

Secretary/Treasurer Report

Executive Meetings

The ACDS executive met five times since the last AGM; agendas/minutes are attached.

Financial Report

A Statement of *Receipts and Payments* for the year ending 30 June, 2009 is immediately below.

Australian Council of Deans of Science Statement of receipts and payments For the year ended 30 June 2009

2008 \$		2009 \$
	<u>OPENING BALANCE AS AT 1JULY</u>	
8,408.57	Cheque Account	13,081.68
130,813.17	Cash Management	153,039.39
<u>139,221.74</u>		<u>166,121.07</u>
	<u>RECEIPTS</u>	
52,635.00	Annual Subscriptions	55,450.00
5,039.00	Net GST received from the ATO	810.00
4,553.51	Bank Interest	2,387.51
<u>62,227.51</u>		<u>58,647.51</u>
	<u>PAYMENTS</u>	
4,380.09	FASTS Membership	4,161.08
9,934.50	AGM Expenses	14,555.40
-	Bank Charges/Fees	105.11
4,253.09	Airfares/Accommodation	1,824.80
909.00	Net GST	5,187.92
-	Hospitality	397.45
-	ADT&L Conference	7,703.59
5,100.00	Conference Sponsorship	
110.00	Internet domain name	
10,641.50	John Rice Honorarium and Expenses	15,830.76
-	Consulting Projects	2,000.00
-	Other	248.54
<u>35,328.18</u>		<u>52,014.65</u>
<u>166,121.07</u>	<u>CASH BOOK BALANCE AS AT 30JUNE</u>	<u>172,753.93</u>
	<u>BANK STATEMENT BALANCE AS AT 30JUNE</u>	
13,081.68	Cheque Account	2,252.95
153,039.39	Cash Management	170,500.98
<u>166,121.07</u>		<u>172,753.93</u>

AGENDA

**The Australian Council of Deans of Science
Executive Meeting 2007
24 November, 2008
Room 4.5.501 UTS 10am - 2pm**

- 1. Apologies**
David Day
- 2. Minutes (attached)**
Minutes of the meeting of July 28, 2008, to be confirmed.
- 3. Business arising (not dealt with elsewhere)**
- 4. Financial Report**
GB to report on:
 - Financial Position
 - Annual Subscriptions Status
- 5. National Curriculum Board**
Prof Denis Goodrum, Peter Sullivan (by teleconference), and Rob Randall (the recently appointed General Manager of the Office of the National Curriculum Board) will join the meeting at ~10.30-10.45am for discussions around the proposal for a new National Curriculum.
- 6. ACER Research Monograph No 63 - Participation in Science, Mathematics and Technology in Australian Education (attached)**
For noting/discussion
- 7. ASELL**
JR to update
- 8. Future Interactions with FASTS**
Representation of ACDS at FASTS Meetings, SmP Day and other issues
- 9. Update of ACDS Website**
RKN to report – comments welcome
- 10. Wrap up of AGM – what worked, what didn't?**
- 11. Actions arising from the AGM**
 - 11.1 Preparation of AGM Minutes/Copies of reports by presenters

- 11.2 Are Education faculties aware of the decrease in Science HECS? (for Ed students taking science electives)
- 11.3 Roles and responsibilities of Associate Deans T&L

12. DEEWR Working Group on HDR Employment in Science and Mathematics

RKN to report on Meeting of 18 December – see *Consultation Report* (attached – NB Confidential)

13. Review of DEST Annual Report

JR to report on Meeting with Parliamentary Review Committee on November 14

14. Other Business

15. Next meeting of executive

Availability *pro forma* – latest version is attached for updating by Executive Members.

MINUTES

**The Australian Council of Deans of Science
Executive Meeting 2008
Monday 24 November 2008
UTS 10am -2pm**

1. Present & Apologies

Present: Rob Norris (Chair, Monash) (RN), John Rice (ED-elect) (JR), Gillian Bushell (Griffith) (GB), Tom Hubble (U Syd) (TH)
By Teleconference Jo Ward (JW), David Finlay (DF), Peter Sullivan (PS)
Apologies: Russell Crawford, Warren Lawrence, David Day

2. Minutes

Minutes of the meeting held 28 July 2008 were accepted.

