

Socrates, Q and you

Measuring the research performance
of individual researchers

With due acknowledgement to the
University of Western Australia (UWA)
and the University of Queensland (UQ)

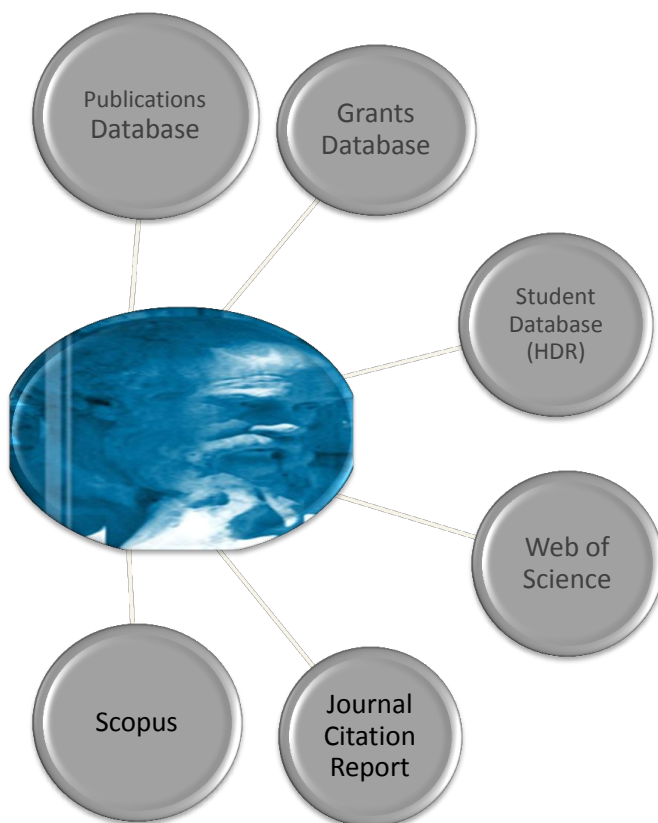
The PBRF

- Measures the quality of academic research
 - and individual researchers (unlike RAE (UK) and ERA (Aus))
- Based on Research Outputs, Contribution to Research Environment and Peer Esteem
 - Over 6 year period
 - Assessed by independent peer or expert review
- Individual assessment (A, B, C, R) is confidential
 - Not used in individual performance management or development

Socrates and Q

- Individual research performance indexes developed by UWA and UQ
- Similar with some differences
- Very different to PBRF (internal not external)
 - Used by the universities to illuminate discussions with staff

What does Socrates do?



- The system draws data from a number of core UWA databases, as well as two ISI databases and Scopus.

- Socrates is then able to collate data for individual staff members to create a detailed research profile, showing an individual's publications, citations, grant income and HDR load.

Socratic Index II

- In January 2009, UWA launched Socrates II, with a new, single Socratic Index (SI II) that focuses upon a six year research period, currently 2004-2010.
- To determine the SI II, Research Output Points (P), Research Input Points (I), and HDR completion points (S) for the five year are summed, and can be represented thus:
- $SI\ II = P^1 + I^1 + S^1$

