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Undergraduate Interdisciplinary Research and the Context of Knowledge Production

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Objectives

• To answer key question:

   How can we make it possible for UG students and academic staff in the UK to achieve both integration and specialization in research?

• In answering key question, to draw on findings of a programme of research published as

   Integrating Knowledge Through Interdisciplinary Research: Problems of Theory and Practice (Routledge, 2013)
Overview

• What is integrative interdisciplinary research?
• What justifies the production of integrative interdisciplinary research?
• Why are established researchers still finding it difficult to produce integrative interdisciplinary research, despite policy makers’ efforts to help them overcome this difficulty?
• What are the policy implications for UG students and academic staff interested in engaging in integrative interdisciplinary research?
• Conclusion
What is integrative interdisciplinary research?

• Different conceptions of interdisciplinary research
  – reflect differences in underlying philosophical theory (e.g. positivism, postmodernism, critical realism)

• Focus on integrative interdisciplinary research
  – Dominant conception in academic literature
  – Synthesis of knowledge from different fields of inquiry
What justifies the production of integrative interdisciplinary research as well as specialized disciplinary research?

  - *Differentiation* of reality justifies *specialization* in research
    - E.g. different types of social (and natural) structure
  - *Interconnection* of reality justifies *integration* in research
    - E.g. interaction/interdependence of different types of social (and natural) structure (as in a totality)
Why are established researchers still finding it difficult to produce integrative interdisciplinary research?

• Complexity of intellectual conditions i.e. contradictory philosophical forms of thought
• Complexity of social conditions e.g. relationships between employment, science, peer review, and education
• Interdependence of social and intellectual conditions generates dominant tendency towards specialization in research
• HE policy makers have overlooked significance of causal effect of underlying socio-intellectual conditions
What are the policy implications for UG students and academic staff interested in engaging in integrative interdisciplinary research?

• Intellectual aspect
  – UG students need to be aware of problem of philosophical contradiction → education in philosophy of science

• Social aspect
  – UG students can help staff to transform social practices in HE e.g. assist with redesigning curriculum
Conclusion

• Problem of integrating knowledge through interdisciplinary research reflects existence of dialectical contradiction

• Resolve dialectical contradiction to facilitate both integration and specialization in research and teaching

• Transform socio-intellectual conditions of knowledge production – with input from UG students – to resolve dialectical contradiction
References


Finally, if you want to learn more...

- Read the book
  Flyers available (20% discount)

- Read my forthcoming article in the *Journal of Critical Realism*:

  ‘Complex realism, applied social science and post-disciplinarity: a critical assessment of the work of David Byrne’