

NERUPI Toolkit: Doing research and theorising widening participation

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Plan for the session

1. Group introductions
2. Exploration of key issues in HE participation and role of research
3. Overview and the NERUPI approach to integrating research and evaluation into WP interventions
4. Consideration of research interests – group activity
5. Working with theory of change
6. NERUPI toolkit resources

Group introductions

Mainly work in
access

Mainly work in
student success

Mainly work in
student
progression

New to
NERUPI

Love people's
individual
stories

Dream about
spreadsheets

Detail
orientated

Easily bored

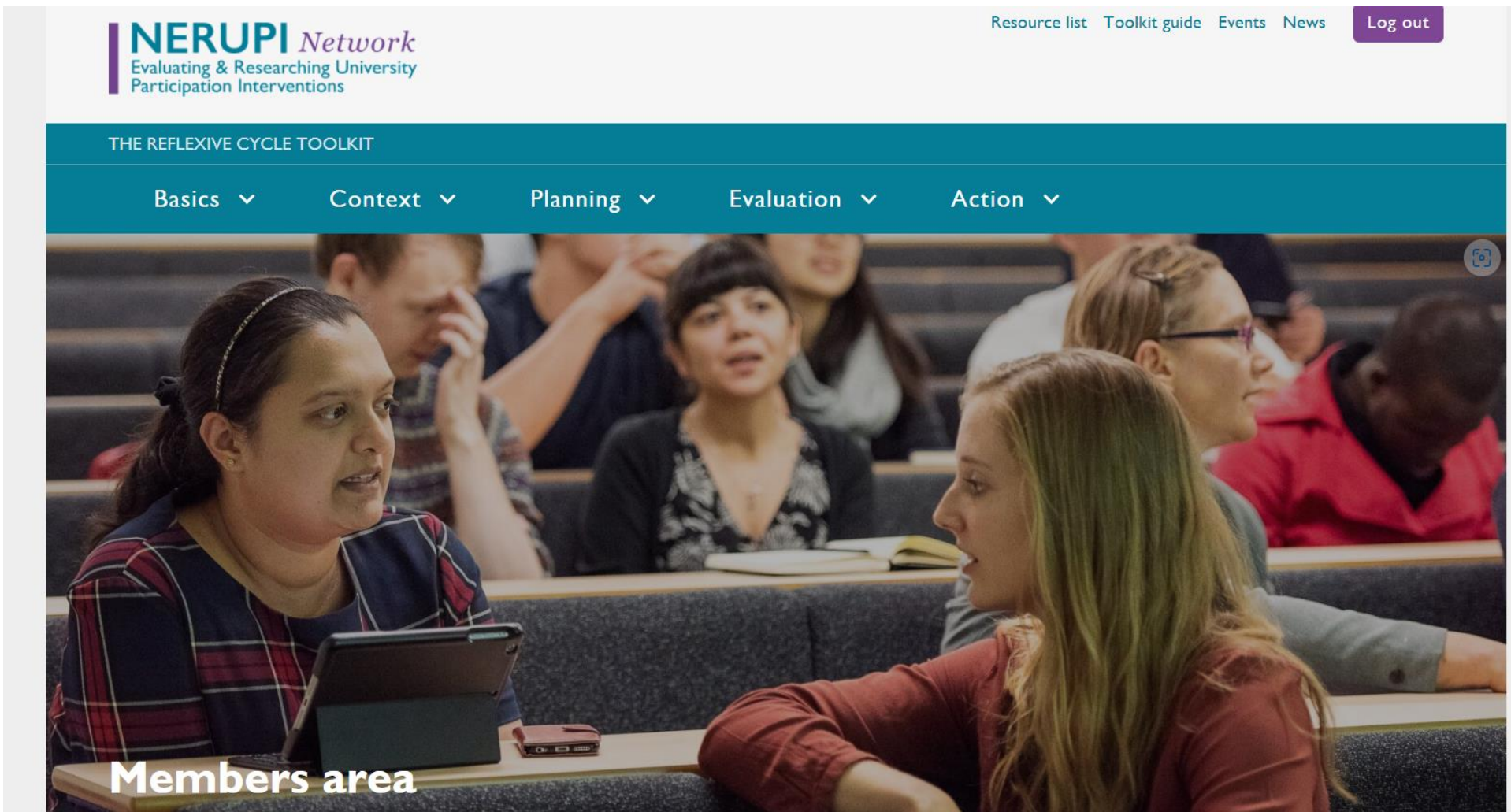
Previous
experience of
research/
evaluation

Have 0 unread
emails

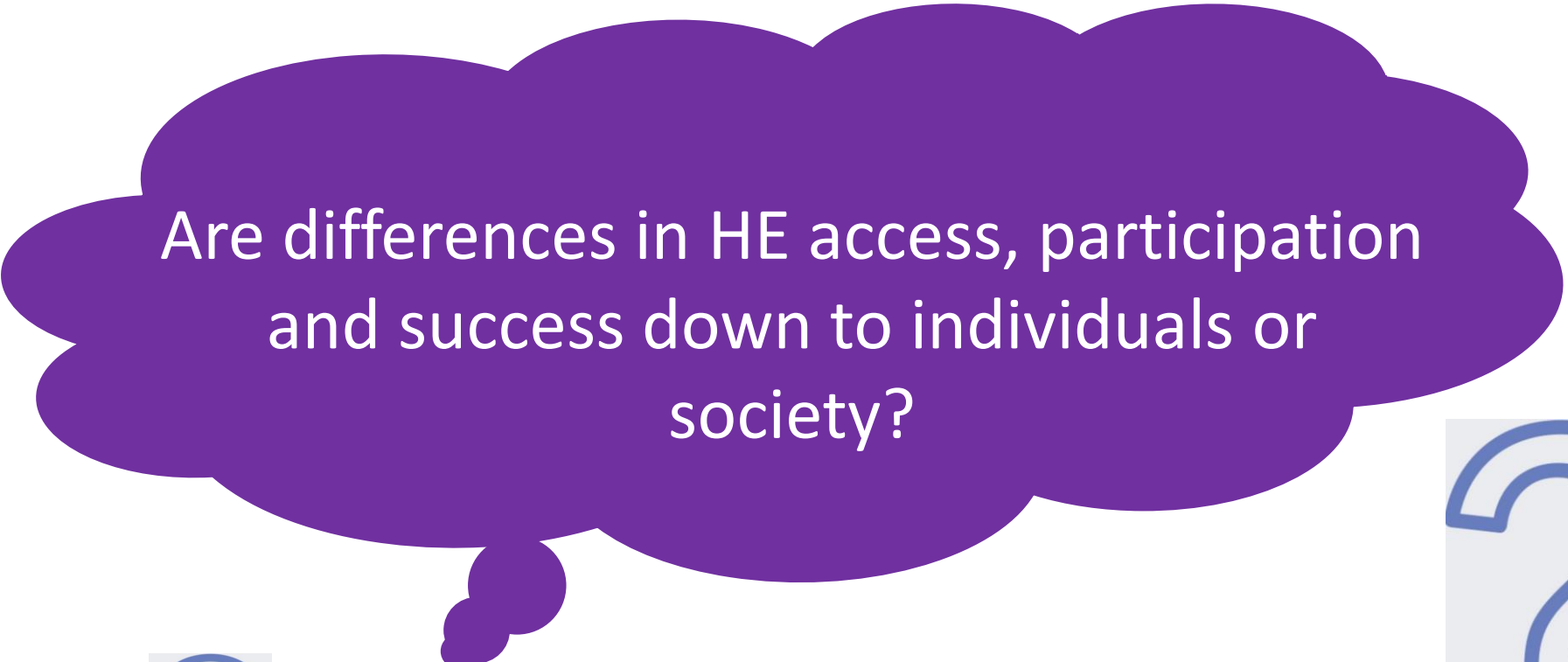
Reads books &
research
articles about
WP