SI II Indicators

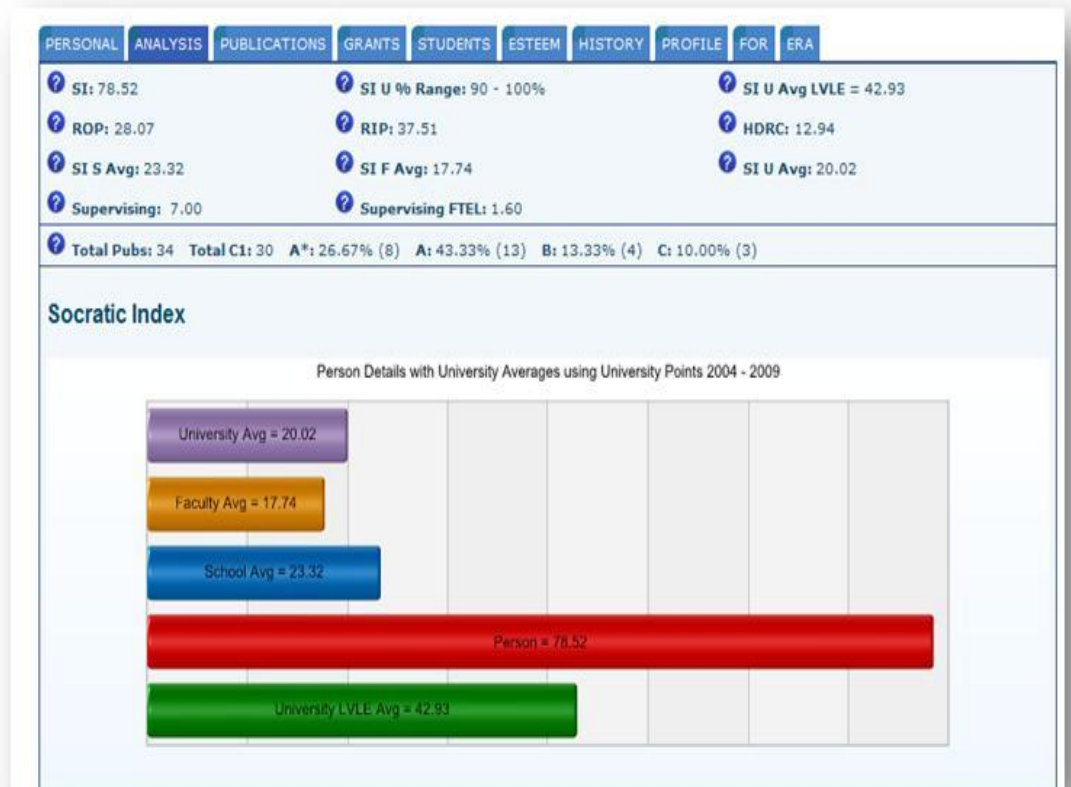
Publication Type	Points
<i>Nature & Science</i> papers	5
Books	15-20 As per UWA publication schedule
Non Indexed Journal Papers	1
Journal Papers indexed in Social Sciences Citation Index	4
Journal Papers indexed in Social Sciences and Science Citation Indexes	3
Journal Papers index in Science Citation Index	2
Refereed Conference paper	0.5
All other publication types	As per UWA publication schedule (Nothing > 5)

HDR Completion Type	Points	Value of the Grant	Points
		> \$500,000	3 points
PhD completion	2 points	> \$50,00 and < \$500,000	2 points
Masters by research completion	1 point	> \$5000 and < \$50,000	1 point

Analysis Tab

Socrates is able to produce averages for:

