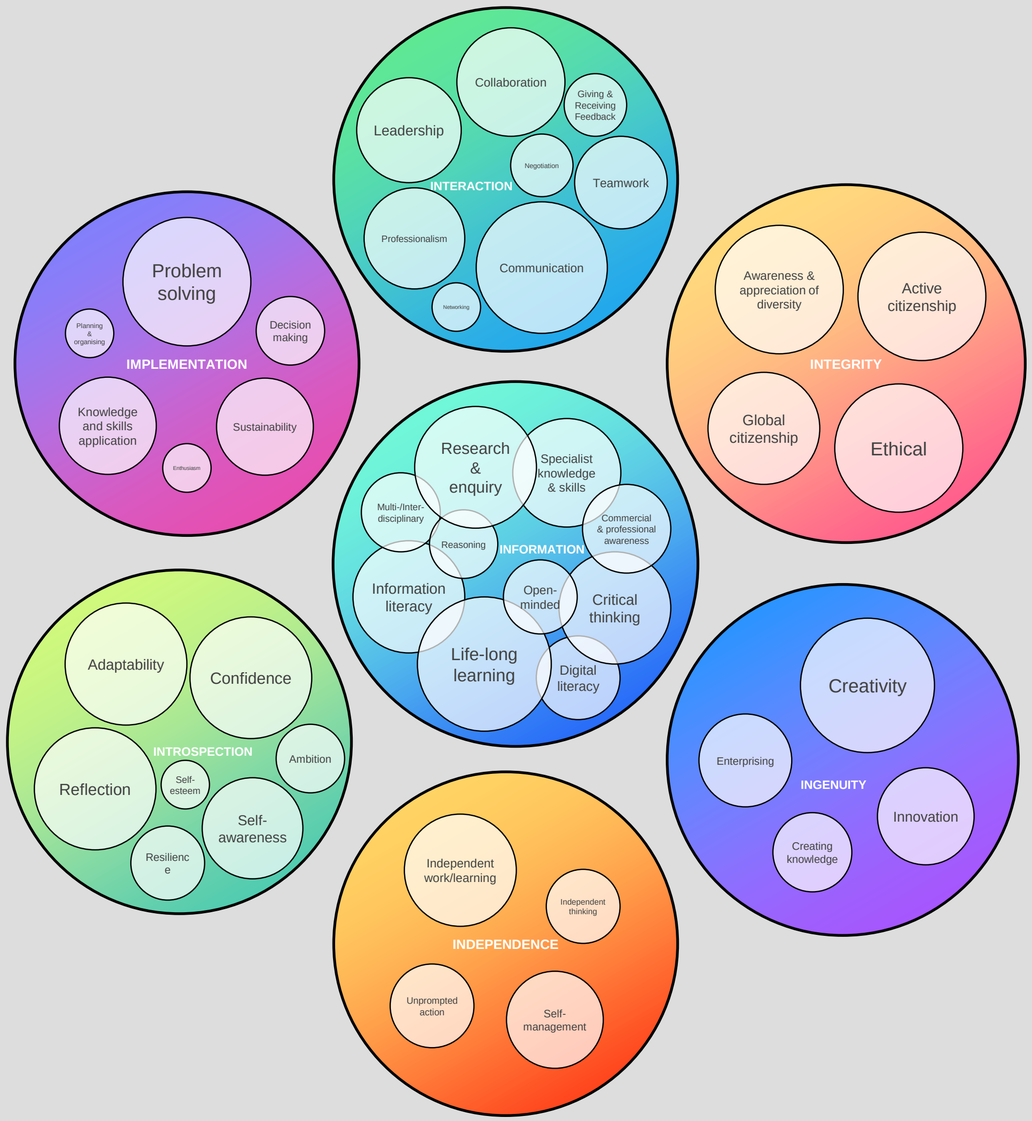
UPDATE & REVIEW CODES

FORM CATEGORIES



STUDY 1 METHOD

CONTENT ANALYSIS

IMMERSION IN THE DATA

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SEMANTIC CODING

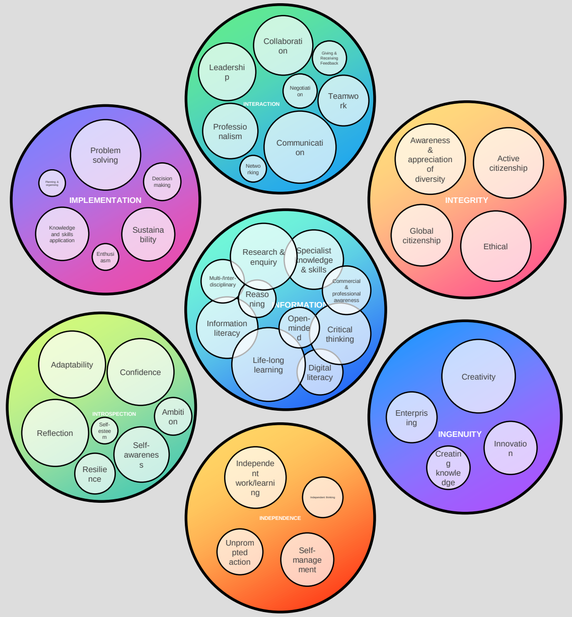
UPDATE & REVIEW CODES

FORM CATEGORIES

REVIEW CATEGORIES

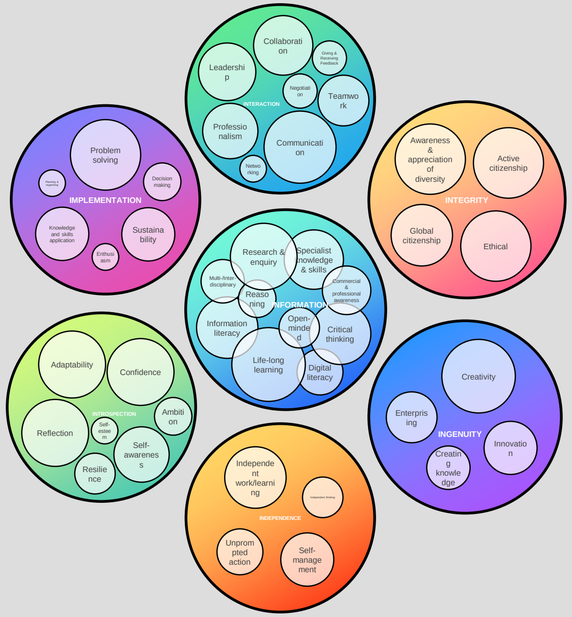
S T U D Y 1

RESULTS



S T U D Y 1

RESULTS



STUDY 1

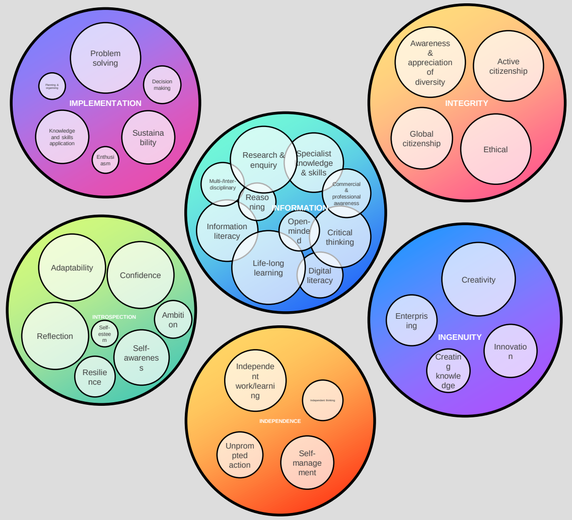
RESULTS

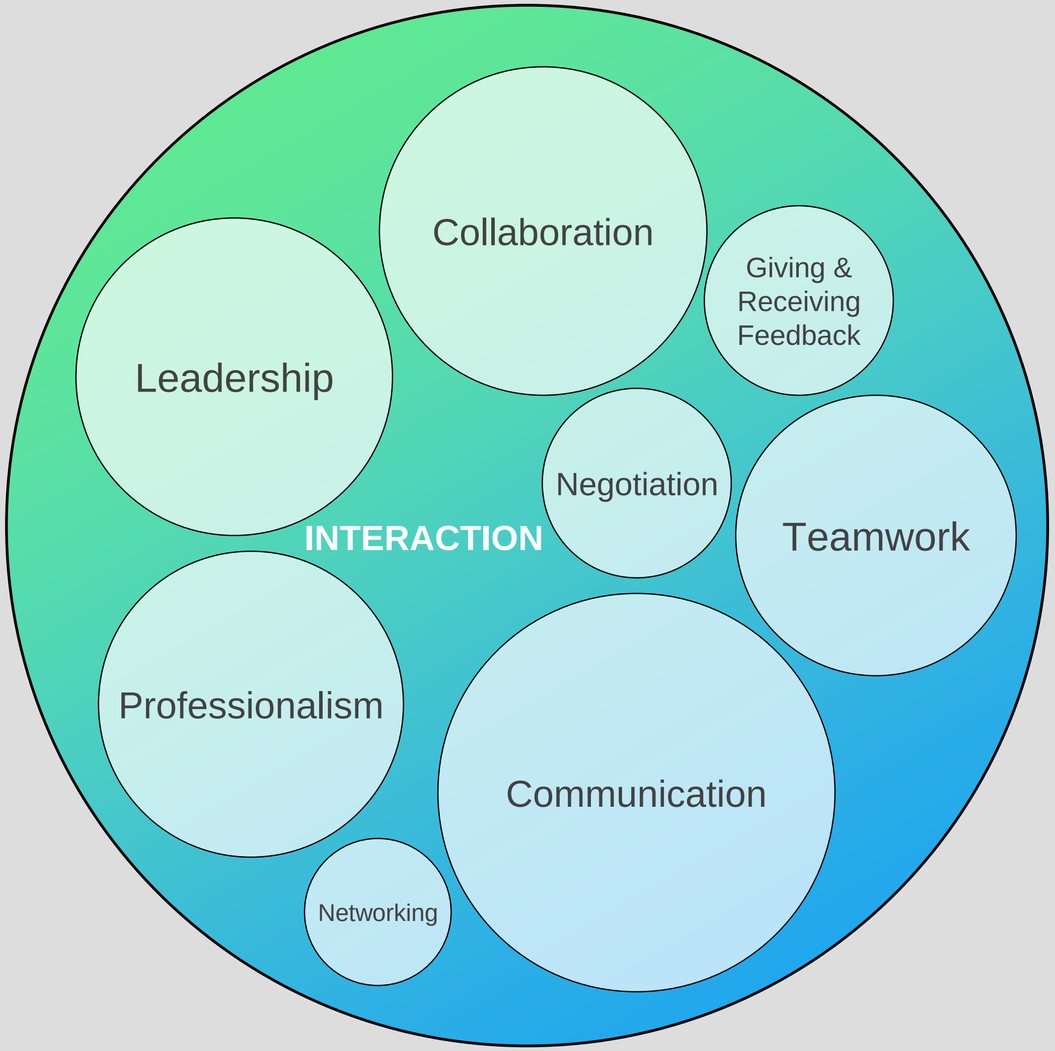
Number of universities mentioning

24/27

Number of total mentions

138





Interacting and working with others.

