

TOK Knowledge Framework – Human Science

Scope and Application

The study of Human behaviour

What is a human science? All of geography? Or only Human Geography and not Physical Geography?

Economics, Business, Finance and Accounting?

Psychology – does this cross over into Natural Science with neuroscience?

Investigate and understand human behavior
Diverse range of disciplines – anthropology, economics, psychology, sociology.

What makes Human Science a science? – Because it's an investigation – but what sort of investigation? Science is the study of the physical world by observation and experiment.

Concepts and Language

How does the word science differ in Human and natural sciences?

How reliable is Human Science knowledge?

Specific concepts such as “opportunity cost” in Economics

Use of mathematics to establish authority and rigour.

Problems with questionnaires – timing and wording and sample size – the difficulty of neutral language.

Historical Development

Greek mathematicians greatly refined the methods and expanded the subject matter of mathematics.

Chinese mathematicians made early contributions including a place value system.

Hindu/ Arabic numerical systems in use throughout the world today.

The development and acceptance of theories – why conflicting theories exist, and CAN exist.

Early economics studied man as a maximiser of utility, replaced by modern behavioural economics which sees man and naturally irrational and heuristic. (Heuristic is a sort of short cut that allows people to make complex judgments quickly – it's a kind of common sense, rule of thumb, experimental type process...)

Human Science

Methodology

The importance of theories in Human Science – compare and contrast to theories in natural Science.

The importance of data and data collection.

The role of mathematics.

The role of logic and reasoning.

Methodology tries to explain the phenomena, but also can admit exceptions to rules

How reliable is Human Science compared to Natural science? Does this make this invalid?
What is the difference of the methods between HS and NS?

Experimental methods

Questionnaires and Polls

Use of models

Links to personal knowledge

Understanding of ourselves as an individual in a society.

Contributions made by individuals in different areas – Freud, Keynes...

Collaborative nature of some studies.

How important are gender, age and social status?

Knowledge Questions

How reliable are the Human Sciences?

Human sciences are less able to predict because people have free will – but HS tries to establish rules, theories – Is this possible?

Are HS methods “scientific”?

How do emotions effect results in HS?

How can we decide which model is better than another?

How effective/ reliable are questionnaires for collecting data?

How can we eliminate the effect of the observer?