- The University
- Academic Levels
- Faculties
- Schools

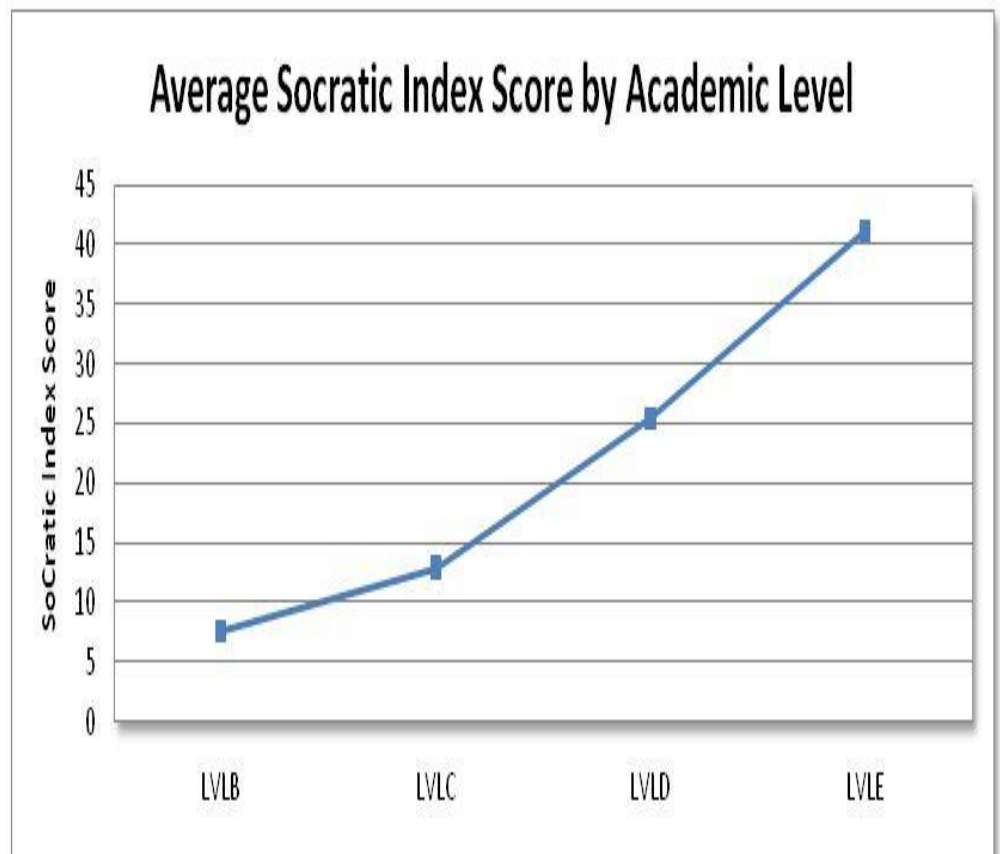


History Tab



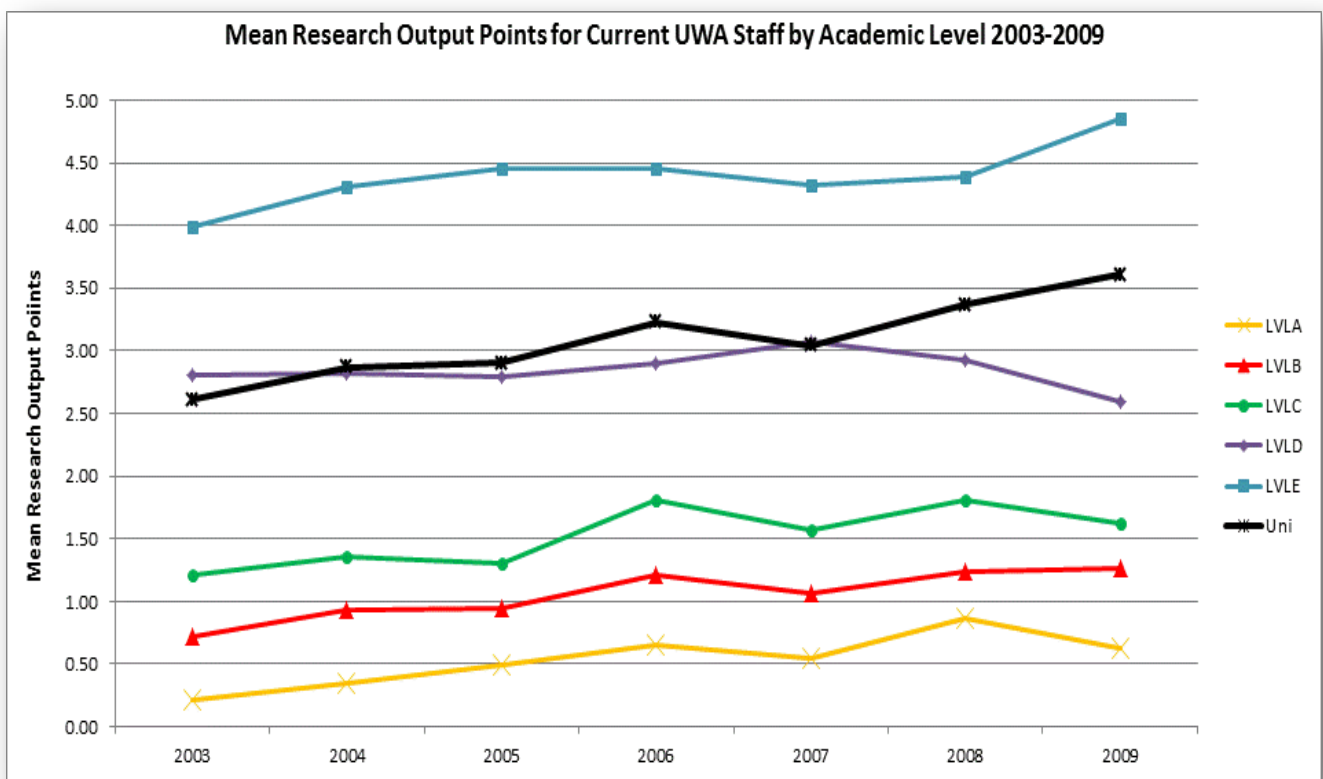
Proving Assumptions about Research Performance

- Socrates shows that the productivity of staff members increases with their academic role level.



