Quality in Educational Research

School of Education
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Summary of series

- Nature of evidence
- Paradigm-related quality
- Practice-based research – tacit knowledge; expected to travel without the tacit knowledge and context of the practitioner
- Common ground across epistemologies? Can facts travel between paradigms and disciplines
Trusting methods and analyses

- Nature of evidence
- Warrants
- Quality criteria
Criteria for quality?

- Originality
- Independence
- Conformity with ethical principles
- Breadth of synthesis
- Conformity with accepted methods
Problems?

- Arguably, some of the most important research and scholarship has been idiosyncratic and failing to conform to accepted norms for quality.
Problems

- The *No Child Left Behind Act* has defined good research as consisting of experimental studies that yield prescriptions for action.
## Evidence – how might we judge it?

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Enabled by</th>
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<tbody>
<tr>
<td>relevance</td>
<td>establishing that the information constitutes information for (or against) some proposition</td>
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<tr>
<td>sufficiency</td>
<td>corroboration with other instances of the same kind of evidence or other kinds of evidence</td>
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<tr>
<td>veracity</td>
<td>establishing that the process of gathering evidence has been free from distortion and as far as possible uncontaminated by vested interest</td>
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Sufficiency of evidence

<table>
<thead>
<tr>
<th>Amount of evidence</th>
<th>isolated observations</th>
<th>prima facie or inconclusive evidence</th>
<th>corroborative evidence</th>
<th>conclusive evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading to</td>
<td>inspiration</td>
<td>hunch</td>
<td>rational belief</td>
<td>knowledge</td>
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</tbody>
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The social and interpretative context of evidence

- In any inquiry, assessment of evidence is social – by jury or by peers
Warrants

... ‘warrant’ refers to the plausibility of the interpretations of the evidence generated by research studies and the conclusions drawn from it. It invites the explicit consideration of whether the conclusions derived from a research study are legitimate in the light of the evidence adduced. More specifically, it addresses the question of whether, given the available evidence, the conclusions reached are better than the alternatives.

James, Pollard, Rees, & Taylor (2005)
Warrants

- Instructions on writing about warrants from TLRP say that warrants are ‘Key reasons why readers should have confidence in your conclusions’. They might include
  - Project design and empirical robustness
  - Conceptual and theoretical coherence
  - User engagement and validation
  - Careful/systematic review of other evidence
  - Peer review
Warrants

- What warrants can be used to validate or justify research findings?
  - Responses on ‘warrants’ from TLRP teams include:
    - ‘in-depthness’;
    - robustness of design;
    - re-statements of method;
    - triangulation;
    - longitudinal structure;
    - strong theoretical framework
<table>
<thead>
<tr>
<th>Processes of Inquiry</th>
<th>Mixed Methods and Triangulation</th>
<th>Frequent Meetings</th>
<th>Location in Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-checking and Respondent Validation Triangulation</td>
<td>Methodology (MLM) Triangulation Regular External Validation</td>
<td>Research Community Will Judge</td>
<td>&quot;Very Rigorous&quot; Analysis Using a Particular Method</td>
</tr>
<tr>
<td>Normal Methods' for Ensuring Rigour</td>
<td>To Be Judged by Research Community in Context of Conventions for Research Rigour</td>
<td>Large Samples Robust Empirical Procedures Quantitative Methods</td>
<td>Variety of Approaches Respected Statistical Methods</td>
</tr>
<tr>
<td>Multimethod Approaches and Triangulation User Engagement and Validation</td>
<td>Robustness of Research Model Creation of Persuasive Theoretical Outcomes Extent to Which Practical Ideas Adopted Creation of Research Tools</td>
<td>Corroboration of Work by Other Empirical Studies</td>
<td>Triangulation Presence of External Evaluator</td>
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<td>Range of Methods Range of Cases Multidisciplinary Approach</td>
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</tbody>
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For further exploration …

- Theoretical coherence
- Plausibility
  - Repeatability; triangulation; sufficiency
  - Trust and belief
- Peer review
  - of originality, significance, rigour, impact, integrity, independence