

Nurturing the managers of tomorrow: Multidisciplinary learning for industry leaders of the future

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A new type of degree: MSc in Global Management of Natural Resources

Increasingly it has been commented upon by industry that many graduates enter the market underprepared for the roles they wish to undertake. Too often the focus of postgraduate study has been on developing academic skills without the application and soft skills. The MSc in Global Management of Natural Resources has been designed and built from the ground up to tackle this growing demand in the resource industry.

The essential components of employability, as shown in Figure 1 (Dacre Pool and Sewell 2007) highlight skillsets that students should possess in order to maximise their employability. This poster outlines a number of elements that aim to tackle perceived deficiencies in postgraduate education, providing broad, balanced and beneficial learning for those who wish to work in the world of natural resource management today.



Skills and knowledge for the industry leaders of tomorrow

Industries encompassing the production and use of natural resources are multifaceted, requiring multidisciplinary learning and interactions with processes from the cradle to grave.

- Broad fixed selection of modules across science, engineering, social sciences, business and management.
- Promotion of breadth and depth in subject matter. Teaching beyond the facts; developing structures for learning, applicable to subject matter beyond what is directly taught.
- Consolidation of knowledge, practice and purpose creates an environment of effective reflection and evaluation of decisions.
- Research projects engaging the academic and industrial communities.
- Development of soft skills is strongly promoted.

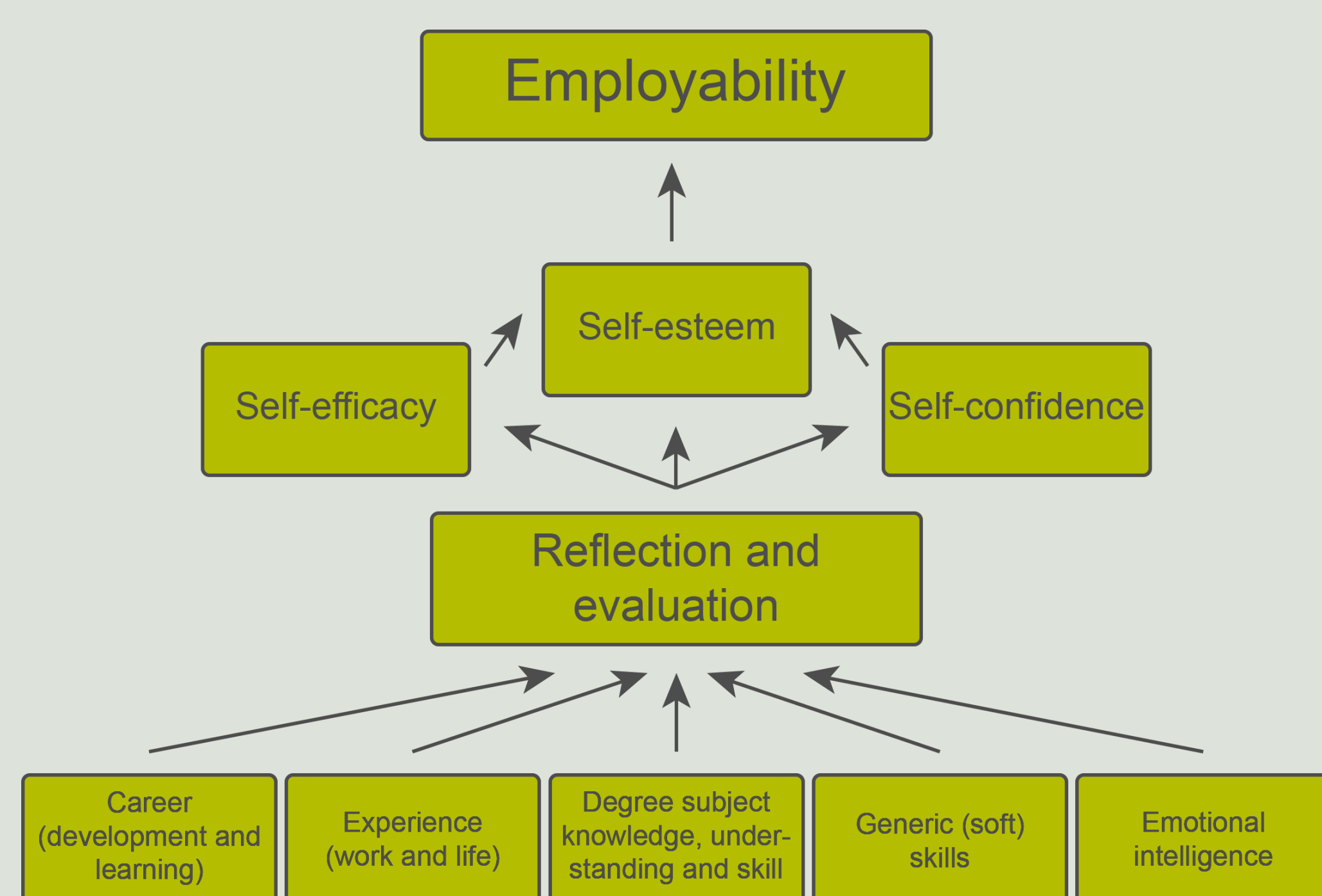


Figure 1 – The essential components of employability. Adapted from Dacre Pool and Sewell (2007).

Teaching across diverse communities

Students enrolled onto the programme come with a broad range of backgrounds, typically corresponding to one aspect of businesses operating in the resource industry, with a strong desire to learn about how the industry functions as a whole.

- Approachable and engaging student-focused teachers.
- Encourage educational and social interactions, which promotes knowledge transfer; a strong programme identity breaks down barriers to learning within and between students.
- Teach from the ground up; fostering an understanding in each subject and why it matters engages all students in learning.
- Complex, team based challenges allowing everyone to benefit from each others skillsets.
- Each student takes a huge wealth of insight from the entirety of the cohort, strengthening their knowledge base.

Industrial engagement; student placement

Strong industry engagement is critical for positive outcomes. Students are engaged in order to improve and mature their knowledge and understanding, make new connections and improve employment outcomes.

- A large selection of industry lecturers, with complex realistic challenges that are mapped to their learning in and out of the classroom.
- Students become confident in their understanding; their willingness to engage with stakeholders, academia and industry grows throughout the year.
- Through engagement, student self-awareness increases; **students recognise they are learning**, efficacy and self-esteem improves throughout the year.
- Employment opportunities, a year in industry is available as part of the programme, with numerous industry partners; the programme is developed in collaboration with industry to ensure it helps to deliver the intended outcomes.

Outcomes

Well rounded, confident and technically versed graduates, whom **understand** the life cycle of natural resources; **recognise** the technical challenges, environmental concerns, social issues. **Aware** of the business case and financial implications. **Competent** and **capable managers of the future**.

Out of the office: International study and fieldtrips

The MSc is dual-continental; two terms in London with five months in Adelaide, Australia. Fieldtrips are dispersed throughout the year, allowing for a range of engagement with subject matter.

- Living in another country helps to develop soft skills and allows students to engage with other points of view, normalising their learning against stakeholder concerns.
- Research and work with industry partners and local stakeholders.
- Fieldtrips help to consolidate learning and understanding with real world examples.
- Visits to geological sites, a mine, production facilities, a nuclear power station and waste repository across the U.K., Finland and Australia.