STUDY 1

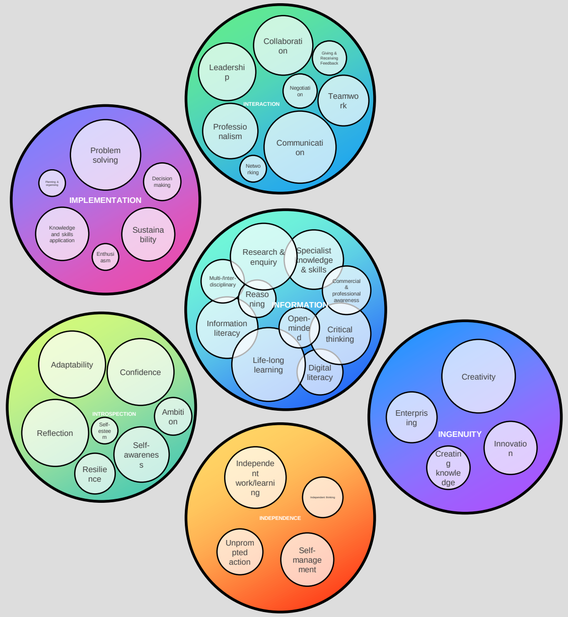
RESULTS

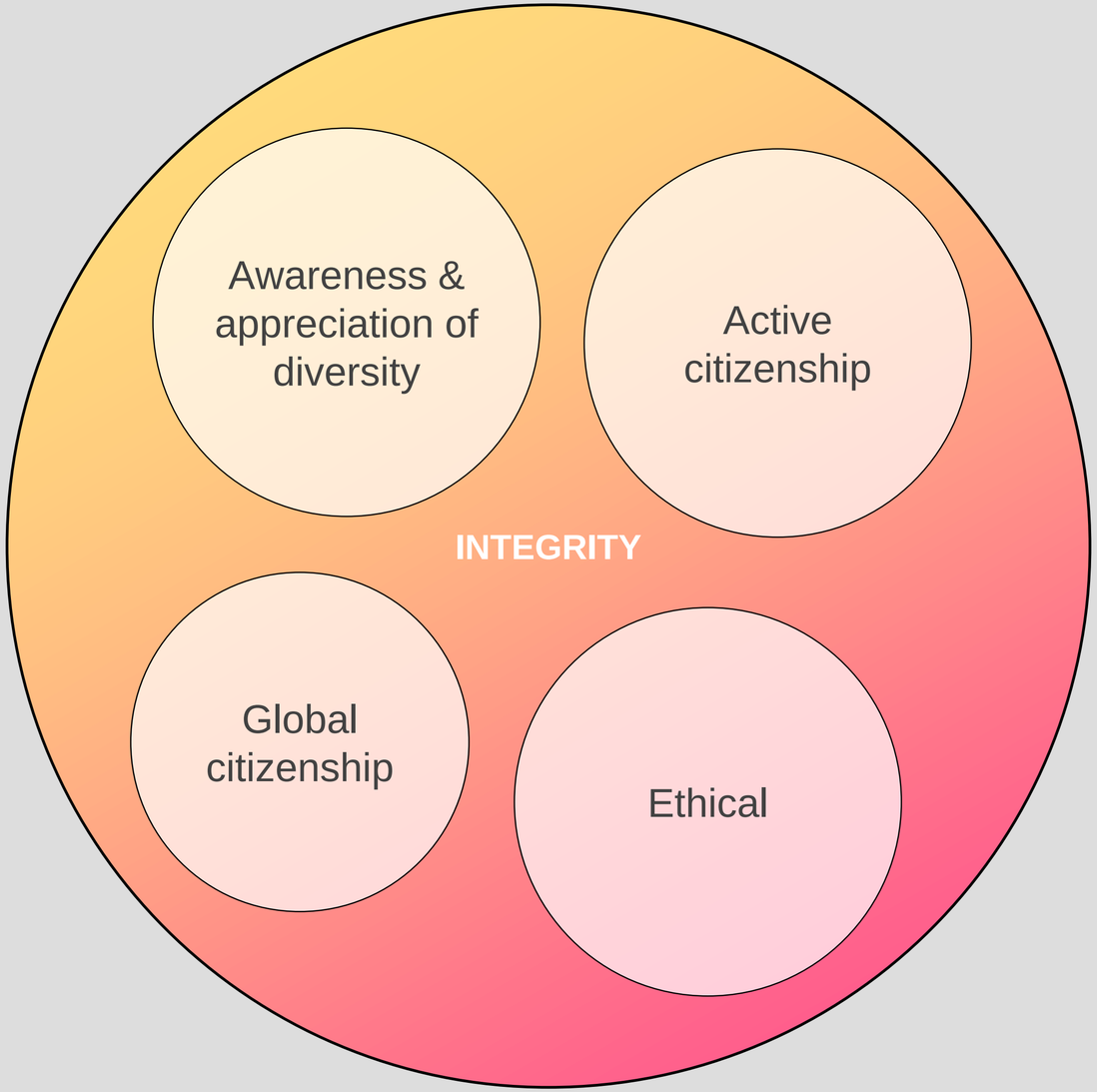
Number of universities mentioning

26/27

Number of total mentions

138





Having a strong moral compass, an awareness and respect for diversity, and displaying a willingness to get involved for the good of the community at local, national and international levels.

STUDY 1

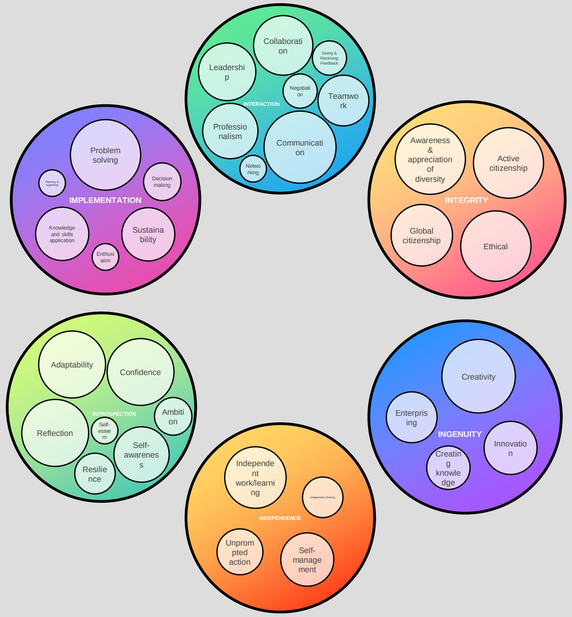
RESULTS

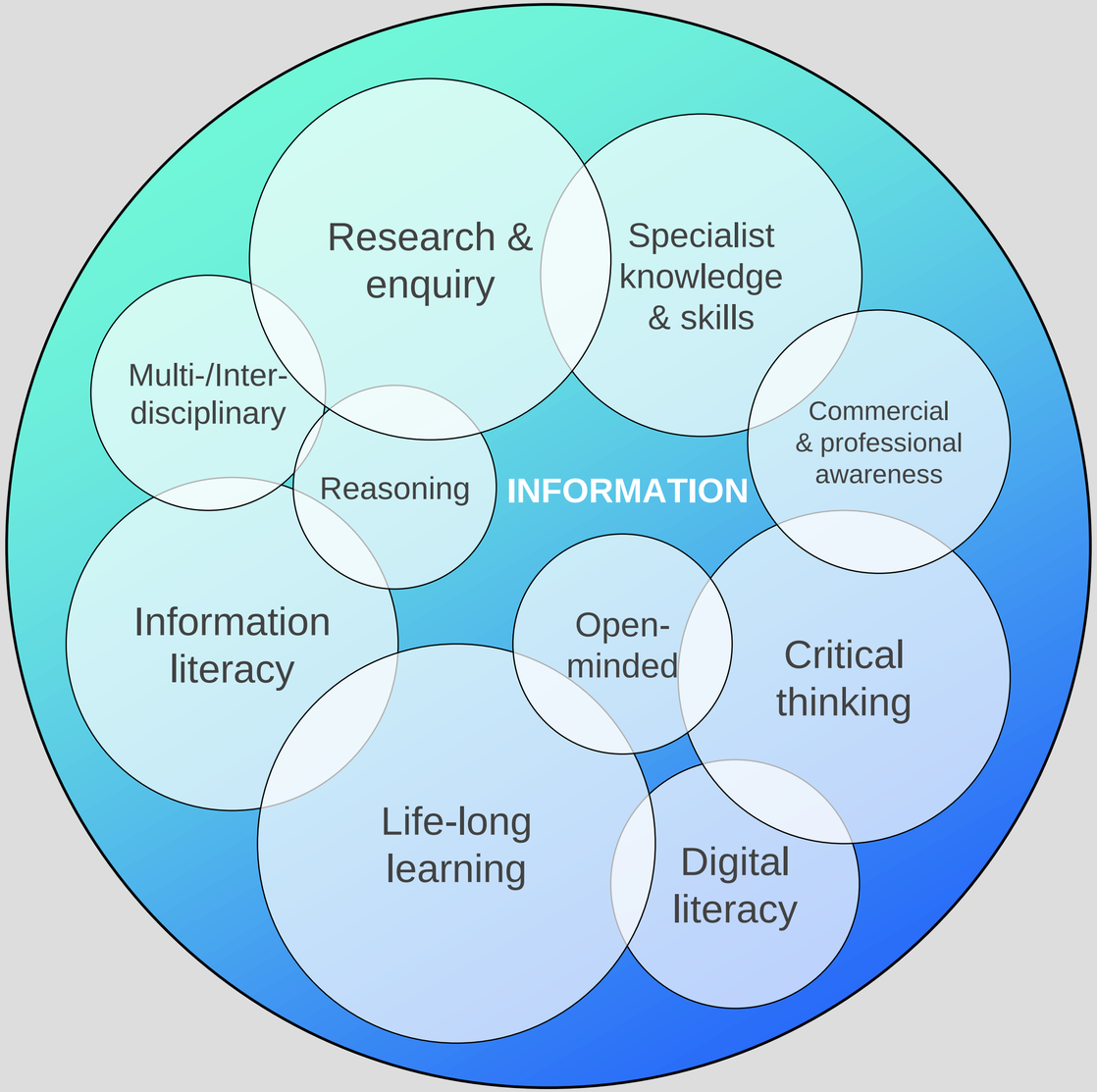
Number of universities mentioning

27/27

Number of total mentions

203





Knowing, managing, and acquiring information.

