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The Work Skill Development Framework, Applied to Minerals Industry Employability

MELT – WORK SKILLS

“The Work Skill Development Framework Applied to Mineral Industry Employability”

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WSD Framework and Mineral Industry Employability

Aim:

To use MELT and the WSD Framework to improve students' mineral industries employability skills

Approach:

Being achieved through a 3 –way partnership between the University of Wollongong, our professional body, the Australasian Institute of Mining and Metallurgy, (or AusIMM) , and local industry members.

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Context:

The approach is based on our situational analysis.

The minerals industry is diverse and there is no structured approach for getting students into employment.

Usually, at most universities, it's up to the students to find their own employment and they generally receive limited, variable guidance.

With the minerals industry going through cycles, this can cause anxiety and stress for students and impact adversely on their formal studies.

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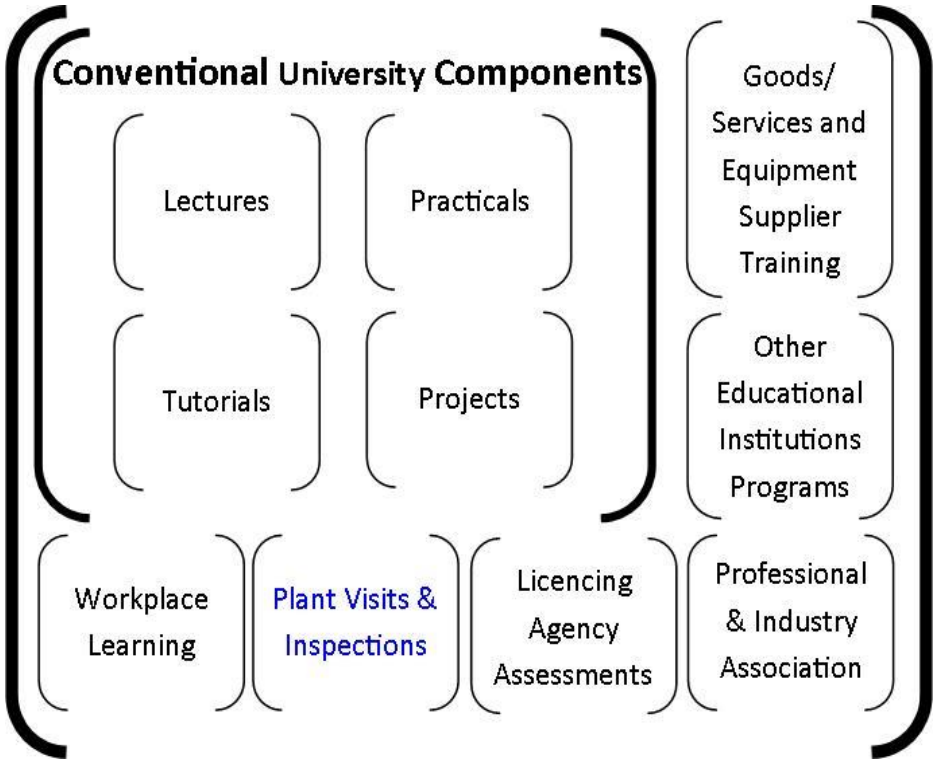
Our application has been based on using the enhanced curriculum model shown below



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Level 1	Levels 2&3	Levels 4&5
Lectures	Practicals	Goods/Services & Equipment Supplier Training
Tutorials	Projects	Other Educational Institutions Programs
Workplace Learning	Plant Visits & Inspections	Licencing Agency Assessments
		Professional & Industry Association Activities

The Enhanced Curriculum Model using the WSD Framework

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In terms of the MELT Pentagon:

1. Embark and Clarify – The purpose is for students to take responsibility for their own employability. The focus is, based on evidence, what is it that minerals industry employers want.

2. Find and Generate – What skills do employers require, both technical and generic? What are the sources for gaining and demonstrating those skills?

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3. Organise and Manage – Students generate their own personal portfolio of evidence and experiences related to employability requirements

4. Analyse, Trial & Synthesise – Students analyse their own skills, how they can demonstrate them, synthesise strengths , gaps and opportunities for development

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5. Communicate & Apply - Students take part in application and recruitment processes, by developing matched, tailored submissions, using a variety of communication forms

6. Evaluate and Reflect - Reflect and evaluate the outcomes of gaining employability skills and applying for positons, on-going personal development building towards continual professional development and life-long learning

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Examples are included in the paper showing how students achieve Levels 4 and 5 through their engagement in each of the Enhanced Curricula fields:-

- Goods/Services and Equipment Supplier Training
- Other Educational Institutions Programs
- Professional & Industry Association Activities
- Workplace Learning
- Licencing Agency Assessments
- Plant Visits & Inspections

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Outcomes:

- The mining engineering enriched curriculum model has been effective in improving the World QS rankings for the program
- It's highly regarded and valued by students and employers
- Adding the MELT WSD Framework has identified strengths and opportunities for improvement with the program
- The approach provides significant opportunities for stuetns to develop independence and autonomy by using the templates shown in the paper's appendices.

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Conclusions:

- Adding the WSD Framework has provided opportunities for continuous improvement
- The approach may be suitable for other universities conducting mineral industry programmes and there could be a role for AusIMM, the professional body, to guide the implementation of the approach, in the national and industry best interest
- There is scope to move the emphasise from 3rd/4th year students to 1st and 2nd year students.