3. Business arising (not dealt with elsewhere)

Nil

4. Financial Report

GB reported on current accounts, missing subscriptions and cost of the AGM. The matter of financial reimbursement for the ED (JR) was raised. Members of Executive agreed that all reasonable travel costs incurred by the ED should be reimbursed rather than the 65% agreed to by the AGM. This will be reported to the 2009 AGM.

5. National Curriculum Board

Profs Denis Goodrum (DG) and Peter Sullivan (PS - by teleconference), and Rob Randall (the recently appointed General Manager of the Office of the National Curriculum Board) (RR) joined the meeting at *ca.* 10.30 am for discussions around the proposal for a new National Curriculum.

Maths

Peter Sullivan gave an outline of the proposal in relation to Maths:

2 separate parts: K→10, then post compulsory (senior secondary)

Senior secondary – basic structure quite similar

3 subjects:

1. Non calculus-based (practical) – more than 50% do this
2. Intermediate (introductory calculus)
3. Advanced (calculus and algebra)

Also vocational level subjects (73 across the country). Yr 11 -12 options commence 2013.

Specialist groups will look at particular States' complexities.

Statistics is in the fundamental level maths.

RR is happy to have more detailed consultation. The National Curriculum Board could be involved in a discussion with ACDS in early Feb.

JR raised the issue of the separation between Science & Maths being a problem.
PS agreed - noted that proficiency standards for numeracy are built in. Numeracy is specifically mentioned as well.

PS gave an outline of the P→10 curriculum:

1. Maths curriculum to be made clearer and more distinct so teachers know what they need to do
2. Curriculum is currently crowded. Intention is to identify the important parts so there are fewer topics, but to have challenging examples within each topic.

JR noted that maths teachers often do not have a lot of experience, and can therefore get too technical.

PS responded that the explicit goals include understanding and proficiency
(PS left the teleconference at ca. 11.05 am)

DG outlined the importance of relationship between Education and Science and the need to address declining student interest. He acknowledged the work ACDS has already done.

Re: K–10:

- The emphasis is on scientific literacy
- Process is emphasised but not at expense of content
 - Science understanding
 - Science enquiry skills
 - Science as a human endeavour
- Desire to push the big ideas. The challenge is to limit those big ideas.

Stage 4 (upper level) – the paper has not dealt with that in detail. Added Env Sci “Science for Living” (or something similar).

RN expressed a concern for geology and asked: “Can we put earth science into Env Sci?”

JW noted the demands of this approach on teachers

DG agreed, but noted that this is to some extent a “chicken and egg” situation

RR: will note the stress on teacher training/learning

DF pointed out that the Deans of Science have firm views on the amount of science that Science teachers should have.

DG noted that context becomes important. The art of teaching is to move from the known to unknown.

It was agreed that in order to advance discussion and enhance cooperation between the various parties that the President of the Deans of Education be contacted to arrange a joint meeting with ACDS and the National Curriculum Board for hopefully the 2nd week in Feb, to be hosted at La Trobe University (Tues February 10 was the preferred date) – **See Action Item 1.**

(DG left the meeting)

12. ACER Research Monograph No 63 - Participation in Science, Mathematics and Technology in Australian Education (attached)

Noted (and that it confirms earlier ACDS reports)

7. ASELL

The group is intending to put an application into ALTC Learning and Teaching Committee (would have gone a couple of weeks ago) for a grant but JR has not seen it.

We committed \$20k. JR suggested we could go to \$50k but there needs to be a wider agenda with more people involved.

Our grant report will be submitted before Christmas but we cannot transfer the remaining funds to the ASELL project.

JR will circulate recommendations of our ALTC report before Christmas – *See Action Item 2.*

JR suggested an Associate Deans L&T Conference regarding these recommendations (implementation etc) and discussions concerning how to add to ASELL initiatives; physics and microbiology for example. Topics for conference: (1) lab science and ASELL project, and (2) the findings & recommendations of the ACDS ALTC project

JW noted that the ASELL people are planning to keep it very focussed – where they have champions

JR pointed out the need to establish “steady state” implementation, e.g how do Universities sign up?