STUDY 1

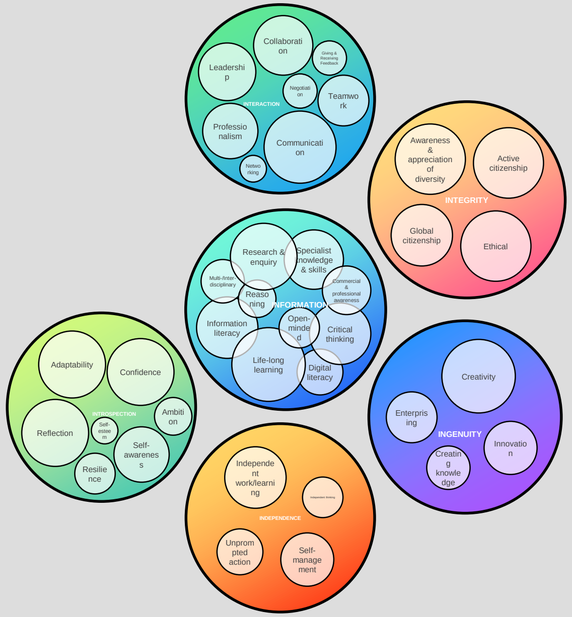
RESULTS

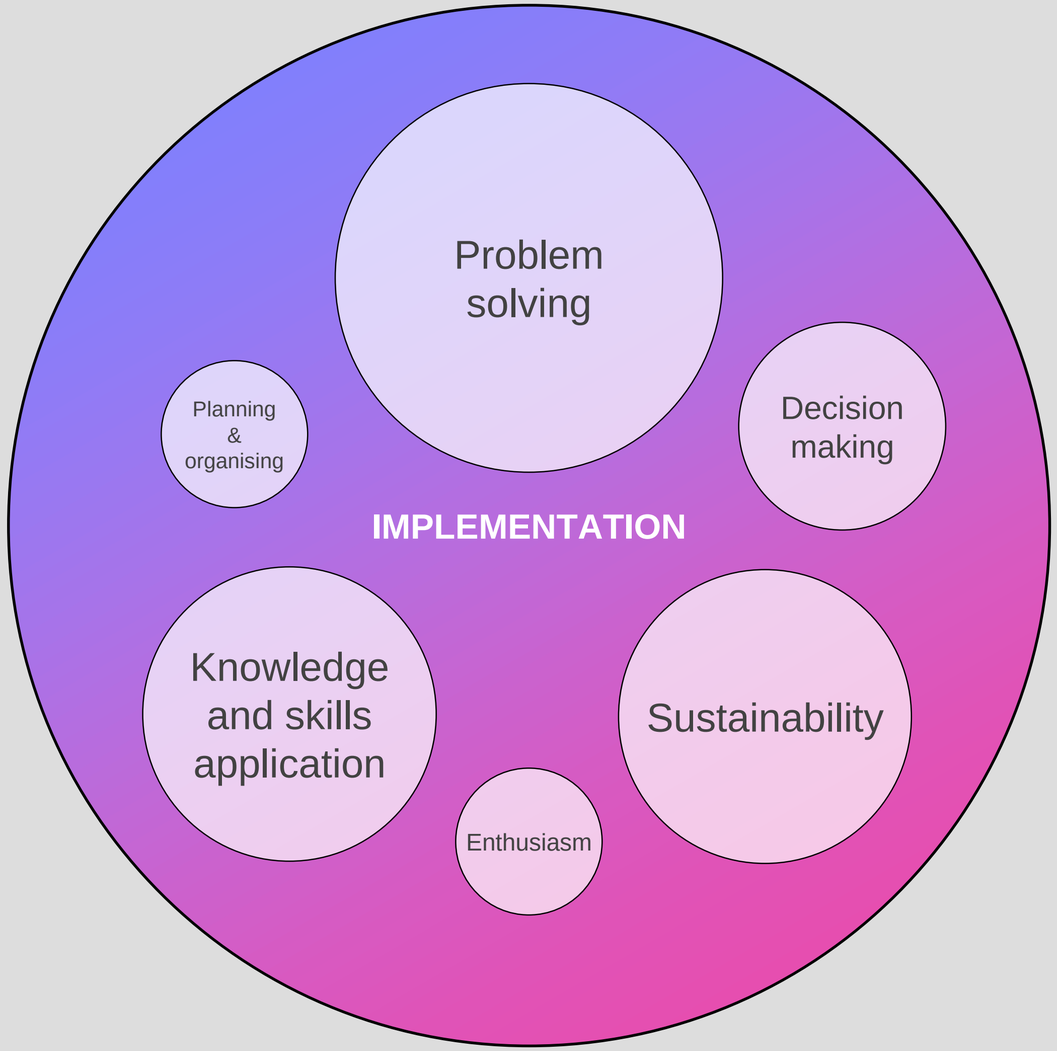
Number of universities mentioning

24/27

Number of total mentions

93





Solving problems and putting plans and decisions into effect.

STUDY 1

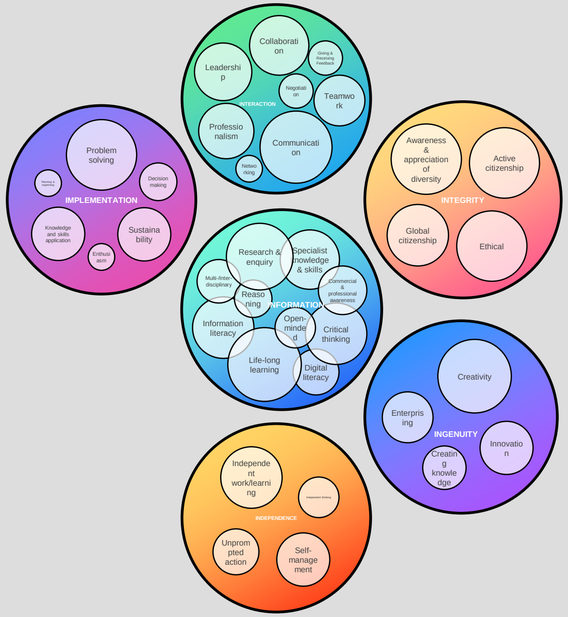
RESULTS

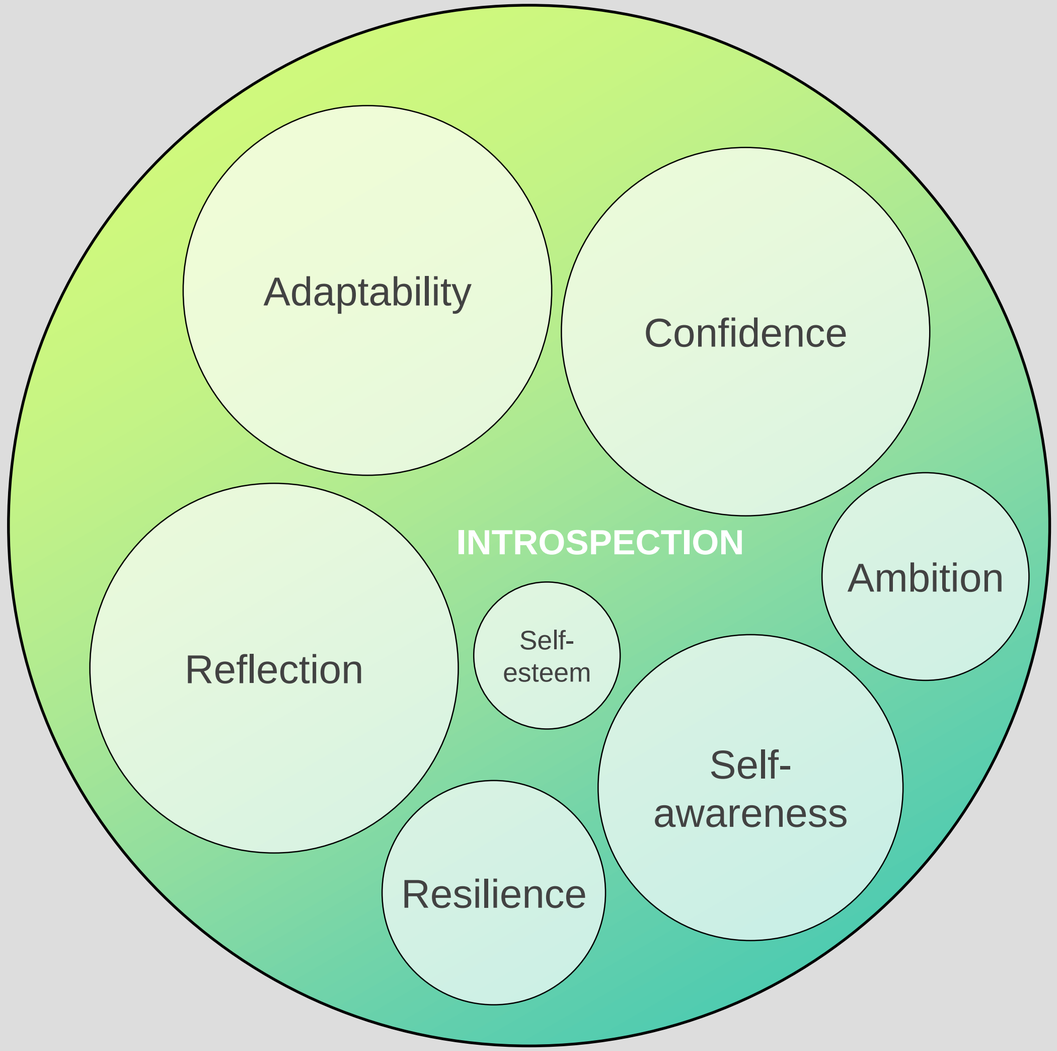
Number of universities mentioning

24/27

Number of total mentions

135





Knowing oneself, appreciating one’s own value, and being able to adapt and change.

STUDY 1

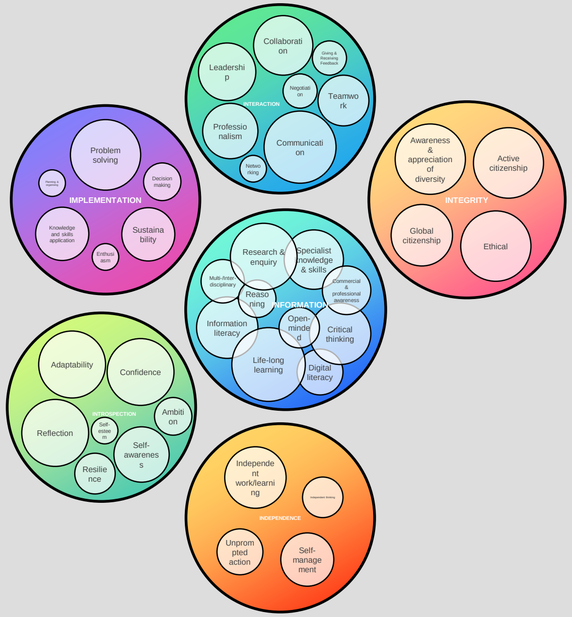
RESULTS

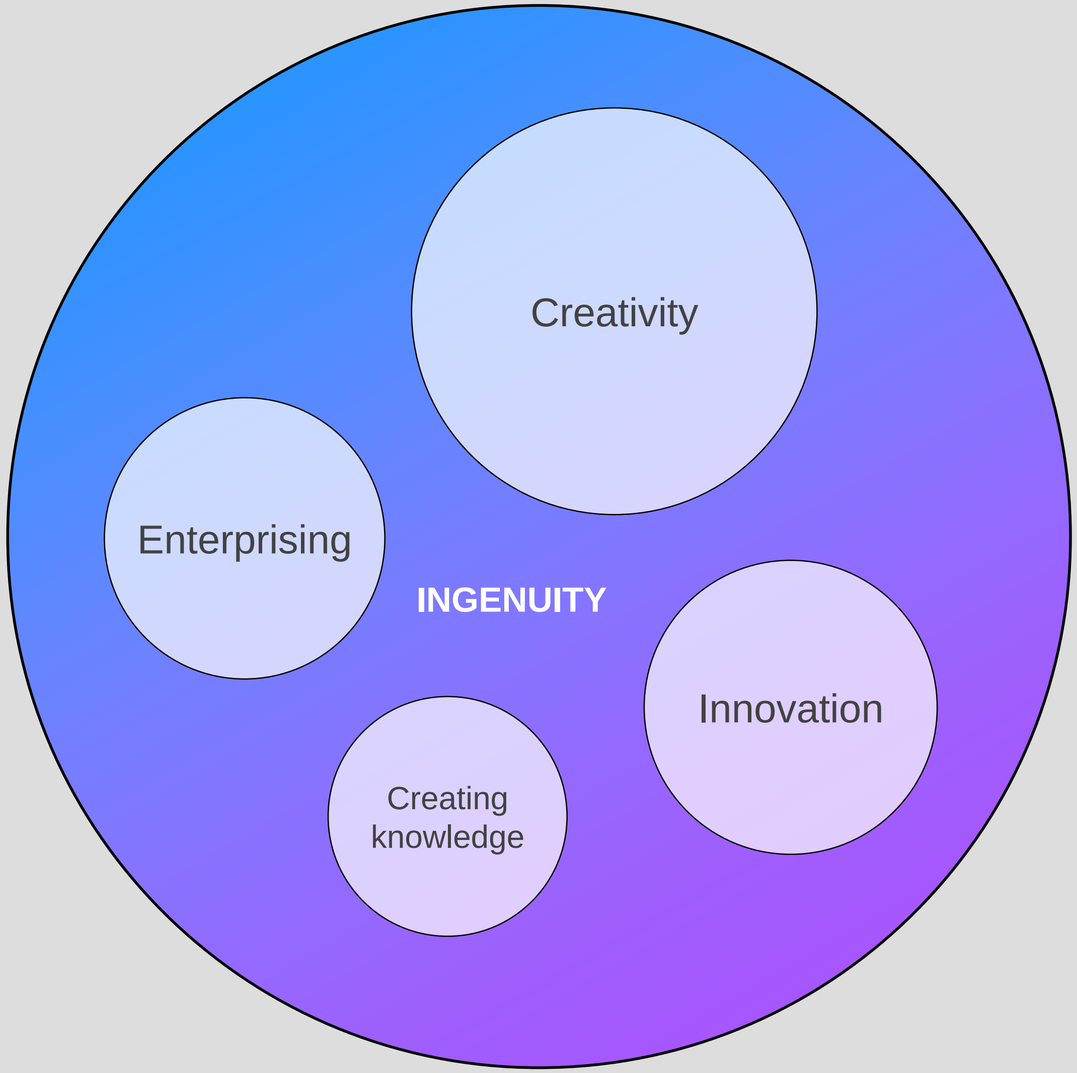
Number of universities mentioning

25/27

Number of total mentions

71





Being original, creating something new, or improving an existing idea, product or process in a new way.

