

CHARACTERISTICS OF FUTURE LEADERS

some early findings

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OUR PURPOSE

- What does a leader of the future look like? What are the characteristics of leaders of the future? Specifically in the Engineering Profession.
- Industry specific research looking at the qualities of leadership required to drive the expansion and growth of the engineering profession into the future.
- To produce a book.

OUR METHODOLOGY

Reference Group as a guiding coalition.

Various ages, gender, experience, status
(Student to Senior Leaders).

Forums and panel discussions.

Individual interviews with a range of
Engineering Professionals. Small and large
Firms, Senior Leaders, Emerging Leaders,
Younger Professionals.

□ Six Questions were posed:

1/. WHAT IS THE PROCESS OF TRAINING AND DEVELOPING ENGINEERS FOR LEADERSHIP IN YOUR ORGANISATION?

LARGE ORGANISATIONS: (50 plus staff)

- Very structured.
- Combination of internal and external courses.

SMALL ORGANISATIONS:

- Largely ad hoc.
- Little internal offerings.
- Some mentoring.

2/. WHAT DO YOU PERCEIVE TO BE THE LEADERSHIP NEEDS OF ENGINEERS IN THE FUTURE?

- Full range of communication skills
- Strong business acumen
- Strategic thinking particularly in terms of policy and community
- Ability to network effectively and build and understand alliancing

3/. WHAT ARE YOUR PERCEPTIONS OF ENGINEERING DEGREE PROGRAMS IN EQUIPPING GRADUATES WITH LEADERSHIP CAPABILITIES?

- Under graduate programs are highly technical
- Graduates lack integration skills, creative problem solving skills, knowledge application ability
- Graduates are not engineers
- No expectation of leadership skills
- There is a need for Universities to teach 'Excellence'..... not mediocrity

4/. IN LOOKING FOR EFFECTIVE LEADERSHIP TRAINING FOR CURRENT ENGINEERS, WHAT DO YOU UTILISE?

- Varies according to size of organisation but mixture of Post graduate Courses, In-House training, Engineers Australia Courses, Conferences, Mentoring, Coaching
- MBA courses featured

5/. WHAT DO YOU CONSIDER TO BE THE KEY LEADERSHIP COMPETENCIES REQUIRED FOR 5 YEAR GRADUATES AND MIDDLE MANAGEMENT ENGINEERS?

FIVE YEAR GRADUATE

- ❑ Technical Skills
- ❑ Team Focus
- ❑ Working effectively with staff and contractors
- ❑ Managing both up and down

MIDDLE MANAGEMENT

- ❑ Ability to Motivate
- ❑ Creative Problem Solving
- ❑ Negotiation Skills
- ❑ Communication skills both internally and externally
- ❑ Engagement
- ❑ Strategic Thinking

6/. WHAT CHARACTERISTICS DO YOU THINK A LEADER IN ENGINEERING WILL NEED TO POSSESS IN 2030?

- ❑ Creativity and Innovation
- ❑ Ability to deal with complexity and change
- ❑ Ability to develop and communicate a vision
- ❑ Ethical behaviour based on strong values
- ❑ Openness, flexibility and Adaptability
- ❑ Technical Competence

SOME OBSERVATIONS

- Different perspectives of leadership.
- Variety of approaches to training and development of leaders.
- Very low expectation of Engineering Graduates. *"We turn them into Engineers"*.
- No expectation a graduate will have leadership qualities.
- Graduates lack in certain practical competencies: Integration, application, complexity, globalisation.

SOME OBSERVATIONS

- It was noted some under graduates do not perceive value in leadership.
- Undergraduate courses are highly technical in focus which is preparatory for the future.

COMMENTARY

It was noted that those who became leaders already held inherent characteristics.

- Does this not challenge the current orthodoxy that leadership can be taught.

"Leaders are born not made" !!!

- Does this not highlight the dichotomy of:

"Leadership is both Science and Art, both Rational and Emotional" !!!

COMMENTARY

The language and focus of leadership changes across generations but the intent does not. MBO, Goal Setting, Vision, Ethics.....

- The authors previous research identified Values Driven leadership produces in followers:

A Sense of Belonging, Identity and Purpose.

- Is this not generic across generational divides?

COMMENTARY

- Will the characteristics of leaders of the future be different to the characteristics of leaders of today (or for that matter of the past)?

IT WOULD APPEAR NOT.

- But the emphasis, the focus, the expression, may well change as we confront new societal issues, technological issues, economic issues.

WHERE TO FROM HERE?

- Further cross generational research.
- Further research into course offerings versus industry expectations.
- Contemplation of approaches to development of Engineering Leadership that reflects the needs of the future.
- Would you like to participate? Contact us to share this exploratory journey about all of our futures.