Likes planning
& delivering
activities

NERUPI Toolkit



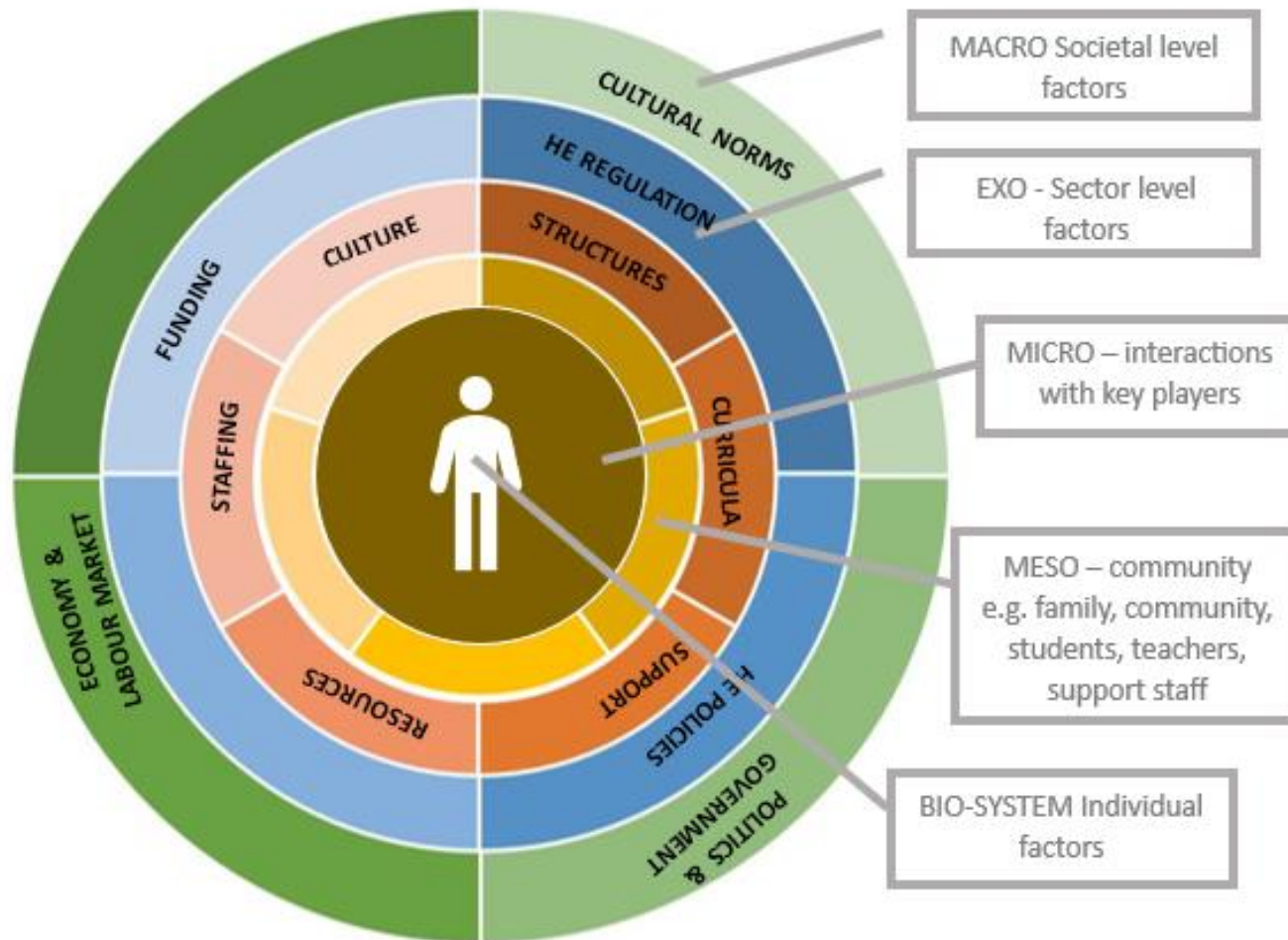
Question



Are differences in HE access, participation
and success down to individuals or
society?



Ecological systems theory

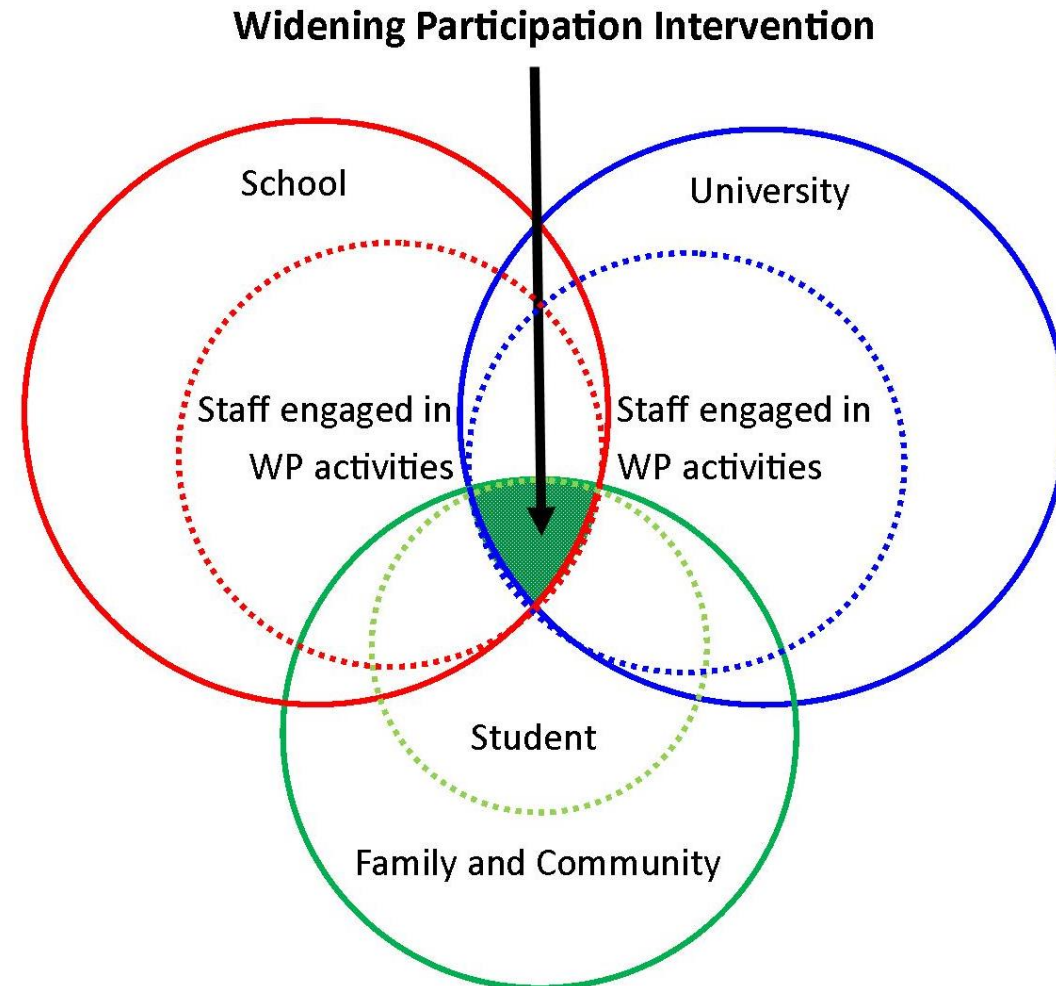


Level	Factors	Description/Examples*
BIO-SYSTEM	Individual	Characteristics specific to the individual, such as personal traits, skills, behaviour, motivation and personal preferences.
MICRO	People in immediate environment	Direct relationships with those in the individual's environment, such as teachers, students, family and support staff.
MESO	Interactions between key players	Relationships and interactions among those in the MICRO level, such as collaboration between teachers and parents, peer group activities or community involvement.
EXO (Institutional Structures)	Structures, resources, staffing, culture, curricula, support	Institutional elements that indirectly influence the individual, including organisational structures, staffing practices, available resources, curriculum standards, cultural elements within institutions and various support systems.
EXO (Regulatory and Financial)	HE regulation, funding, he policies	External factors that involve regulatory and financial aspects of the higher education sector. These influence the individual indirectly by shaping the policies, funding availability, and standards across institutions.
MACRO	Cultural norms, economy & labour market, politics and government	Broader societal influences that impact all individuals indirectly, such as cultural expectations, economic conditions, government policies, political climates, and labour market trends.