STUDY 1

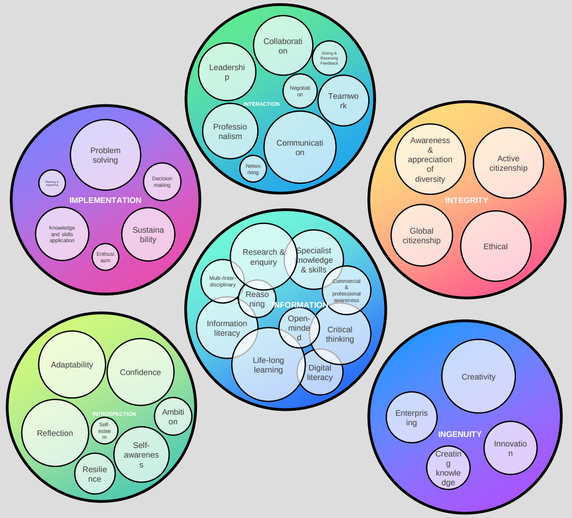
RESULTS

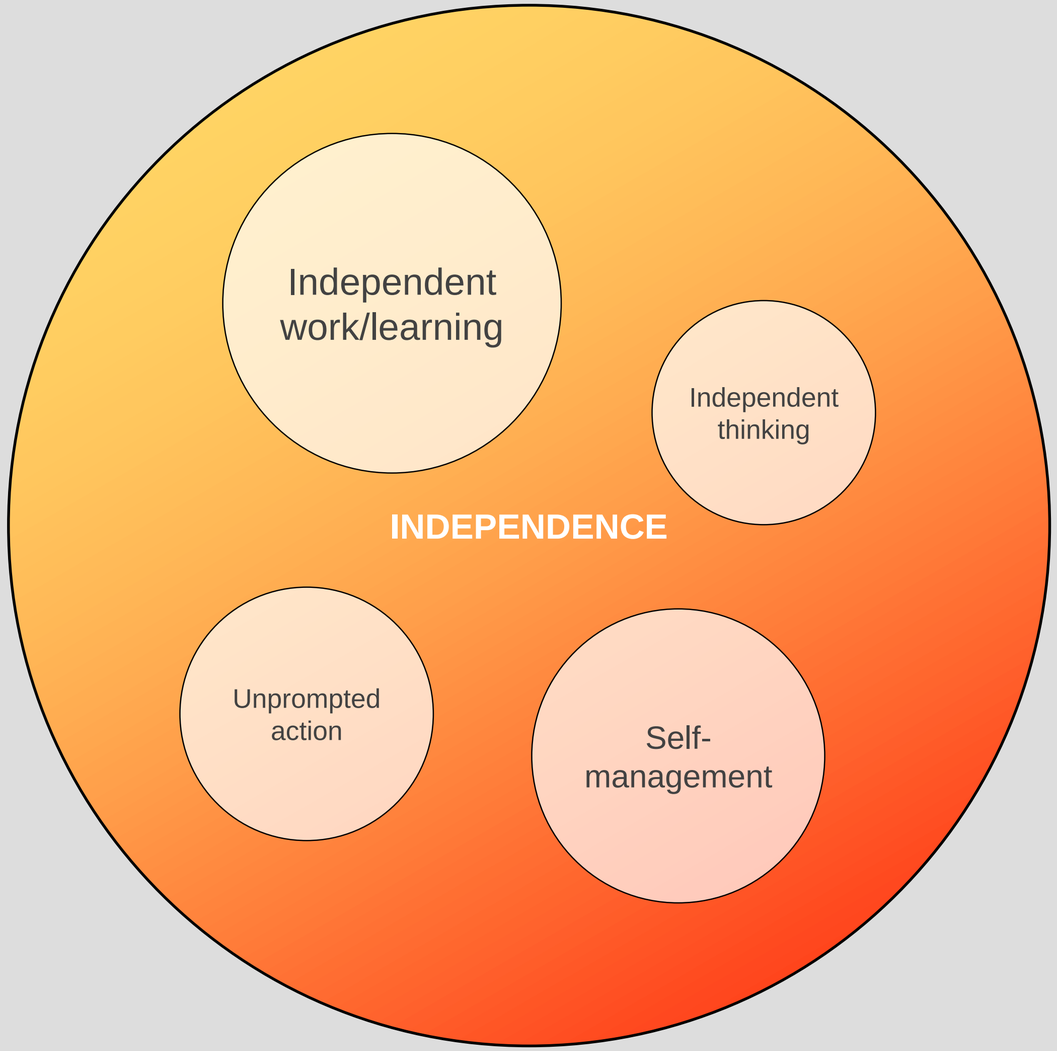
Number of universities mentioning

24/27

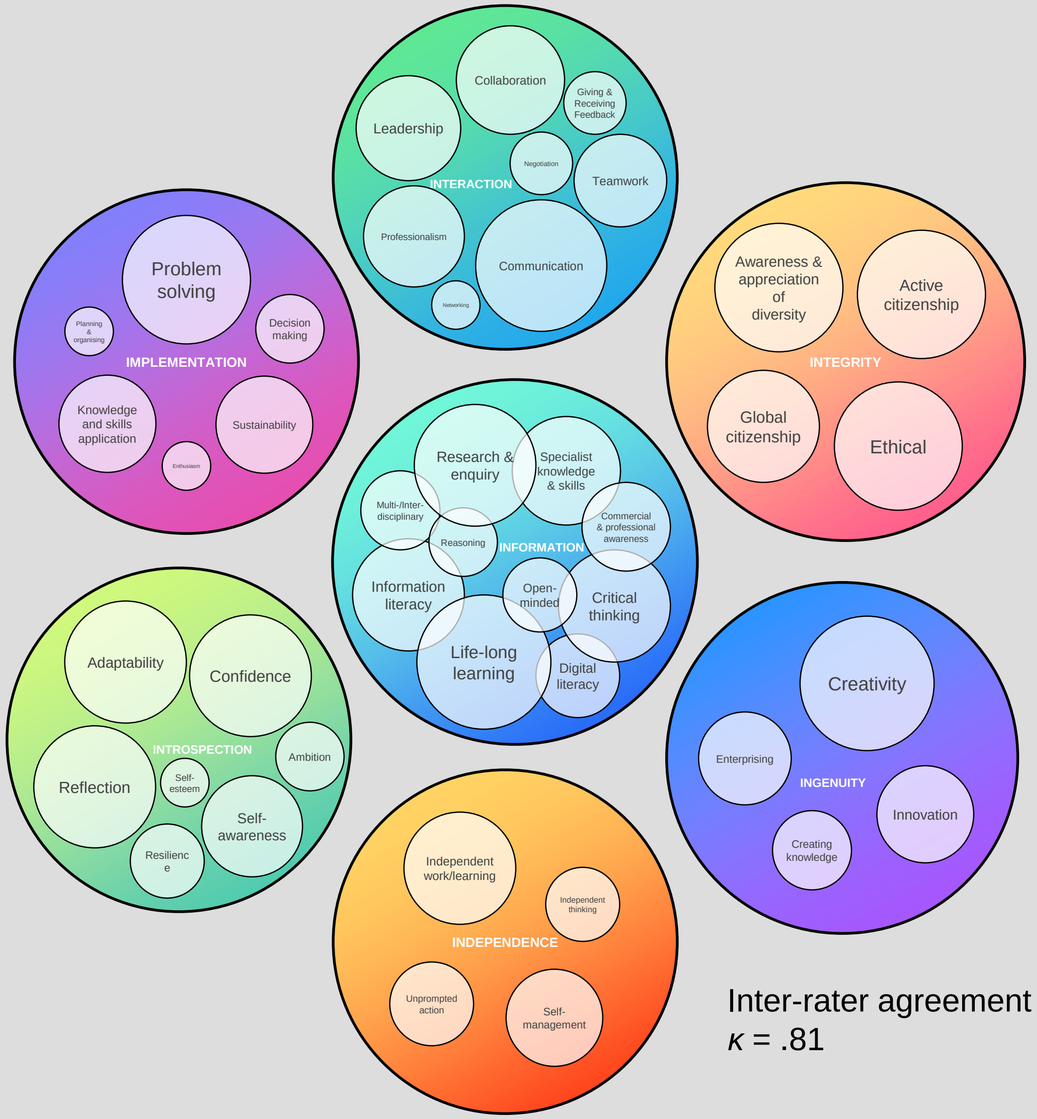
Number of total mentions

68



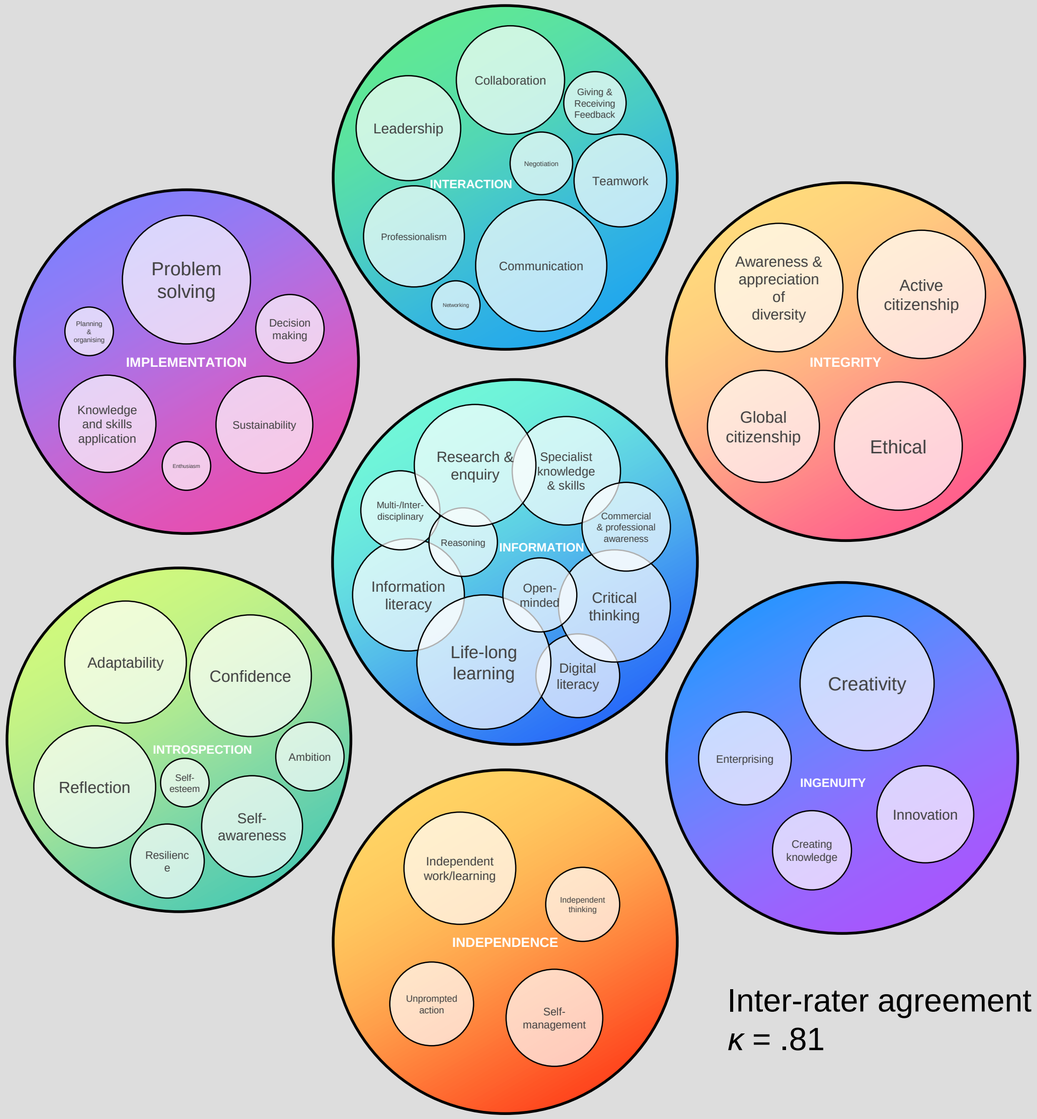


Performing, thinking, and acting independently.