* LVLA = Associate Lecturer, LVLB = Lecturer, LVLC = Senior Lecturer, LVLD = Associate Professor, LVLE = Professor.

Patterns of Publication



Q-index: Individual performance tool



Q-Index - Scope of Indices

- Use 6-year window of activity consistent with ERA
- Include current academics (including Level A*), and those who were included in the most recent census

• Components:

- Research Input Points (RIP) – grant income
- Research Output Points (ROP) – publications
- HDR Completions
- HDR Load

Each component will be **normalised** such that the staff member with the highest raw point score in each component equates to 100% for that component.

- The normalised scores will be **weighted**:

RIP	ROP	RHD Completions	RHD Load	Q-Index II
33.33%	33.33%	20.33%	13%	100%

Q-Index

Research Input Points (RIP)

UWA Socrates	Q-Index
1 point for any grant from \$5,000 up to \$50,000	Yes
2 points for any grant between \$50,000 and \$500,000	Yes
3 points for any grant over \$500,000	3 points for any grant between \$500,000 and \$5,000,000
	4 points for any grant over \$5,000,000
Externally peer-reviewed grants get a double weighting	No - Peer-reviewed grants are not weighted
Points should be shared evenly between internal CIs	\$amount are shared evenly between all CIs (internal, external, and students) before points calculation
Internal students treated as staff for these purposes	Yes

Q-Index

Research Output Points (ROP) *(aligned with ERA data)*

UWA Socrates	Points	Q-Index	Points
A1 Research Monographs	5	A1 Research Monographs	10
<i>Nature or Science</i> C1 articles	5	<i>Nature or Science</i> C1 articles	5
C1 articles in the SSCI	4	C1 articles in ERA A* journals	3
C1 articles in both SSCI and SCI	3	C1 articles in ERA A journals	2
C1 articles in the SCI	2	C1 articles in ERA B journals	1
Other C1 articles not indexed	1	C1 articles in ERA C or not ranked	0
Book chapters not indexed by ISI	1	B1 research Book chapters	2
Refereed conference papers	0.5	ERA ranked A conference papers	2
All other output as for UWA's funding model	?	ERA ranked B conference papers	1
		ERA ranked C and unranked conference papers	0
		All other output	0
Creative works	Up to 5	Creative works	?
Points shared between internal authors only to encourage external collaboration		Points are not apportioned across authors as we do not want to discourage collaboration with students and internal colleagues	

Q-Index

Research Higher Degree Completions

UWA Socrates	Q-Index
2 points should be allocated for a Doctoral completion	Yes
1 point should be allocated for a Masters Completion (RTS masters)	Yes
Points apportioned across all supervisors on the basis of proportional supervisor load at completion	Yes
All supervisors are accounted for – UWA supervisors do not gain the points of external supervisors	Yes

Research Higher Degree Supervision Load

UWA Socrates	Q-Index II
N/A	2 points allocated for Full Time RHD Students
	1 point allocated for Part Time RHD Students
	Points apportioned across all supervisors on the basis of proportional current supervision load
	All supervisors are accounted for – UQ supervisors do not gain points for external supervisors; No weightings for PhD vs MPhil

Summary

- It is possible to measure at least some aspects of research “performance” of researchers
 - And it correlates with recognition factors such as academic level
- Based on metrics for
 - Research Outputs
 - Research Inputs
 - PG Research Degree teaching and completions

Is it useful?

- Have UWA and UQ (and others) developed something of value ?
 - To themselves?
 - To the academic researchers?
- Are the measures sufficient?
 - What else could be added?
 - (review the post its!)