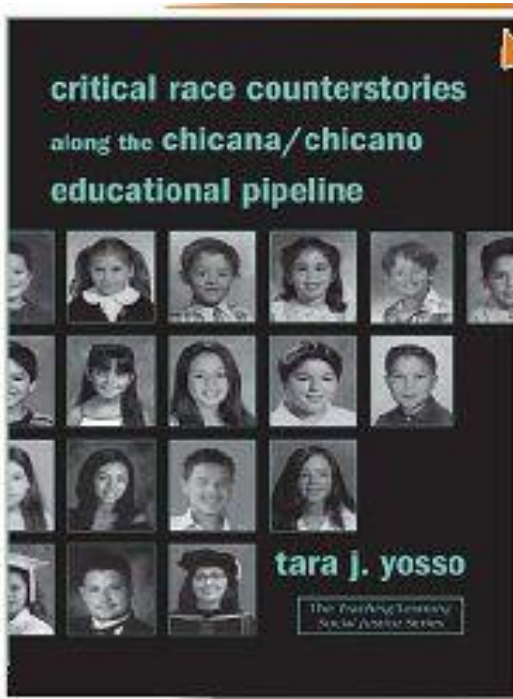
* Thanks to Mir Abdullah Miri, PhD Researcher, Department of Education, University of Bath for the description/examples

Areas for potential action

- Ourselfes?
- Our relationships?
- Our work?
- Our communities?
- Our wider society?



Key theoretical influences



Freire's notion of 'praxis'

Bourdieu's capitals, habitus and field

Sen and Walker's concepts of capability

Nancy Fraser social justice

Concepts of powerful knowledge

Yosso critical race & cultural wealths

Identities and future/possible selves

Critical pedagogies



Bourdieu's Theories

Bourdieu – Capitals and Habitus and **Field**

- **Capitals:** economic, cultural or social which impact on opportunities to engage with education, careers etc.
- **Habitus:** cultural identity & dispositions related to family & community

Theoretical basis for a great deal of academic research into widening participation e.g Diane Reay

Cultural model of Widening Participation that locates interventions within a context or *field* of engagement

How can we change a situation?

The NERUPI Framework

SOCIAL AND ACADEMIC CAPITAL		HABITUS	SKILLS CAPITAL	INTELLECTUAL & SUBJECT CAPITAL	ECONOMIC CAPITAL
PROGRESSION CURRICULUM		STUDENT IDENTITIES	SKILLS CURRICULUM	KNOWLEDGE CURRICULUM	ECONOMIC RESOURCES CURRICULUM
KNOW	CHOOSE	BECOME	PRACTISE	UNDERSTAND	SUSTAIN
Develop students' knowledge & awareness of the benefits of higher education & graduate employment	Develop students' capacity to navigate Higher Education sector & make informed choices	Develop students' confidence and resilience to negotiate the challenges of university life	Develop students' study skills & capacity for academic attainment	Develop students' understanding by contextualising subject knowledge	Develop students' capacity for critically informed financial decision-making and managing financial resources



Organisational Aims

Culture, structures, policies & procedures	Staffing (incl. student staff members)	Curricula & Pedagogy	Mechanisms for student support	Economic capital
ENACT	ACTIVATE	EMPOWER	ENABLE	SUSTAIN
Embed a culture and ethos, backed up by policies, procedures, and resource mechanisms internally, which promote inclusivity, supportive values and behaviour, and promote participation and engagement for all	Embed staffing and professional development arrangements, support and rewards, which build the capacity, awareness and skills of staff members to support and promote equity	Support and extend approaches to curricula and pedagogy which ensure inclusivity, and promote innovation, co-creation and partnership arrangements	Identify and operationalise types and mechanisms of financial, academic and pastoral student support to enable full participation and engagement of diverse student groups and individuals	Develop students' capacity for critically informed financial decision-making and managing financial resources



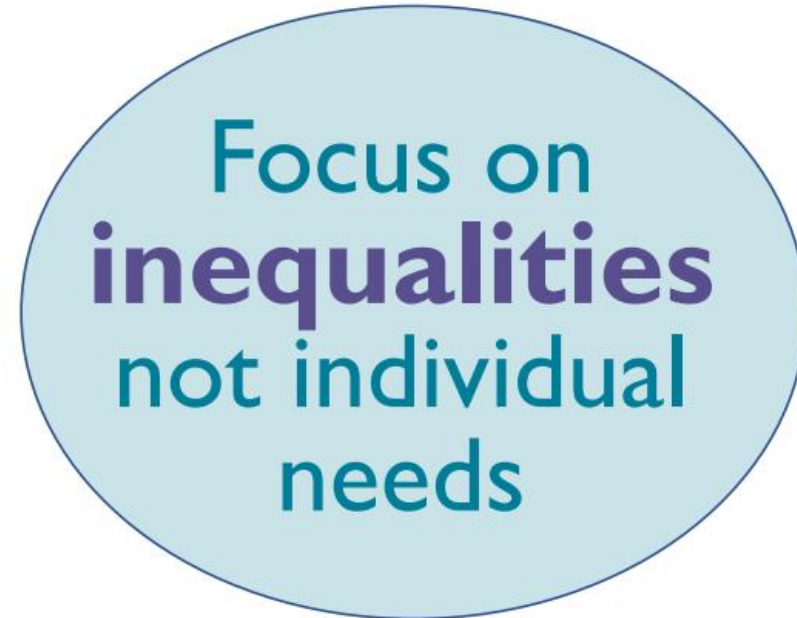
Evaluation approach



moves away
from the
**medical
model**



diagnose
treatment



EVALUATION

Why would you research WP?

- Because you're interested in it
- To inform policy
- To explore unexplained areas?
- To help devise strategy
- To support effective practice development
- To evaluate why initiatives worked
- To prove the investment was worth it
- To convince stakeholders/funders
- Other reasons.....?



Role of
research in
supporting
positive
change...

Research versus evaluation

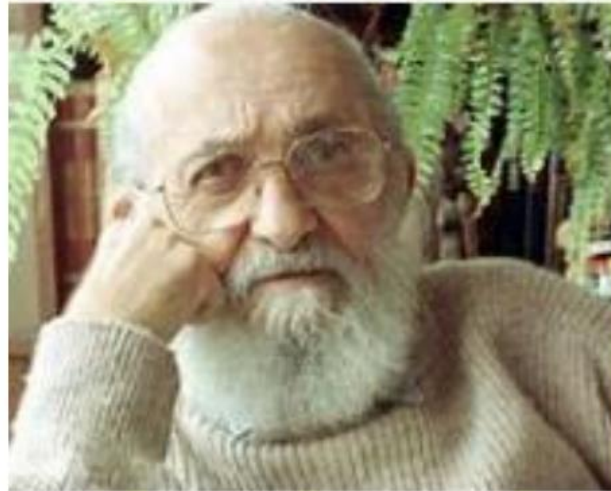
	Research	Evaluation(s)
Decision making	Used for macro decision making.	Used for micro decision making.
Focus	Concerned with how things work	Concerned with how well things work.
Outcome focus	May not prescribe or know its intended outcomes in advance.	Concerned with the achievement of intended outcomes.
Purposes	Contributes to knowledge regardless of practical application. Conducted to extend knowledge & generate theory	Designed to use the information / facts to judge worth. Conducted to assess performance and to inform policy making
Stance	Active and proactive.	Reactive.
Standards for judging quality	Judgements are made by peers; standards include: validity, reliability, accuracy, causality, generalizability, rigour.	Judgements made by stakeholders; standards include: utility, feasibility, stakeholder involvement, side effects, efficacy, fit for purpose.
Status	An end in itself.	A means to an end.
Use of theory	Creates the research findings.	Not necessary to base in theory May (or may not) use research findings.