Inter-rater agreement
κ = .81

THE 7i MODEL



Inter-rater agreement
κ = .81

THE 7i MODEL

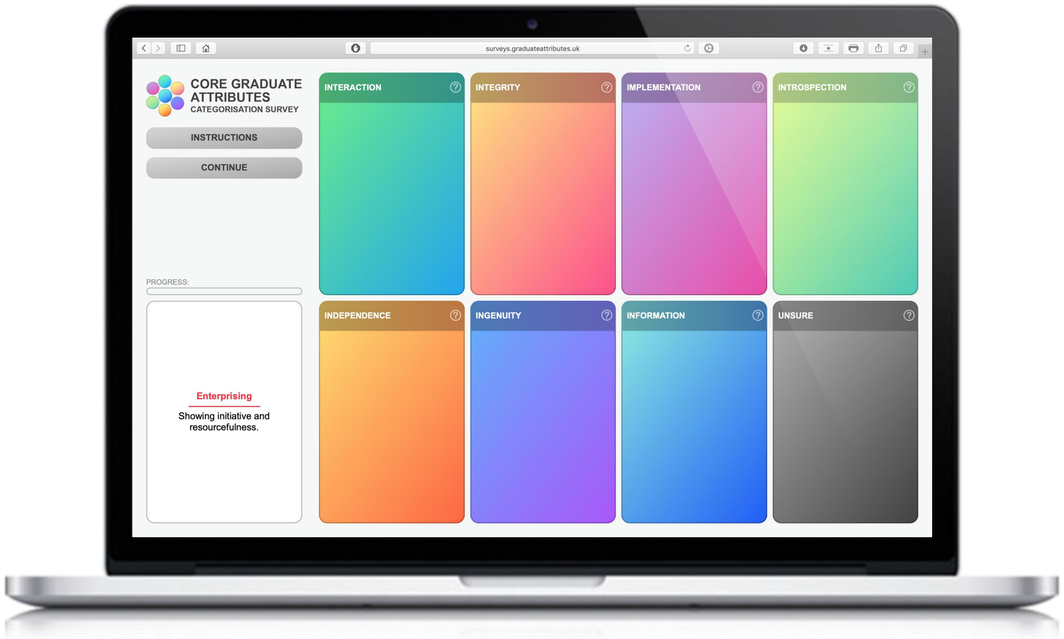
VALIDATE & REFINE THE MODEL

STUDY 2

CATEGORISATION SURVEY

QUICK OVERVIEW OF THE TASK

REFINE AND VALIDATE THE CATEGORISATION.



CORE GRADUATE ATTRIBUTES
CATEGORISATION SURVEY

INSTRUCTIONS

CONTINUE

PROGRESS:

Independent thinking

Being able to make their own minds and question existing ideas, rather than just adopting others' thoughts or ideas.

INTERACTION	INTEGRITY	IMPLEMENTATION	INTROSPECTION
INDEPENDENCE	INGENUITY	INFORMATION	UNSURE

CORE GRADUATE ATTRIBUTES
CATEGORISATION SURVEY

INSTRUCTIONS

CONTINUE

PROGRESS: Done!

All done.

INTERACTION
- Teamwork
- Collaboration
- Leadership
- Giving and receiving feedback
- Professionalism
- Communication
- Negotiation

INTEGRITY
- Self-awareness
- Ethical
- Awareness and appreciation of diversity
- Social and civic responsibility
- Global citizenship

IMPLEMENTATION
- Self-esteem
- Knowledge and skills application
- Enthusiasm
- Planning and organising
- Decision making
- Problem solving
- Sustainability

INTROSPECTION
- Confidence
- Ambition
- Reflection
- Adaptability/Flexibility

INDEPENDENCE
- Independent thinking
- Unprompted action
- Specialist knowledge and skills
- Self-management
- Independent work/learning

INGENUITY
- Innovation
- Critical thinking
- Creativity
- Creating knowledge
- Enterprising

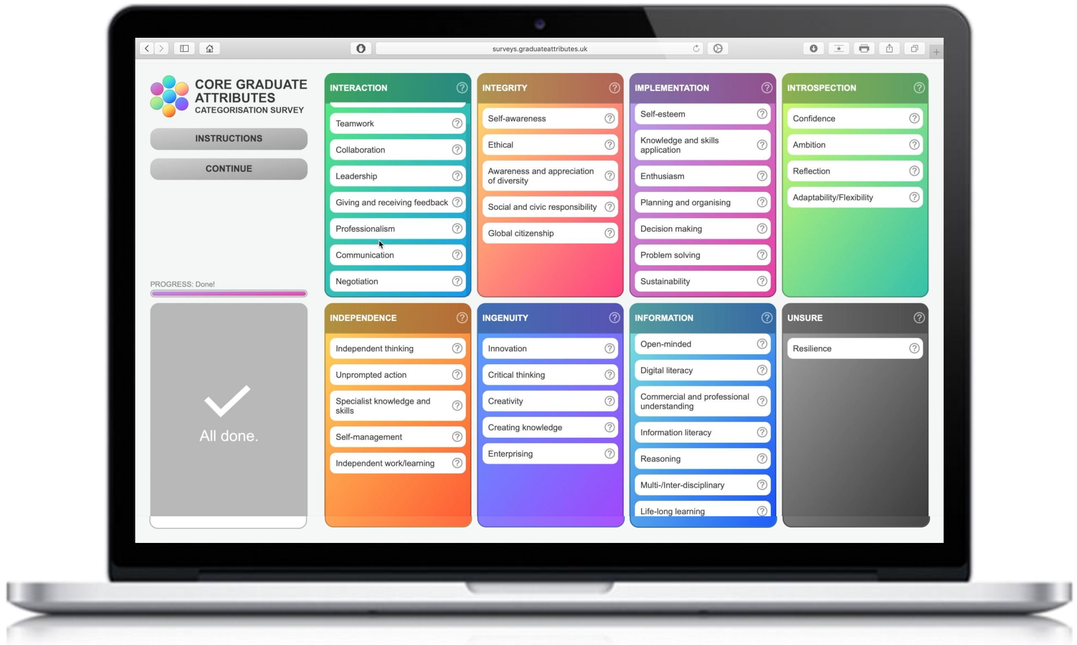
INFORMATION
- Open-minded
- Digital literacy
- Commercial and professional understanding
- Information literacy
- Reasoning
- Multi-/Inter-disciplinary
- Life-long learning

UNSURE
- Resilience

STUDY 2

CATEGORISATION SURVEY

SURVEYS.GRADUATEATTRIBUTES.UK



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CATEGORISATION SURVEY

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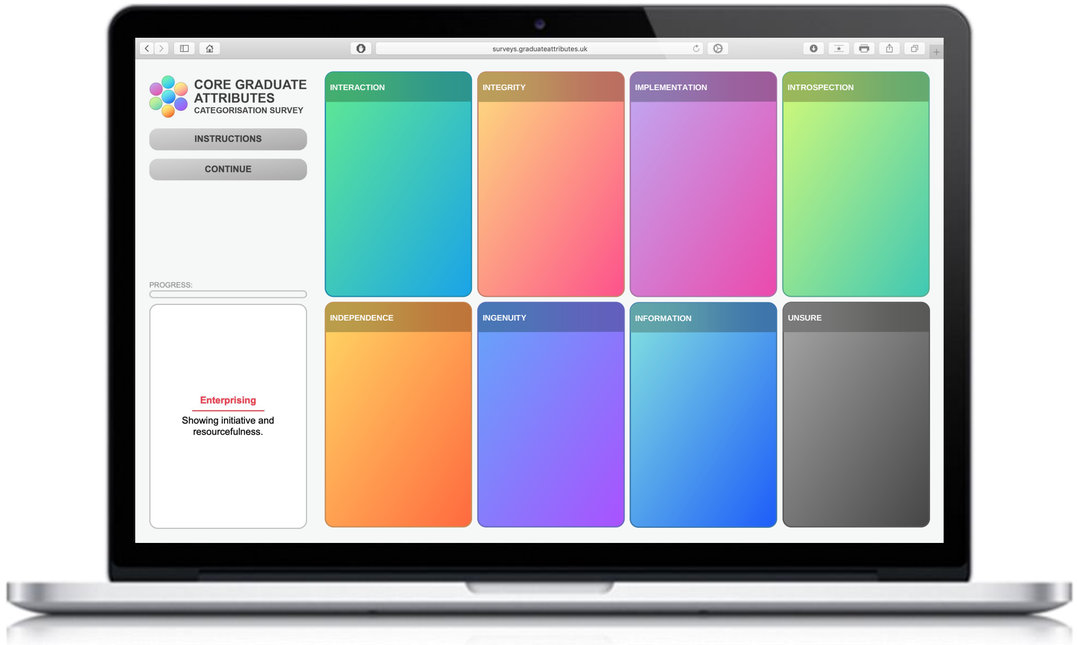
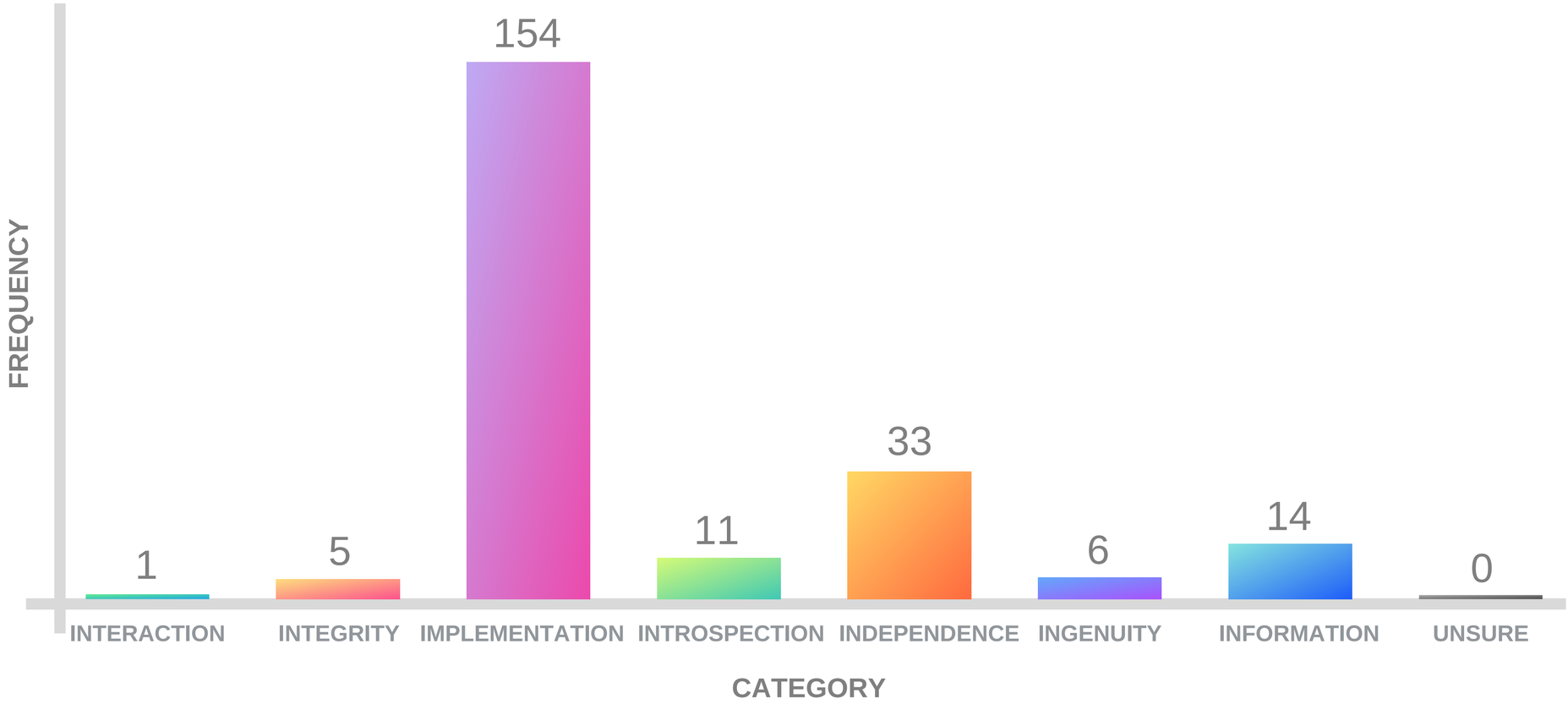


