Statistical support for HDR students

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MONASH University
Statistical needs of HDR students

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The need for good statistical support for HDR students is greater than ever before.
Monash Uni statistical consulting service

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- Students from all faculties use the service.
Some examples

1. Arts student studying factors that affect favoured language of Italian migrants at home. Multinomial regression used to untangle the various factors. Provided help in using SPSS and interpreting results.
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3. Business & Economics student studying Asian telecommunications industry. Suggested data collection and storage methods, and recommended an intervention analysis to measure the effect of policy changes.
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- analyse their data
- interpret their statistical analysis
- present statistical results
- use a statistical package on a computer
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Statistics

- approx 250 students per year
- 4–6 staff members involved (all part-time)
- Cost to university: approx $60K per year.
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- staff members on supervisory panels of several PhD students.
Universities with free statistical support for all HDR students: ANU, Flinders, Griffith, James Cook, Melbourne, Monash, Southern Cross, UWA, Wollongong.
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- ANU: “[we have] a senior administration that . . . realizes that if it wants to maintain its position as one of the leading research universities in the world, then the statistical treatment and presentation of results in all forms of publications has to be up to scratch.”
More limited support

Free service limited to one faculty

- Newcastle: Faculty of Science and IT
- Adelaide: Faculty of Health Sciences
- U Queensland: Faculty of Health Sciences
- Swinburne: Faculty of Life and Social Science
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Workshops only

- QUT and Sunshine Coast (other support provided but not funded)
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Brokering service

*(matching student with staff member)*

- Charles Sturt (largely unfunded)
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- “I receive a very large volume of requests and I routinely turn them down as do most of my colleagues. We would like to help but don’t have the time and this aspect is not rewarded in promotion.”
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- "I receive a very large volume of requests and I routinely turn them down as do most of my colleagues. We would like to help but don’t have the time and this aspect is not rewarded in promotion."
- "It is okay, apparently, to spend millions on data collection but data analysis should only cost a few hundred dollars."
A constant theme

“Statistics at Australian Universities”, Statistical Society of Australia 2005

Recommendation to Federal Minister for Education, Science and Training: “the development and maintenance of quality on-campus statistical consulting services”.

A constant theme

Recommendation of the 2006 National Strategic Review of Mathematical Sciences Research in Australia

“Provide every university with the appropriate mathematical and statistical consulting infrastructure to ensure that research undertaken by staff and students is efficiently planned and the results validly assessed. This infrastructure is best provided from within a mathematical sciences department, rather than by relying on dispersed individual consultants with inadequate peer support.”
A constant theme


Recommendation by National Committee for the Mathematical Sciences: “Universities should formally and centrally support statistical consulting services for their researchers and their students in all disciplines on campus. This places statistical science firmly as a basic resource or component in the research process. Such consulting centres can also operate in the wider community as a valuable source of expertise and also provide excellent training for students in statistics.”
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Only 9 universities do this now. HDR students deserve better.