Supporting praxis teams

reflection and action
directed at the
structures to be
transformed

=

praxis



Paulo Freire 1968

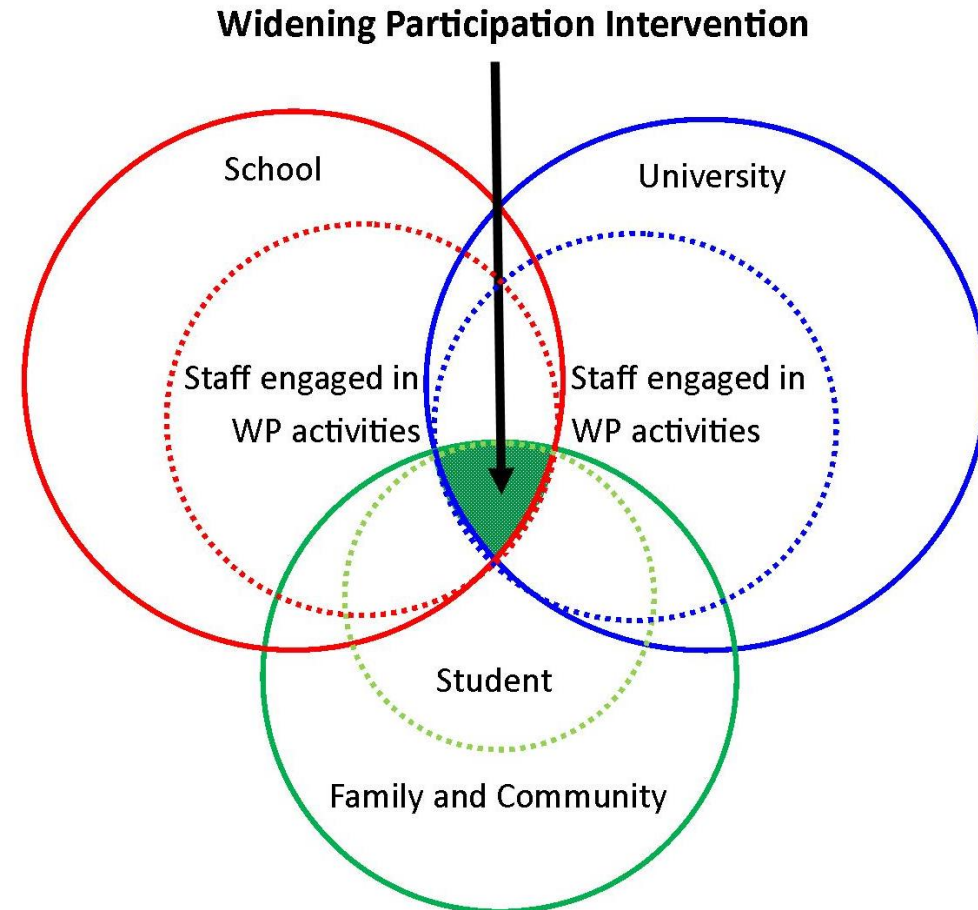
- **Theory &**
academic research
– quantitative and
qualitative
- **Practice**

PRAXIS

Praxis & action research

‘praxis-related research’

aims to change things in praxis:
developing an inquiry culture in a field setting, developing a critical approach among participants, empowering participants to take action, building their sense of solidarity, drawing on and developing their life experiences, opening communicative space between them, and so on, all of which can contribute to changes in currently established modes of praxis.



Action Research & praxis

Action research

“a form of collective self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out”

Kemmis and McTaggart 1990:5

‘praxis-related research’

aims to change things in praxis: developing an inquiry culture in a field setting, developing a critical approach among participants, empowering participants to take action, building their sense of solidarity, drawing on and developing their life experiences, opening communicative space between them, and so on, all of which can contribute to changes in currently established modes of praxis.

Mattsson, M., and S. Kemmis. 2007. Praxis-related research: Serving two masters? *Pedagogy, Culture & Society* 15: 185–214.

Critical Participatory Action Research

Focus:	The individual	The social	Both: a reflexive-dialectical view of individual-social relations and connections
Perspective:			
Objective	(1) <i>Practice as individual behaviour:</i> Quantitative, correlational-experimental methods. Psychometric and observational techniques, tests, interaction schedules.	(2) <i>Practice as social and systems behaviour:</i> Quantitative, correlational-experimental methods. Observational techniques, sociometrics, systems analysis.	
Subjective	(3) <i>Practice as intentional action:</i> Qualitative, interpretive methods. Clinical analysis, interview, questionnaire, diaries, journals, self-report, introspection	(4) <i>Practice as socially-structured, shaped by discourses and tradition:</i> Qualitative, interpretive, historical methods. Discourse analysis, document analysis.	
Both: a reflexive dialectical view of subjective-objective relations and connections		(5) <i>Practice as socially- and historically-constituted, and as reconstituted by human agency and social action by participants:</i> Critical methods. Critical participatory action research that reflexively combines multiple methods —.	

How to research WP?

- **Possible methods**

- **Quantitative approaches**

- Questionnaires
- Semi-structured interviews

- **Qualitative approaches**

- Interviews
- Focus groups
- Observations
- Creative methods



- Triangulation of sources
- Mixed methods approaches

How to research WP?

Using qualitative data examples: Interviews

- Researchers at the Lincoln Higher Education Research Institute (LHERI) used biographical life-grid interviews with students as part of research to understand the impact of University of Lincoln's Access Covenant (AC).
- This research project also included interviews with staff delivering AC services, a survey of university students including those who have accessed AC support.



Using qualitative data examples: Focus Groups

- The WP team at Oxford Brookes has included use of focus groups with students as part of the evaluation of their student ambassador training activities.
- As well as student ambassador training, the recruits also take part in employability training where ambassadors reflect on what skills they have gained from working on programme.
- Running focus groups at the mid point in the programme, and various points in the student ambassadors student journey, is designed to help with the medium and long term evaluation (along with a pre and post survey, interviews and use of reflective diaries).
- Tracking is being put in place to assess success at university and graduate prospects.



How to research WP?

Erasmus University: Using validated scales

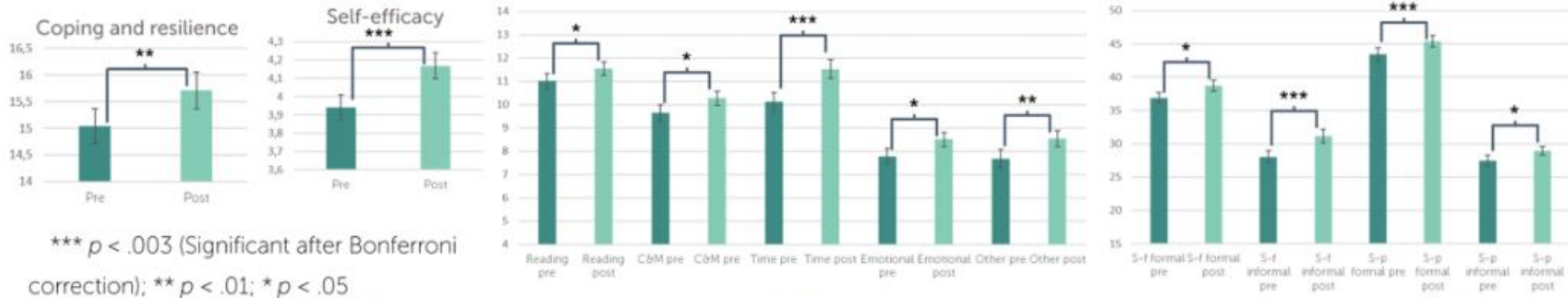


Examining the effects of a pre-academic programme on components of educational, social and cultural capital

Participants in the Pre-Academic Programme (PAP) were found to have higher grades, higher retention rates and better communication with staff and peers compared to students who did not participate.¹ By implementing a pre and post participation survey using a series of validated scales, the team aimed to find out in what ways the PAP was making a difference to the capitals and students' sense of belonging.