STUDY 2

CATEGORISATION SURVEY

THE DATA WE OBTAINED

e.g. Frequency data for ‘**DECISION MAKING**’



STUDY 2

CATEGORISATION SURVEY

THE DATA WE OBTAINED

e.g. Qualitative data for '**DECISION MAKING**'

INTERACTION "involves taking other people into consideration and having their opinions taken into account"

INTEGRITY "Understanding what type of decision is being made is critical and this comes from personal integrity"

INTROSPECTION "A person can develop decision-making skills but their competence may relate to their personality."

INDEPENDENCE "Having a clear decision making ability involves the ability to be sure of yourself and your judgement"

INGENUITY "their ability to process (…) different sides of an argument in order to make a decision may take some ingenuity"

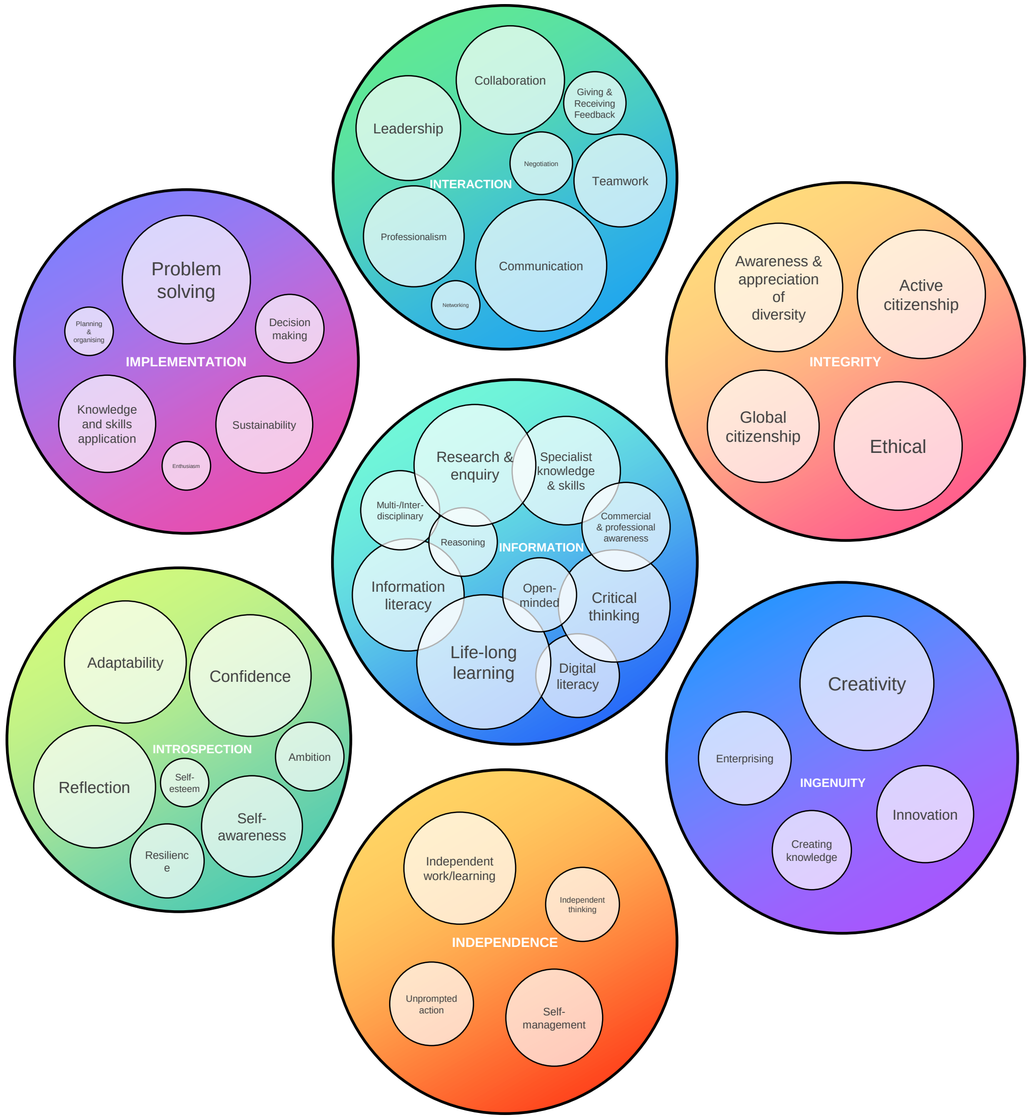
INFORMATION "To be able to make decisions you need to have all the information."

SURVEY STUDY

OUR SAMPLE & RESULTS SO FAR...

224

RESPONSES

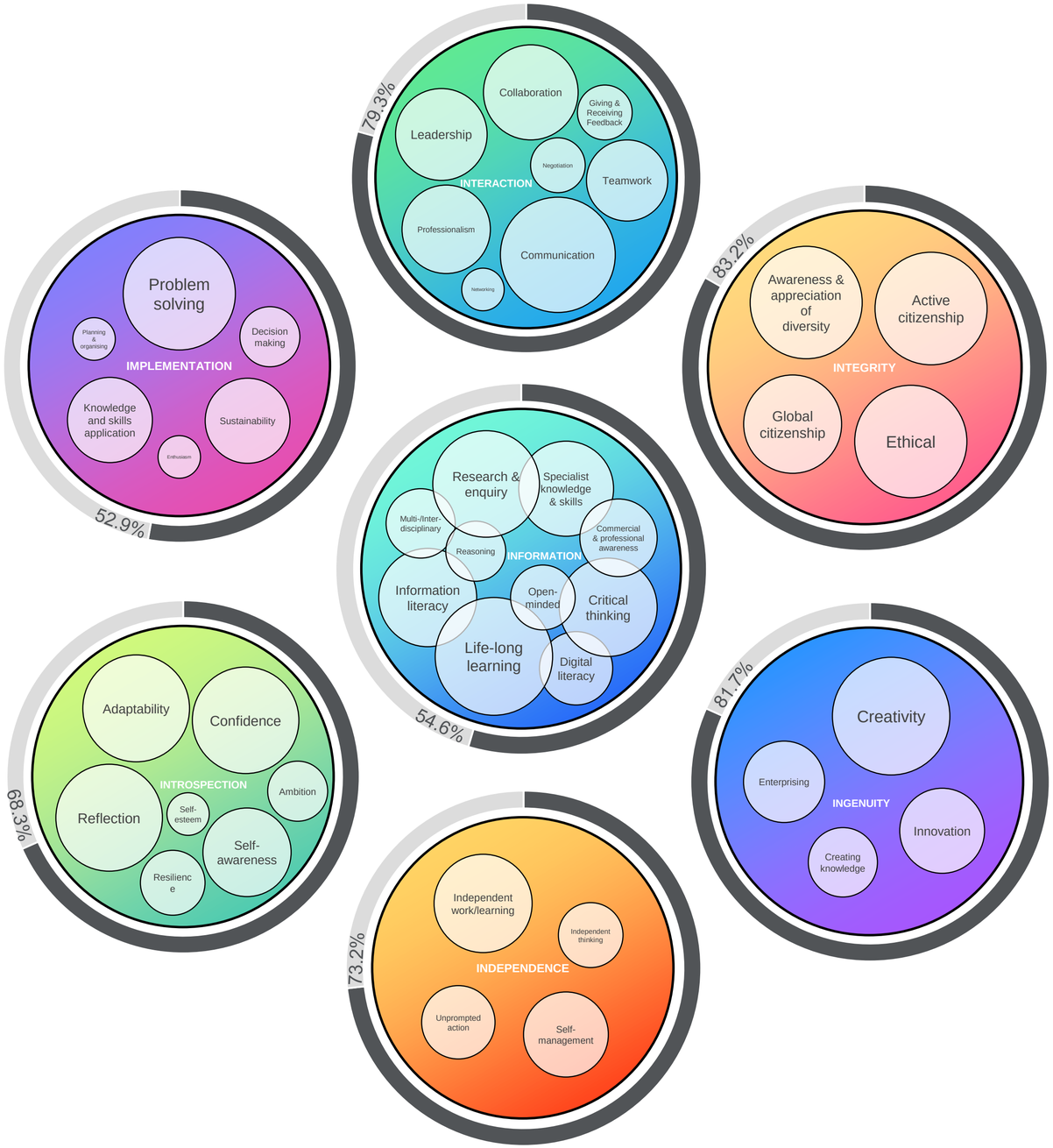


SURVEY STUDY

OUR SAMPLE & RESULTS SO FAR...

