

Thematic, analytic and pragmatic ways of thinking

Having spent many years among sociologists, historians *et al*, well away from physics, it came as something of a shock to realise that I still saw the world as a physicist. My world is a world of phenomena, not themes, although as an activist in health and social care it's a world of issues too for me.

I suggest - as a working hypothesis - that in many university subjects thinking is primarily thematic (e.g. the humanities, much of the social sciences) or analytic (e.g. the natural and physical sciences). The Table brings out the contrast between them. By contrast, in the world outside academia thinking is primarily pragmatic, issue-oriented. Only rarely do we come across a mix of these ways of thinking. What do you think?

	Thematic	Analytic	Pragmatic
'Focus'	A theme	A phenomenon	An issue. What should we do?
Definitions	Abstract, all-encompassing	Concrete, to enable you to recognize X when you see it	To establish a common language, make sure 'we're all talking about the same thing'
Goal	Generalization	Unification	Decision, then action
Use of conceptual framework	To impose order. Likely that only one conceptual framework is used	To reveal order. Possible that several conceptual frameworks are used in conjunction.	Action-oriented, focusing on the need and scope for action and criteria for evaluating consequences
Mode of discourse	Argument, debate, commentary, attempt to persuade	Report: non-judgmental description of findings, analysis and conclusions; speculation based on these	Contributory (putting elements from different sources together), evaluative (of alternative courses of action) and advocating of options
Material (input)	Views and metaphors, made up into a 'collage' with pieces of evidence that support	Observations, evidence, 'facts', established 'laws' and rules	Experience and expertise; evidence, judgments, hunches, formulae
Test of validity	Plausibility (appeal to intuition)	Consistency	Will it work? Will it sell? Will it be acceptable?
Mode of learning	Reflective: 'You read for a degree.' Writer and teacher are interposed (as interpreter/authority) between student and raw material	Experimental: students exposed directly to phenomena, learn to observe, marshal evidence, draw reasoned conclusions. But teachers may rely on textbooks.	Entrepreneurial: Invention, trial and error, development, making sense of experience, learning from any available source (in-house or not), learning in cross-functional teams