Results



*** $p < .003$ (Significant after Bonferroni correction); ** $p < .01$; * $p < .05$



Brief Resilience Coping Scale (BCRS)



New General Self-Efficacy Scale



Study Skills Inventory



Interpersonal Support Evaluation List



Student-Faculty Interaction scale



Student-Peer Interaction scale



Sense of Belonging

Components of:

Cultural Capital

Educational Capital

Social Capital

Using qualitative data examples: Photo Elicitation

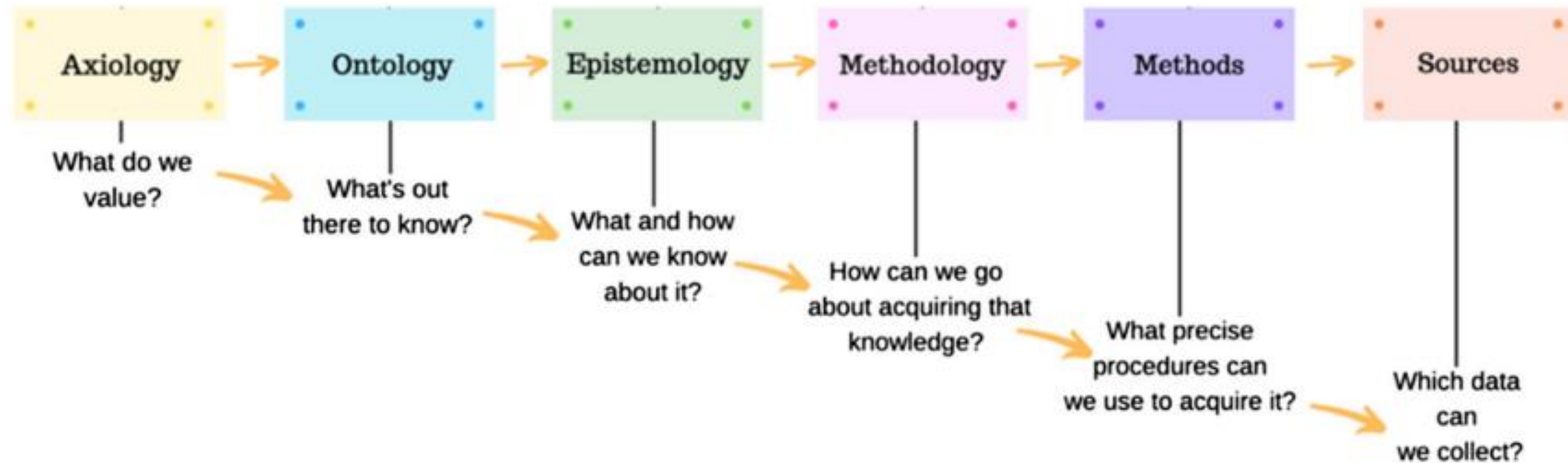
- A small scale study conducted with a sample of estranged students at the University of Lincoln (UoL) used photo elicitation to explore the experiences of estranged students and provide the institution with recommendations on how to better support its estranged students.
- The students were asked to take a series of images over the Easter holiday period - which represented their student experience.
- The students' comments about, and reactions to, these images were audio-recorded with their consent.



Different approaches

Evaluation – impact measuring	Requires outcome and impact measures such as attitudinal change, achievement improvement etc	Preferred by funders, can be problematic – how do you prove you caused the impact and how do you know which intervention has which result?
Qualitative evaluation	Identifying patterns, themes, discourse analysis, authentic perspectives	Why things work as well as what. Tends to be formative, can lead you back to where you started?
Case study approaches	Detailed and intensive analysis of case(s) e.g. event, school, cohort	Can be qualitative, quantitative or both, can be used as a comparative technique (e.g. different cohorts, different institutions), good for contextualising results
Action research	Cycles of planning, acting, observing and reflecting (e.g. run an event, collect data/observations, use to critically evaluate and inform what will happen next)	Involves those responsible for the practice throughout and includes those affected by the practice, involves dialogue and collaborative processes

Arriving at methods and sources



Brown et al (2019)

<https://link.springer.com/article/10.1007/s40670-019-00898-9>

The case for mixed methods research

- **Robustness:** Maximising the relative strengths of each approach (Qual/Quant) and offsetting weaknesses
- **Completeness/Validity:** multiple datasets Interviews plus observation plus survey
 - Questionnaire plus follow-up interviews
- **Social structures** (quantitative) and **social processes** (qualitative)
- **Generate and test hypothesis** in single project
- **Contextualise** the findings
- **Unexpected results**
- **Triangulation** – diversity of views

Types of mixed methods research design

Design	Description	Rationale
Exploratory sequential design	Firstly qualitative research is undertaken to investigate the phenomenon and afterwards quantitative data is gathered to explain the qualitative findings	Helps to generate hypotheses that can then be tested quantitatively; qualitative research in the first phase helps to inform quantitative research in the second phase (e.g. to develop survey questionnaires); the qualitative findings are prioritised and the quantitative research helps with conclusions about the generalizability of the qualitative findings
Explanatory sequential design	Quantitative data is gathered first and then qualitative research is undertaken to enhance and expand on the quantitative findings	Quantitative data is prioritised and qualitative data is used to shed further light on and contextualise the quantitative findings
Embedded design	Quantitative and qualitative data are gathered separately (could be concurrent parallel design, sequential or multi-phase) but then the findings are integrated from both strands	Offsets weaknesses of either method; allows for findings to be compared; can help to triangulate the evidence. The purpose is to support the findings based on both strands (i.e. each on its own is not sufficient to answer the research questions).
Transformative design	Uses any of the above designs but in an evolving context	This is essentially an iterative approach with the intention of being open to possible changes in perspective as the research progresses

NERUPI Methods Guides

	Quantitative	Qualitative
Using symbols	✓	✓
Interviews	✓	✓
Focus groups		✓
Feedback from stakeholders and interested parties	✓	✓
Creative expression		✓
Reflective accounts	✓	✓
Evaluation wheel	✓	
Photo elicitation		✓
Questionnaire surveys	✓	✓
Structured observation	✓	✓
Tracking	✓	
Voting	✓	
Use of Validated tools	✓	
Experimental and Quasi-experimental methods	✓	
Case studies	✓	✓

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Options: based on either:

- A research interest within the group – any suggestions?
- Or using the list of possible topic below

Task: draft out a research strategy:

- Decide on method(s) of collecting information?
- What research activities would you undertake?
- Do you think the evidence would be persuasive and have effect/impact in changing/improving organisational practices and structures?

1. You have identified that there have never been any young people from local authority care on any of your courses. Should you do anything about it? If so, what?
2. You have found that some mature students do really well in HE and others do not. Why?
3. You have been running an extensive outreach programme with a group of target schools locally. Where people live seems to determine the likelihood of them going on to study in your higher education provision. Why the differences between localities?



Which method(s) of collecting information?
Research activities you would undertake?

What did you discuss?

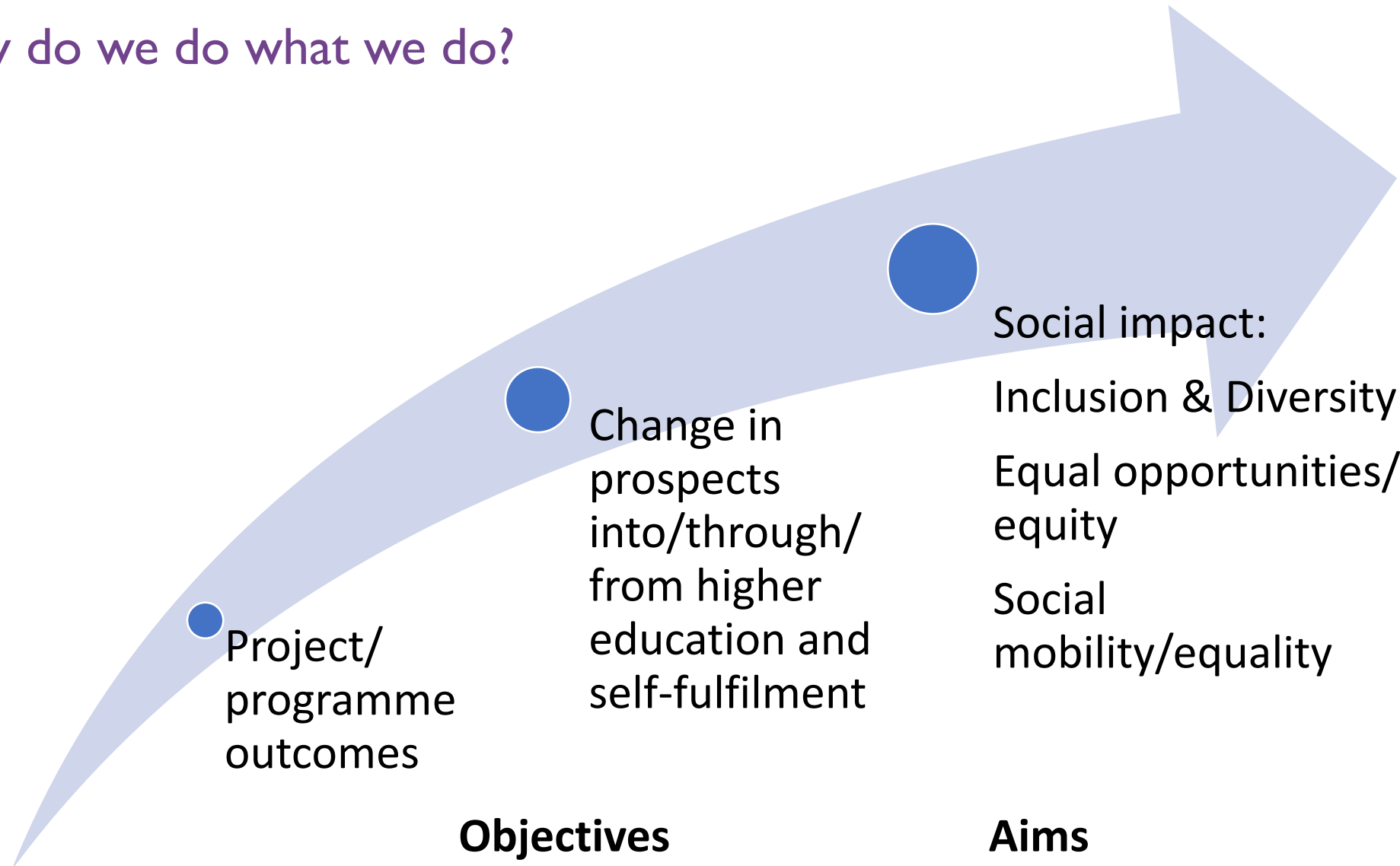
Did any methods seem better/worse than others?