224 RESPONSES

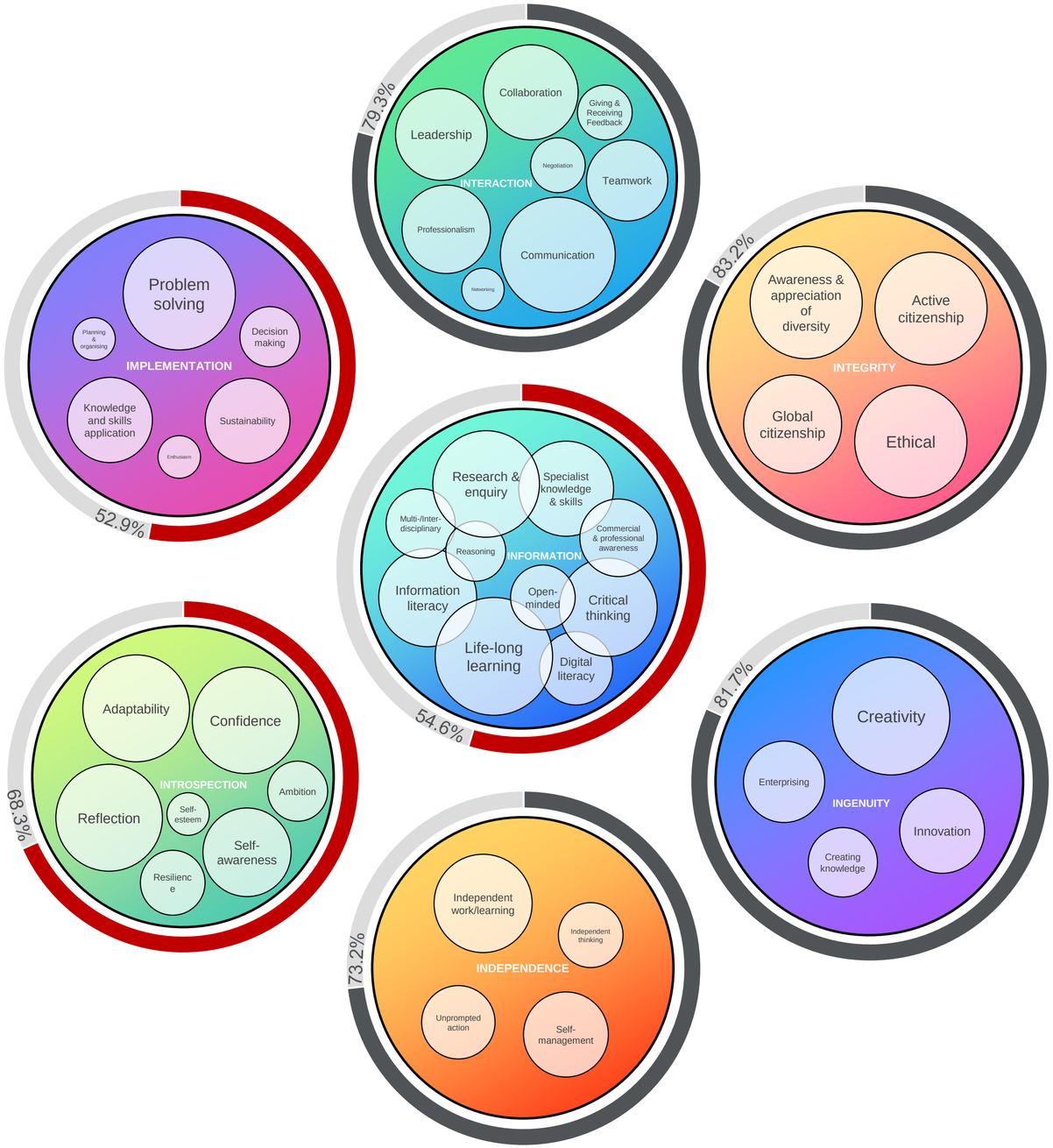
~70% AGREEMENT



SURVEY STUDY

OUR SAMPLE & RESULTS SO FAR...

- **224** RESPONSES
- **~70%** AGREEMENT

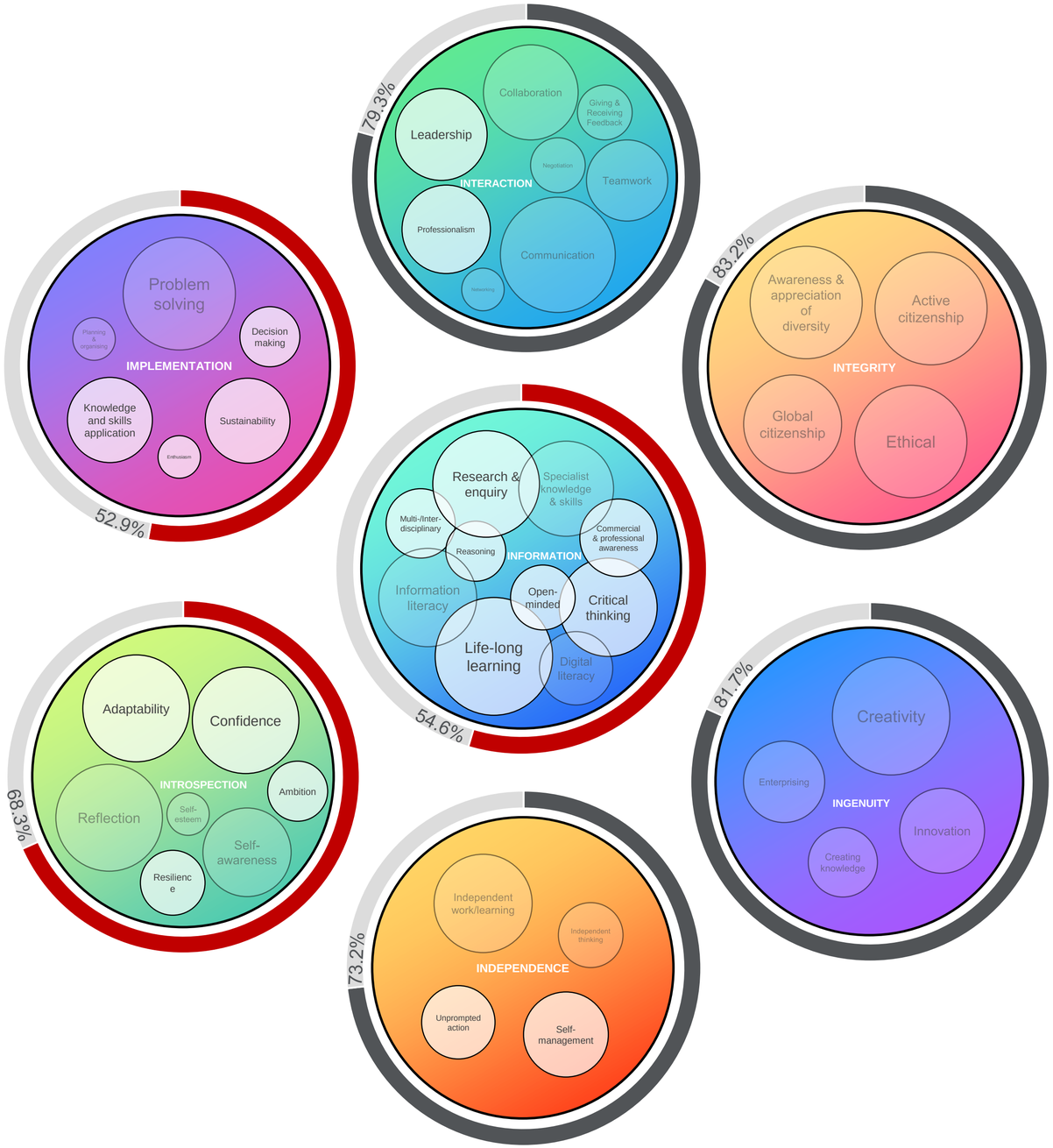


SURVEY STUDY

OUR SAMPLE & RESULTS SO FAR...

224 RESPONSES

~70% AGREEMENT



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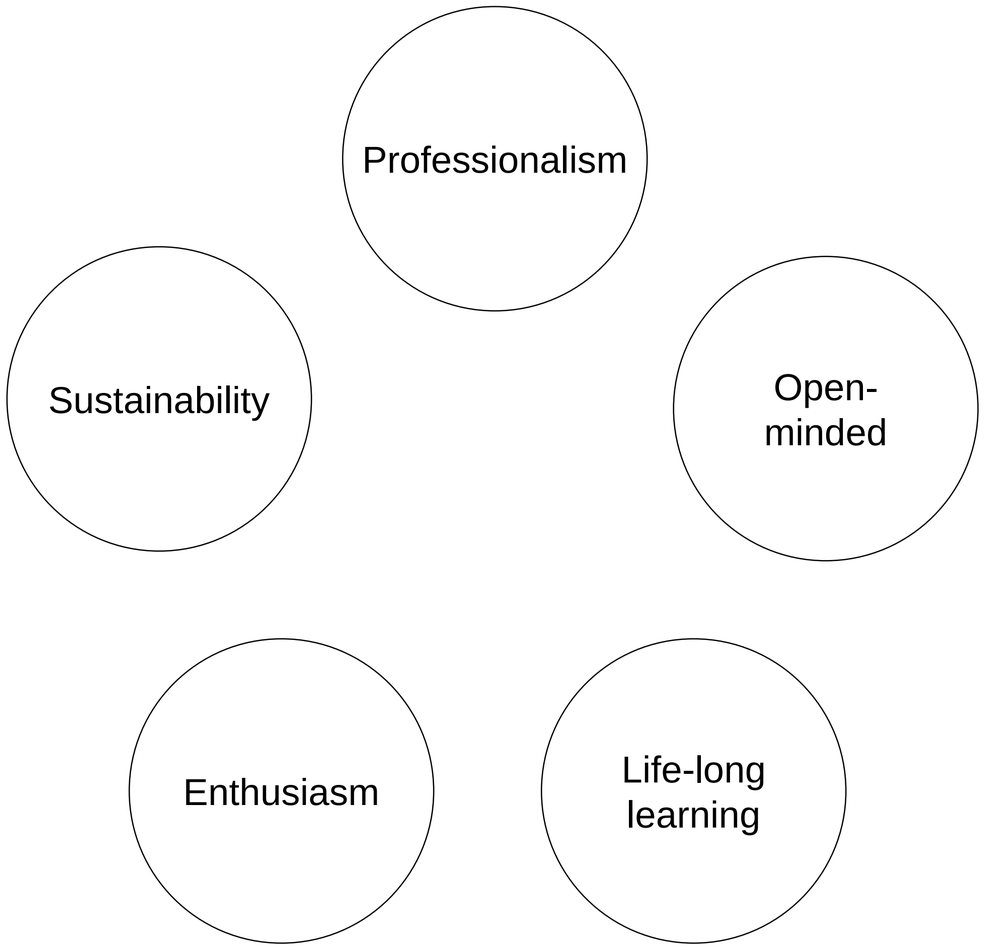
SURVEY STUDY

OUR SAMPLE & RESULTS SO FAR...

- **224** RESPONSES
- **~70%** AGREEMENT
- **9** ATTRIBUTES <50%



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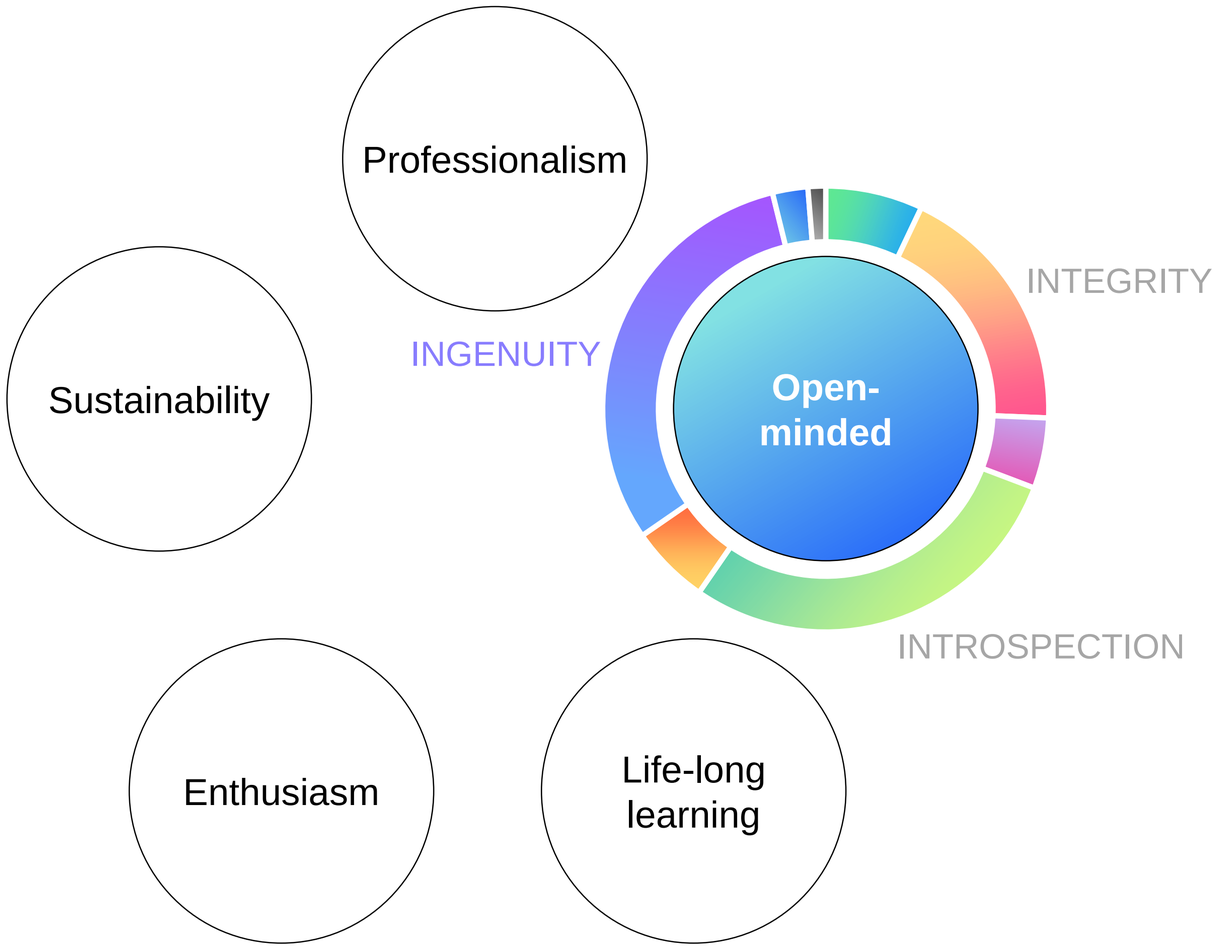

