



Central Queensland  
UNIVERSITY  
Where Students Come First.

# GENERIC ATTRIBUTES OF IS GRADUATES

An Australian Academic View

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# Introduction

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- Aim of the study
- Definition of a Generic Attribute
- Research method
- Summary of results of the study
- Further Research

# Aim of the Study

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- Identify the generic attributes required of entry-level employees
- Provide a basis for development of IS curriculum that meets the needs of the Information Systems industry

# DEFINITIONS

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- Generic attributes describe a core set of abilities and characteristics of an individual
- Individuals in their first year of employment in an IS field

# Generic Attributes

- Basic Skills
  - Knowledge
  - Understanding
  - Capacity
  - Quality
  - Attitude
- Competency
  - Knowledge Use
  - Capabilities
  - Ability
  - Generic Skills

# RESEARCH METHOD

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- The Delphi technique
- Previous researchers involved with “key issue” studies have used the method
- Successfully used in the previous study in 1998.
- Three rounds of email surveys asking participants to rank the set of attributes on a 7 point Likert-type scale.

# The Ranking Scale

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Each attribute is to be rated as to whether it is important for a Graduate to possess:

- 1 = extremely unimportant,
- 2 = unimportant
- 3 = of little importance,
- 4 = neutral,
- 5 = very important,
- 6 = of major importance,
- 7 = extremely important (essential).

# Participants

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- Australian academics from most Australian universities.

# Participation Results

	<b>Total</b>	
	<b>Number</b>	<b>Percent</b>
• Round 1	<b>122</b>	<b>23</b>
• Round 2	<b>123</b>	<b>23</b>
• Round 3	<b>123</b>	<b>23</b>

Total time for the study was 6 weeks

# Essential Attributes

Rank	Attribute	Mean	1998 Rank
1	Retrieve, evaluate and use relevant information	6.46	3
2	Define problems in a systematic way	6.24	5
3	Analyze, synthesize and evaluate the various solutions	6.16	8
4	Work as part of a team	6.15	1
5	Listening skills	6.13	NR
6	Written communication skills	6.09	6
7	Participate in continued learning and intellectual development and develop critical, reflective and creative thinking	6.08	2
8	Oral communication skills	6.06	4

# Least Essential Competencies

Rank	Attribute	Mean	1998 Rank
35	Capacity to use new technologies without additional training	4.95	NR
36	Identify information systems that will provide competitive advantages	4.83	NR
37	Customer service orientation and skills	4.73	NR
38	Understand the profit motive of business	4.71	29

# The Big Movers

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- **Up**
- Analyze, synthesize and evaluate the various solutions (8 to 3)
- Adapt to unfamiliar situations and operate in a socially and culturally diverse environment (26 to 20)
- **Down**
- Demonstrate practical skills and understanding in at least one computer language (20 to 34)

# Comments Received

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- Participants stated that they valued the feedback provided in the second and third round and this allowed them to re-evaluate their views.
- 56 written comments received from participants.

# Comments Received

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- When specialists are in short supply, the generalist with some exposure to the area can respond and, with some additional on-site training, grow into the position offered.
- A need for (emotional) maturity beyond their years. Too much expectation of taking on important / complex jobs immediately when there is a need for a 'working in' period.

# Comments Received

- Understand the limitations of information systems and how information systems are only part of a coherent approach to solving organisational problems and making organisational improvements.
- The PC celebrates 25 years as a part of the workplace - only 25 years and look at the changes. The next 25 years which only represents the first half of the career of current graduates looks to be every bit as dynamic - don't get too attached to the way things are in undergrad texts.

# Conclusions

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- Information retrieval, problem definition, analysis of various solution, oral and written communication, listening are rated as essential.
- All of the attributes are considered to be important to first year employees some are simply considered to be more important.
- The large drop in the ranking of demonstrated practical skills and understanding in at least one computer language.

# Further Research

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- A further study has begun to identify the emergence of new attributes.
- Further analysis on a state by state basis.

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# The End