How did you decide?

Any observations?

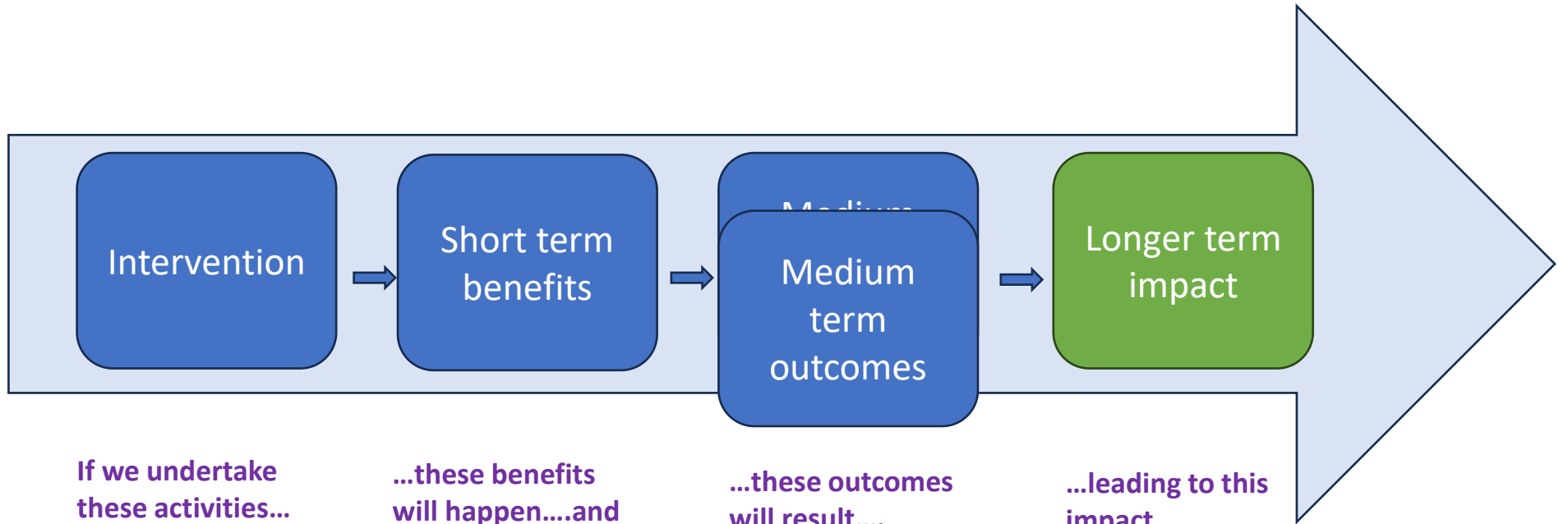
Exploring Aims

- Why do we do what we do?



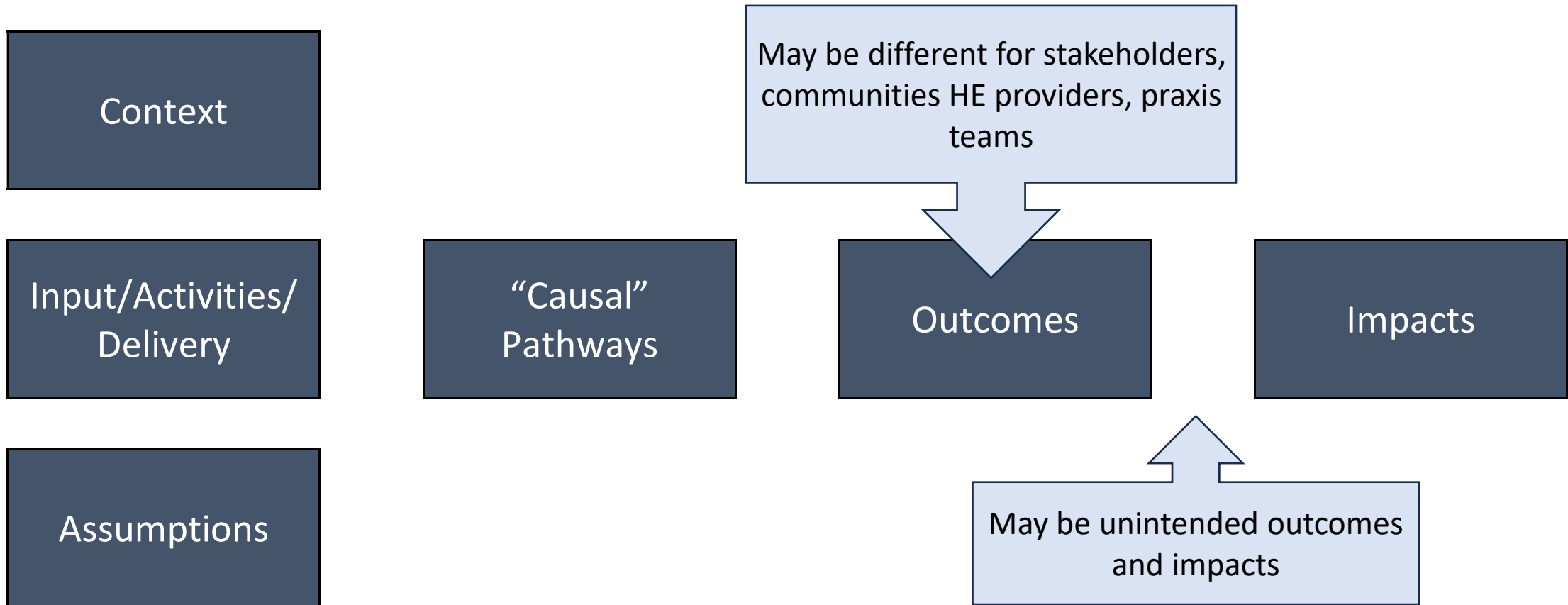
Using 'Theory of Change' (TOC)

- Not a theory in the academic sense of the word – a **planning tool**
- A **hypothesis** or **prediction** of how change will take place helping you to understand how an intervention can create a positive impact
- A **process** to uncover:
 - What improvements or **changes** you **expect** your action to make
 - How you **expect** the intervention will **generate** the **benefits**
 - The **assumptions** you are making in order to be **successful**



THEORY OF CHANGE:	If we undertake these activities...	...these benefits will happen....and then...	...these outcomes will result....	...leading to this impact....
EXAMPLE:	HE workshops for students in disadvantaged schools	Participants are able to identify at least one new study skill developed	Students demonstrate use of study skills Grade predictions revised upwards Grade achievement exceeds initial predicted grades prior to intervention	Increase HE applications and acceptances
MECHANISMS:	Study skills learning takes place	Students apply new skills to their school work	The skills were sufficient to boost results	
ASSUMPTIONS:	Students engage with the workshop and the materials	Learning takes place and skills are relevant to students' learning objectives	Attainment in exams was the key barrier to HE	