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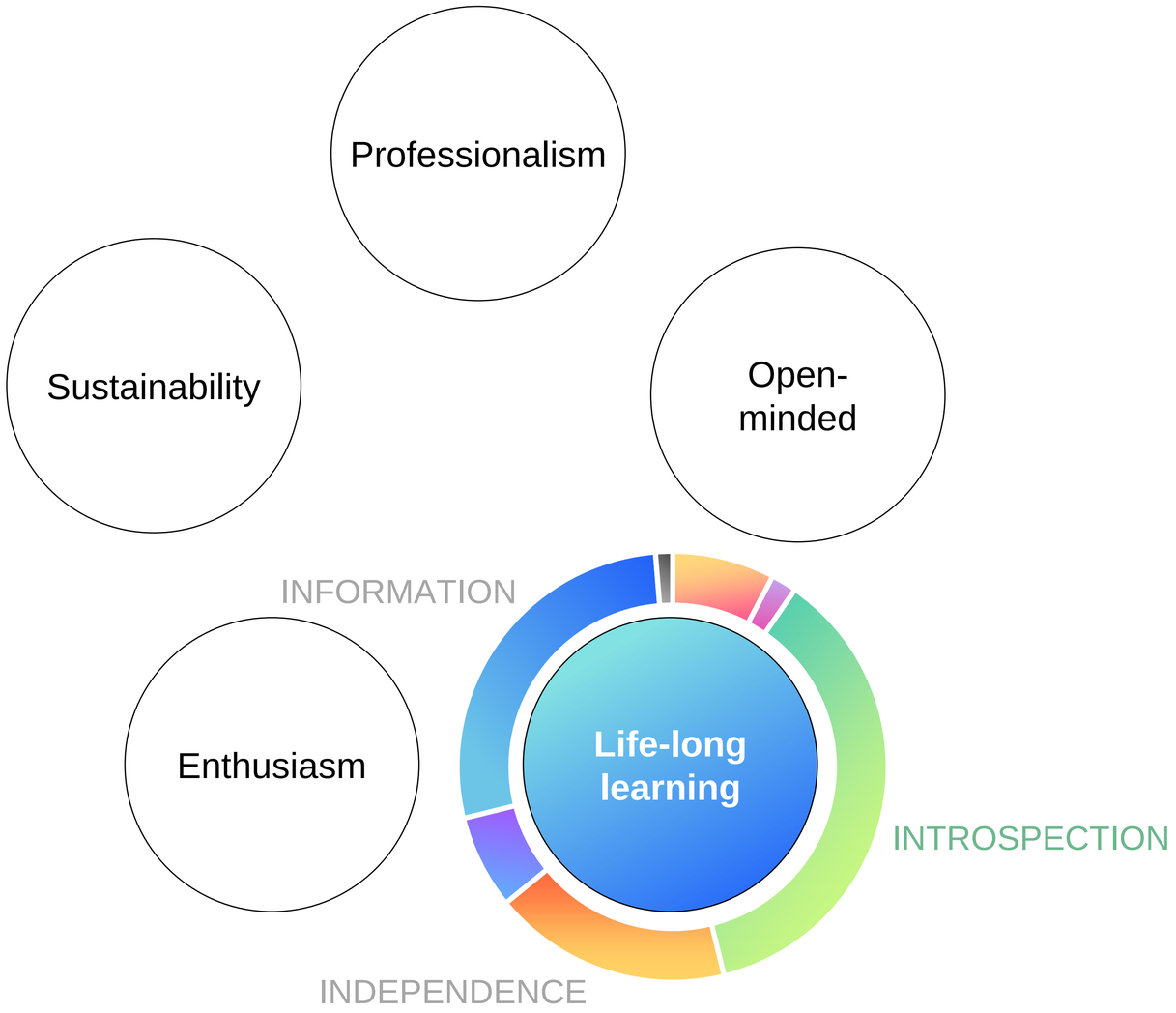

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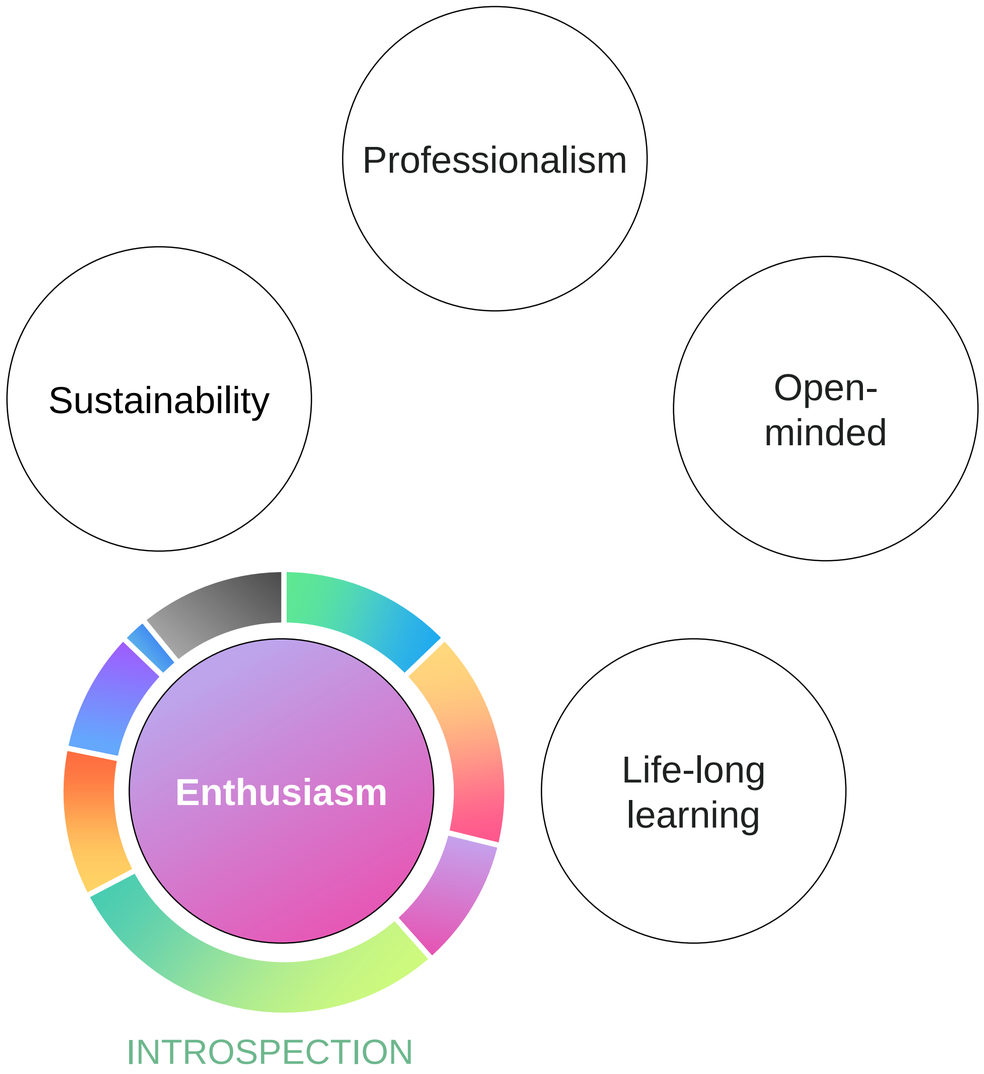

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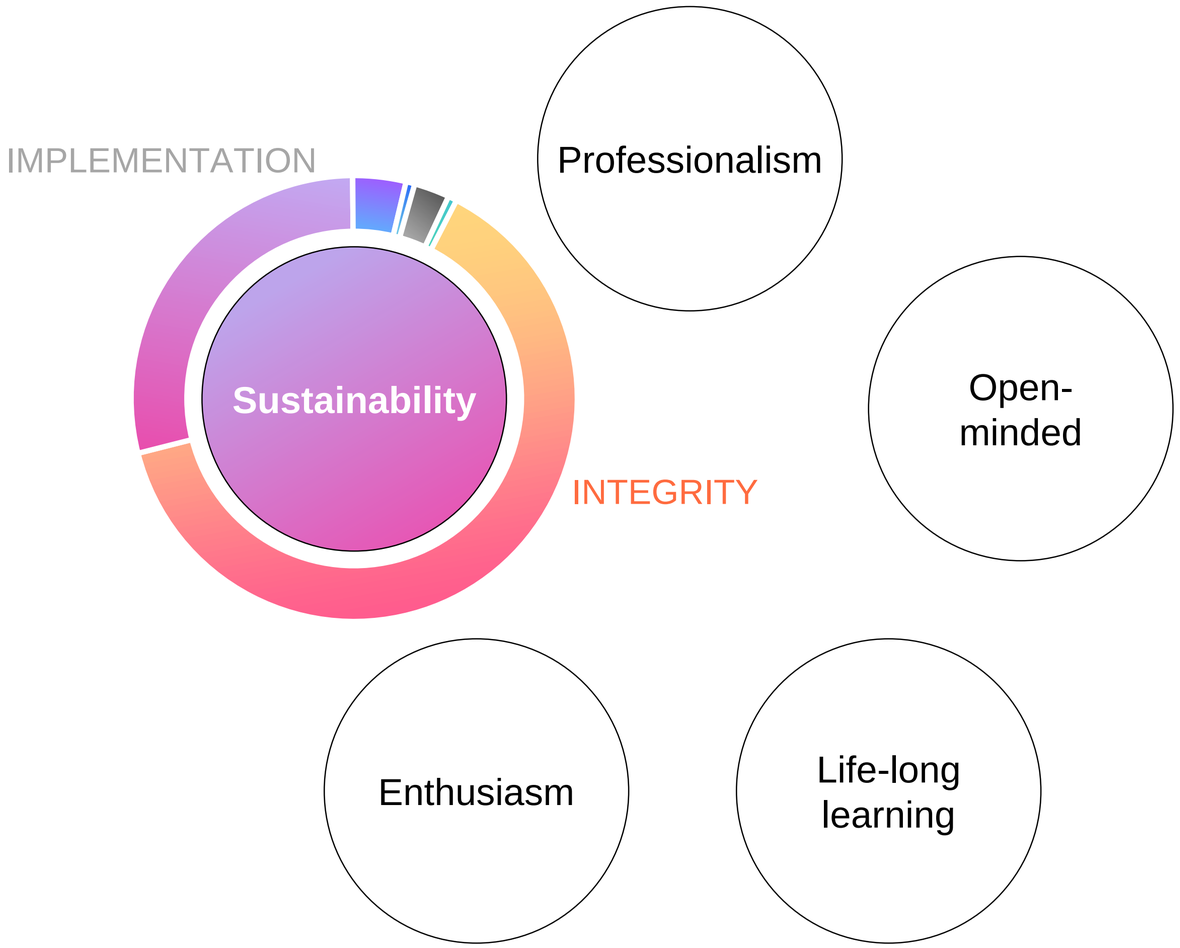

SURVEY STUDY

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NEXT STEPS

SEMANTICS SURVEY

AIM: Validating and refining the names and descriptions of the GAs and categories.

BEHAVIOURAL MARKERS STUDY

AIM: To identify a set of behavioural markers for attributes that can only be measured through observation.

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