05/003

MEMORANDUM TO: Professor Jenny Strong
President, Academic Board

DATE: 18 January 2005

SUBJECT: 6-Month Implementation Plan – Review of School of Engineering

I am pleased to enclose the 6 month implementation plan prepared by the School of Engineering in response to the accepted recommendation of the Review of the School of Engineering.

I wish to note that with reference to Recommendation 5, the School has been successful in negotiating the funding of the Thiess Chair for a further 5 years.

I commend the implementation plan to you and trust that it will receive the approval of the Academic Board.

Michael Keniger
Executive Dean

cc: Professor J Simmons, School of Engineering
    Professor J Litster, School of Engineering
    Ms J Guenther, School of Engineering
I apologise for overlooking this reporting requirement. However, the School and I have been very busy implementing the Review recommendations. An outline of the implementation strategies, actions and achievements follows.

**Recommendation 1:**
The Review Committee recommends the abolition of the current divisional structure and that the School operate as a single unit with a single Head of Engineering. The Review Committee recommends that the removal of the divisional structure be implemented by January 2005.

This was implemented in 2004 with a ‘One School’ budget. One time divisional representation on the Executive Committee has been eliminated. ‘Discipline groups’ exist informally for the reasons advocated by the Review Committee, namely, for “retaining disciplinary identities for students, staff and external constituents”.

**Recommendation 2:**
The Review Committee recommends that the single new School structure be managed through an Executive Committee based on functional lines with, for example, representatives for Teaching and Learning, Postgraduate Learning, Research and Strategic Planning. The Review Committee expressly would not wish to see an Executive Committee based around pre-existing divisional groups.

This has been implemented as spelled out in the recommendation, except that ‘postgraduate learning is represented on the Executive through both the Chair of the T & L Committee and the Chair of the Research Committee. Professor Jim Litster becomes Head of School in mid February 2005 and will put his own stamp on the Executive structure, consistent with the recommendation.

**Recommendation 3:**
The Review Committee recommends that the full implementation of the One School structure be facilitated with the assistance of structural adjustment funding.

This was implemented in 2004, with a major staff restructure funded by the University.

**Recommendation 4:**
The Review Committee recommends that the costs and incomes associated with all activities be made transparent.

This has been implemented in the 2004 budget structure, with further refinement for 2005.
Recommendation 5:
The Review Committee recommends that the School pursue new sources of income and increased levels from new and existing sources to address the serious financial position.

The following strategies were implemented in 2004.

- Appointment of some academic staff with support from CRC Mining and Hyshot activity.
- Acquisition of VC Strategic Funds for a Strategic Innovation Partnership, a major aim of which is to obtain industry funding for chairs.
- Strengthening of attention to international student recruiting through appointment of School International Director.
- Establishment of a Joint Industry/University Taskforce for Education for Minerals Industry to develop a financially sustainable model (involving industry funding) for delivery of teaching in mining and minerals process engineering.

Recommendation 6:
The Review Committee recommends that Faculty Centres outside the School, University Centres and Institutes, be properly interfaced with School activities. Faculty Centres that have grown out of the School or the departments that pre-dated the School should be reinstated within the School structure or disbanded.

This recommendation was not supported by Standing Committee, Academic Board and Senate. Nevertheless, links between the School, SMI and JKMRC are to be strengthened as outcomes of the Joint Minerals Industry/University Taskforce on Education for the Minerals Industry. The Taskforce report is about to go to the Executive Dean and the Senior Vice-Chancellor.

Recommendation 7:
The Review Committee recommends that the University establish no new Faculty centres. Where the establishment of university-wide institutes is justified, that specific actions be taken to ensure that such Institutes are fully complementary to School goals.

This recommendation was not supported by Standing Committee, Academic Board and Senate.

Recommendation 8:
The Review Committee recommends that the focus for mining and mineral processing at the University of Queensland be firmly placed within the School of Engineering.

This has been implemented in terms of academic responsibility. However, the critical resource issues that have been addressed by the Joint Minerals Industry/University Taskforce can only be resolved with some careful integration with SMI.

Recommendation 9:
The Review Committee recommends that the Executive Dean and the Head of School encourage the Director or an equivalent senior staff member of the JKMRC to accept a fractional appointment within the School, along similar lines and with similar intent to the recent appointment in Mining Engineering.
This will be implemented in 2005-2006 (at least two joint appointments) as a recommendation of the Joint Minerals Industry/University Taskforce, a recommendation that is supported by the JKMRC.

**Recommendation 10:**
The Review Committee recommends that the School explore and develop the potential for substantially increased internationalisation of teaching and learning in the mining and minerals processing area.

This will be implemented in 2005-2006 as an outcome of the Joint Minerals Industry/University Taskforce. An important element of this is the formation of the national body, Mining Education Australia and the National Collaboration Metallurgy Program. These Australia-wide initiatives will lead to a one-stop shop for industry support and the ability to focus marketing on high quality programs, with input from a number of universities, to international students.

**Recommendation 11:**
The Review Committee recommends that the School reduce course offerings through a process of rationalisation of the delivery of courses covering similar areas of study in all degree programs offered by the School. A program to implement greater utilisation of common laboratory facilities should also be considered.

This was implemented in 2004 with a substantial reduction in the number of undergraduate and postgraduate courses offered in 2005. The national collaborations mentioned above in response to Recommendation 10 will lead to further rationalisation in 2006. Furthermore, the BE programs associated with Materials and Minerals Process Engineering are being rationalised with programs in Mechanical and Chemical Engineering to generate a further reduction in course offerings.

**Recommendation 12:**
The Review Committee recommends that the School establish a suite of modular postgraduate coursework offerings in areas of research strength. Collaboration at the postgraduate level with other groups within and beyond this University should be undertaken.

This will be addressed in 2005 for implementation in 2006. The matter has been assigned to a senior academic.

**Recommendation 13:**
The Review Committee recommends that the Head of School ensure that University policies in relation to the supervision, support and monitoring of research students are followed.

This has been implemented through strengthened monitoring by the Co-ordinator of Postgraduate Studies and his committee. However, the Head of School has evidence that this recommendation arose from comments by a non-representative student group.

**Recommendation 14:**
The Review Committee recommends that the School needs to grow at least two new areas of national research strength in mechanical engineering.
An academic position has been advertised with a view to strengthening the area of smart machines. Materials academic staff have been physically moved in the same office area as Mechanical Engineering staff to support new initiatives in advance manufacturing. A new ARC-Linkage project begins in the area in 2005. Professor Schaffer is pursuing a number of initiative to strengthen the area.

**Recommendation 15:**
The Review Committee recommends that the School of Engineering build on strong industry links and develop forward-looking innovative research programmes in civil engineering; potential areas could include infrastructure, transport and water.

The key to implanting this recommendation is the appointment of a chair in Civil Engineering. None exists at present. The advertisement will appear in early 2005. This leadership will be crucial in driving new research programs.