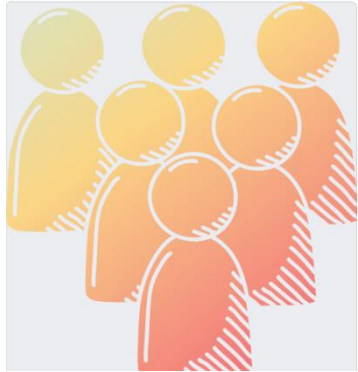
Aspects of ToC that support research & evaluation



- **There will be different research questions about different aspects and probably different methods to answer these questions.**

- **Research/evaluation needs to have impact**
 - Findings have potential to make a difference
 - Funders demand evidence of impact (key indicator of worthwhile research)
- **What is classed as impact?**
 - **Direct practical implications**
 - e.g. for practitioners, policy makers, general community
 - **Theoretical developments**
 - Builds on what we know and takes us a step further.
 - **Better understanding/more effective interventions** (achieve practical, real-world change)
 - Societal impact
 - Changing how we think about issue, condition, social group
 - Answering questions that matter to people and to society





Returning to ToCs...

What evidence would be most persuasive and have the strongest effect/impact:

1. In changing/improving organisational practice and structures?
2. Informing WP policies and strategies?

Different types of questions

Question Types

- Exploratory
- Predictive
- Evaluative (pre- and post-)
- Process

Exploratory: Learn more about a topic, probe on the main factors involved

How does participation in our activity affect students' attitudes?

E.g. Do you feel that x (e.g. the summer school) has positively or negatively affected you and if so how?

Open ended questions in surveys, Interviews and focus groups, Creative methods, Photo elicitation, Observational research

Predictive: Thinking about the potential future outcome of taking part in an activity

What difference does our intervention make to intention to progress in education?

E.g. As a result of x (e.g. the summer school) are you more likely to y (e.g. apply to university). What do you feel you achieved by taking part in this activity?

Post activity questionnaires and surveys, tests of knowledge and understanding

Evaluative (pre/post): Documenting impact against a measure

Does attendance at our activity increase students' HE confidence a measurable way?

E.g. How confident do you feel... (e.g. in your ability to progress to university) - repeated before and after participation in an activity

Pre and post questions, tests or surveys or other methods which use rating scales to quantify pre and post intervention changes (e.g. evaluation wheel)

Process: Understand the mechanisms at play in successful programmes

What are we doing that is working?

E.g. What's the best thing about this activity? How would you rate x,y,z?

Feedback forms, post activity surveys, interviews, focus groups

WP activity: a transformative experience?

- Overcoming feelings of fear
- Experiencing university life and a sense of belonging
- Confidence in their capacity to achieve
- Challenging perceptions and overcoming doubts
- Living away from home and meeting new people
- Developing the capacity for academic and learning challenges
- Enhancing and contextualising subject knowledge
- Developing the capacity to make informed choices

Experiential impact

Transformational effect on learners

Pedagogy

Active learning and critical pedagogies

Content

Accessible yet challenging content

<p>Enable students to:</p>	<p>NERUPI Framework sees it as the HEIs role to facilitate students to:</p> <ul style="list-style-type: none">- support the transformative learning process- encourage reflexivity within the HEI
<p>Engage Discover Identify Navigate</p>	<p>Active learning terms are used to:</p> <ul style="list-style-type: none">- encourage critical pedagogies- develop student agency- embed these within the success measures

NERUPI's Formula

Context

Micro-meso-macro level environment and the systems which surround the individual which are more or less favourable for success in HE

+

Person

Individual dispositions (habitus) and characteristics which influence capacity to engage effectively (e.g. knowledge, skills and experiences), how other people perceive/respond to them (which in turn impacts upon how they see themselves)

+

Processes

The forms and qualities of the interactions which take place in HE (e.g. active learning).

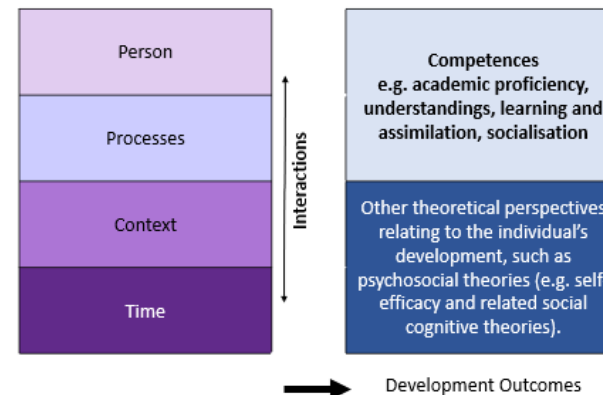
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HE Capabilities

KNOW, CHOOSE, UNDERSTAND, PRACTISE, BECOME, SUSTAIN

=>

**Access, Success,
Progression**



Learning Aims

Type	Notes	Collection
Imagined Future	Beliefs about ability to succeed in a future situation (e.g. as a student)	Individual perspective from self-report measures)
Self-belief	Beliefs about ability to influence one's future (locus of control, mindset)	Individual perspective from self-report measures)
Engagement (e.g. with school)	i.e. motivation towards school work and relevant actions	Could be self-reported or include observation measures and reports from those close to the students
Application	Situating and adapting new information to better understand your world	Measures of achievement of tasks which demonstrate how learning was applied
Expertise	i.e. becoming knowledgeable about a topic or proficient in a skill	Objective tests or performance in study-related tasks
Social Networks	Social capital/networks and linkages	Finding out from participants or those around them

THE REFLEXIVE CYCLE TOOLKIT

Basics ▾

Context ▾

Planning ▾

Evaluation ▾

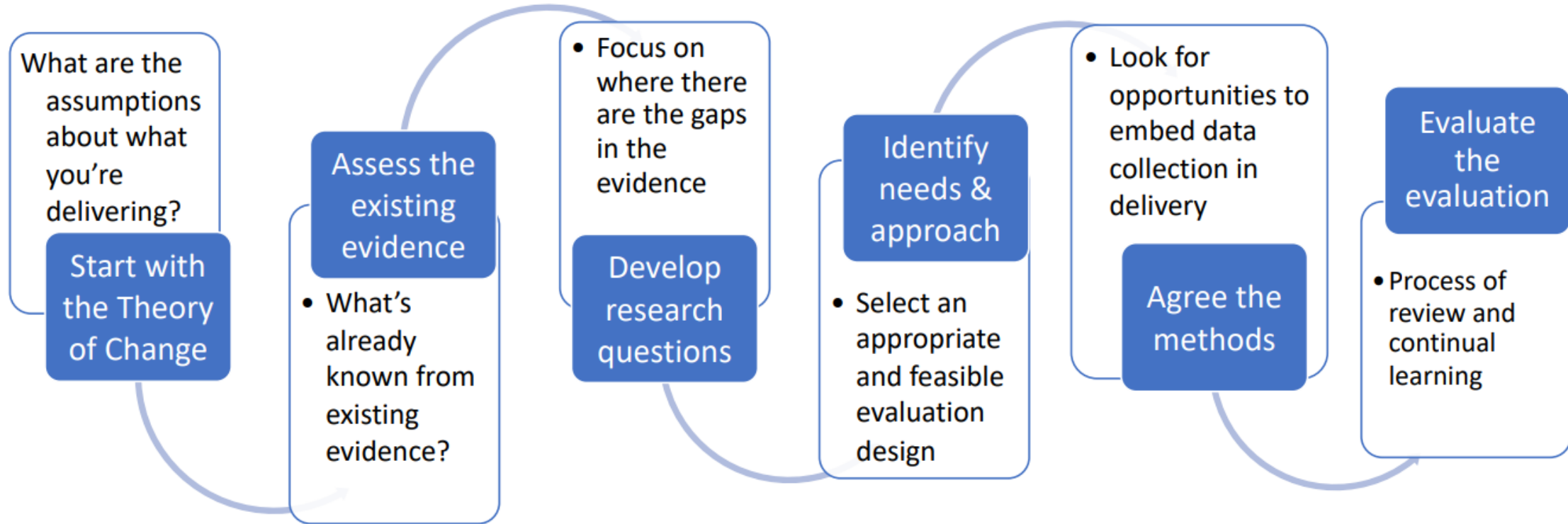
NERUPI Framework question bank

In developing the NERUPI Framework question bank, particular attention has been paid to the different aims and types of evaluating the short term outcomes of particular project activities. Short term measures, although partial and insufficient to demonstrate lasting benefit, are important to assess success in meeting the learning objectives for particular activities, and demonstrate a direction of travel which can be important in the context of trying to pinpoint the implications for the progress of participants towards future intermediate and long term outcomes. The Framework gives different suggestions relating to different evaluation aims, as follows:

Download (Excel): [NERUPI Framework Question Bank](#)

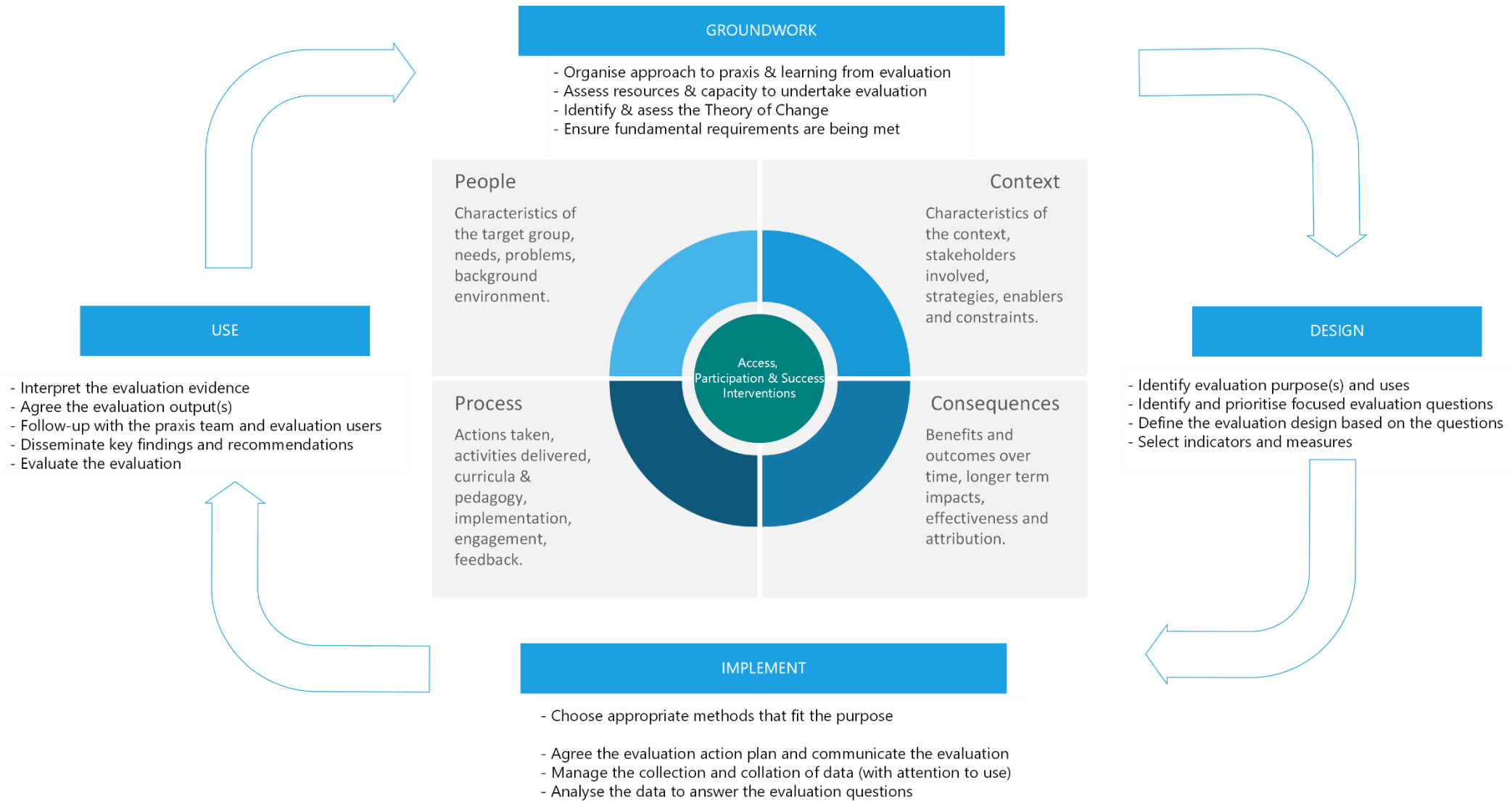
- **What the Question bank does:**
 - gives different suggestions relating to different learning aims mapped to the NERUPI framework
 - includes ideas for different types of evaluation questions
 - offers a format for different questionnaire designs (e.g. rating scales)
 - focusing on immediate/short term outcomes
- **What the Question bank doesn't do:**
 - measure progress towards the medium-long term outcomes and impact of the activity

Model for embedding evaluation



NERUPI APPROACH TO EVALUATION

EVALUATION PROCESS MAP



Dimensions

People	Processes	Context	Consequences
<p>Featured both as an initial factor influencing processes and as a result shaped.</p> <ul style="list-style-type: none">- process-relevant person characteristics (disposition, motivation, persistence, etc.)- resources (past experiences, skills, social and material resources) - characteristics (age, gender, ethnicity)	<p>Might involve student-teacher interactions, peer relationships, engagement with learning materials etc:</p> <ul style="list-style-type: none">- increasing complexity leading to either competence (or not);- duration and frequency effects;- reciprocal interaction.	<p>Includes the micro-, meso-, exo-, and macrosystems in the EST model. Emphasis is on the microsystem structure, highlighting the impact of proximal processes and involving interaction with objects and symbols, rather than solely with individuals.</p>	<p>What is occurring during a specific activity or interaction (micro)</p> <p>Extent to which activities and interactions occur (and consistency) over time (meso).</p> <p>Events in life period of individuals (macro)</p>

Synergy a key concept

Cooperative action of these four elements, such that the sum of the parts is greater than the whole

1. Basics: praxis teams, theory of change, student voice
2. Context: exploring inequalities, NERUPI aims and framework
3. Planning: targeting, curriculum, pedagogy, logistics
4. Evaluation:
 - Designing evaluations: purposes and uses; evaluation designs, using questions
 - Implementing evaluations: indicators and measures, contextualisation, methods guides, ethics
 - Using evaluation: data analysis, reporting
5. Action: case studies, dissemination opportunity

Reflexive cycle toolkit filter

- Basics ▾
- Context ▾
- Planning ▾
- Evaluation ▾
- Action ▾

Filter by type

- More on this topic
- Key resources
- Interactive exercises
- Tools & templates
- Practice examples
- Methods guides
- Further reading
- Relevant presentations
- Videos

481 resources found



KEY RESOURCES

Theory, evaluation, and practice in widening participation: a framework approach to assessing impact - Annette Hayton and Andrew Bengry-Howell, 2016

Published in the London Review of Education, 2016, 14(3), pp.41-53.



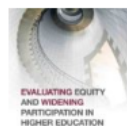
The evaluation of the impact of outreach: proposed standards of evaluation practice and associated guidance - Claire Crawford, 2017

Commissioned by OFFA, Claire Crawford and her team at Warwick University produced detailed guidance on evaluating outreach.



Translating close-up research into action: A critical reflection - Sue Clegg, Jacqueline Stevenson and Penny Jane Burke 2016

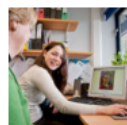
Reflective Practice, 2016, 17(3), pp.233-244.



FURTHER READING

Evaluating equity and widening participation initiatives - Penny-Jane Burke, Annette Hayton and Jacqueline Stevenson, 2018

Illustrating evaluation and research methods that capture the complexity and context of WP initiatives. Trentham Books



The influence of socioeconomic status on changes in young people's expectations of applying to university - Jake Anders, 2017

Peer Evaluation course

- This course is for those involved in leading or undertaking evaluation of access and participation initiatives.
- Combines continuing professional development for evaluators with an institutional Peer Review process the course benefits both individuals and organisations.



Starting April 2024

<https://www.nerupi.co.uk/events/peer-evaluation-course>