

WHY DO UNDERGRADUATES NEED RESEARCH SKILLS?



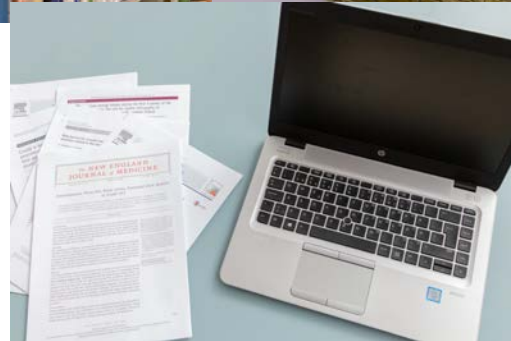
- knowledge society
- fluid knowledge
- societal change
- lifelong learning



scholarly mindset



DISCIPLINE-SPECIFIC RESEARCH SKILLS



UMEÅ UNIVERSITY

"THE HEALEY MODEL"

*Student-focused
Student as participants*

*Emphasis on
research content*

Research-tutored
(students write and
discuss papers or
essays)

Research-based
(students undertake
inquiry-based
learning)

*Emphasis on
research processes
and problems*

Research-led
(teaching subject
content)

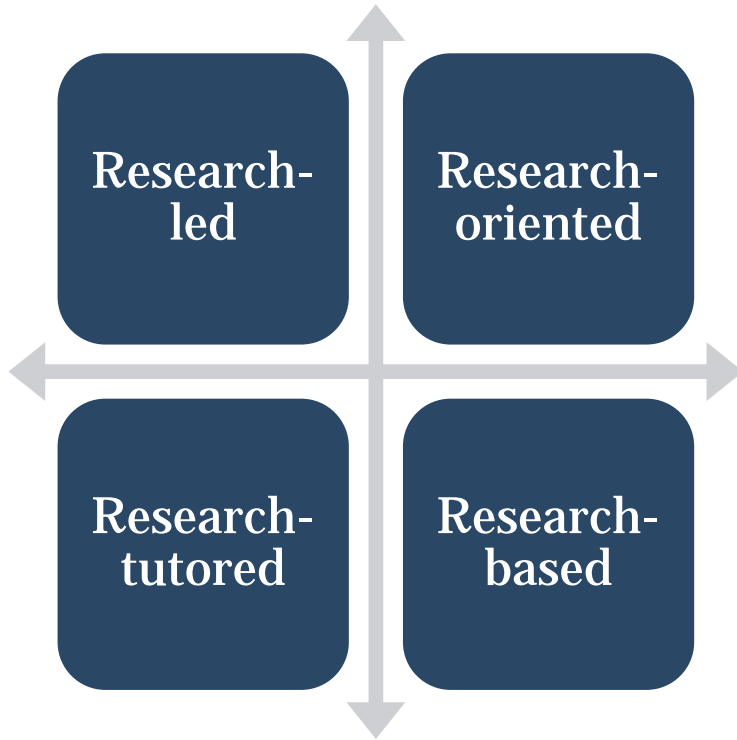
Research-oriented
(teaching know-
ledge construction in
the subject)

*Teacher-focused
Students as audience*

- Mick Healey, "Linking research and teaching exploring disciplinary spaces and the role of inquiry-based learning," R. Barnett, ed., *Reshaping the university: new relationships between research, scholarship and teaching* (McGraw-Hill/Open University Press, 2005) 67-78



"THE HEALEY MODEL"



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CASE STUDIES

- Bioengineering program at Nanyang Technological University



- curriculum organised from research-led foundation courses to progressively more research-based courses

- Student-led conference in clinical psychology at Örebro University



- developing “soft research skills”



EVALUATION REPORT

- ***Insufficient familiarity with relevant methodology and formal requirements***
- ***Insufficiently developed analytical skills and inadequately defined research questions***
- ***Weaknesses in demonstrated ability to identify problems in a well-defined, scholarly manner and to address and discuss the selected issues and reach conclusions***



TOWARDS A DEFINITION OF RESEARCH-BASED EDUCATION

- current and relevant research results
- generic skills needed to perform scientific enquiries
- ability to understand, evaluate and use academic methods and knowledge
- ideally, all learning should take place in or close to active research environments



CHALLENGES AND QUESTIONS

- Students tend to ask for links to their future professions rather than links to research. Professional and vocational programmes and the question of license in certain professions?
- Increased quality – increased workload? How do we convince teachers to invest the time necessary to move towards a stronger research focus in their teaching?
- How do we meet the costs of including active research tasks in our courses?
- Students – teachers – administrators – leadership – who should be targeted? In what way? How are links between education and research promoted or blocked through policies on different levels?
- Who should be in charge of evaluating and or monitoring developments?
- What is lost if we fail to connect our teaching to research?





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