8. Future Interactions with FASTS

JR is attending the FASTS meeting tomorrow (25/11/08) where DG is presenting.

9. Update of ACDS Website

RN reported that the transfer of the ACDS website had been carried out. Monash Faculty of Science IT staff were now maintaining the site. The site has been updated. Subsequent to discussion under Item 5 it was agreed to add a link to National Curriculum Board onto the ACDS website – *See Action Item 3.*

10. Wrap up of AGM

The meeting agreed that the AGM was successful; in particular the after dinner speaker – talking about “big science” – was a great success, and this style of after-dinner talks should be continued.

11. Actions arising from the AGM

11.1 Minutes of AGM → web site

11.2 JR will talk to the President of the Deans of Education

11.3 The AGM endorsed

- support for ASELL
- a clearer statement of role & responsibilities of ADT & L -- For debate at the conference

11.4 FASTS will do an update of our graduate survey. -ACER to do it? This will be suggested to Bradley Smith (ED- FASTS).

12. DEEWR Working Group on HDR Employment in Science and Mathematics

RN attended the steering committee meeting in Canberra on 18 November and he reported that nothing in the report will be a surprise. The Report reinforces lack of engagement between Universities and Industry. Positive are: high employment for graduates (basic degree)

Final stage will be 4 case studies including:

- o CSIRO
- o Private industry – had a lot of trouble finding an industry that has not closed down its R&D

There will **NOT** be any recommendations

RN will circulate final report – *See Action Item 4.*

We could do an occasional paper in relation to this

13. Review of DEST Annual Report

JR tabled a document that he used as his prompt for his presentation.

14. Next meeting of executive

The next meeting of the Executive will be on Monday March 2, 2009.

GB will circulate members to confirm 2009 meeting times – *See Action Item 5.*

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Action Sheet from November 2008 Executive Meeting

Item	Action	Action by:
1	Contact President Deans Education to arrange a joint meeting with ACDS and the National Curriculum Board for 2 nd week in Feb, to be hosted at La Trobe Uni (Tues Feb 10 is the preferred date)	JR / DF
2	Circulate recommendations of our ALTC report before Christmas	JR
3	Add link to National Curriculum Board onto ACDS website	RN
4	Circulate case study and final draft reports of the DEEWR Working Group – IN CONFIDENCE	RN
5	Fix dates and venue for Executive Committee Meetings for 2009	GB

AGENDA

**The Australian Council of Deans of Science
Executive Meeting 2007
2 March, 2009
Room 4.5.501 UTS 10am - 2pm**

- 1. Apologies**
- 2. Minutes**
Minutes of the meeting of Nov 24, 2008 - to be confirmed.
- 3. Business arising (not dealt with elsewhere)**
- 4. Financial Report**
GB to report on ACDS Financial Position
- 5. Executive Director Report**
JR to report
- 6. ACDS Website**
RKN to report
- 7. Response to ACER reports on “Supply, demand and approaches to employment by people with postgraduate qualifications in Science and Mathematics”.**
The draft reports were circulated by RN on 13/1/09
- 8. ACDS conference on teaching and learning**
JR to report
- 9. Science ALTC Pilot Project report 2008**
JR to report
- 10. ACDS Response to National Curriculum Board**
JR to report
- 11. Science Meets Parliament**
Science meets Parliament 2009 will take place on the 17th and 18th of March, 2009
- 12. Date for 2009 AGM**
Margaret Sedgley (UNE) has requested that we avoid 30 Sep – 2 Oct (DASSH AGM) and 9-10 Oct (UNE assessment boards).

Note: JR has advised DASSH that we will invite them to our AGM, and that we would be pleased to be invited to their AGM

13. AGM papers

The minutes of the 2008 AGM, and papers presented at the AGM (zip file), are attached – for comment/approval

14. Donations to charities by ACDS

For discussion

15. 2009 Meetings of the Executive

16. Other Business

MINUTES

**The Australian Council of Deans of Science
Executive Meeting 2008
2 March, 2009
UTS 10am - 2pm**

4. Present & Apologies

- Present:* Rob Norris (Chair, Monash) (RKN), John Rice (JR), Gillian Bushell (Griffith) (GB), Russell Crawford (SwinU), Warren Lawrence (Flinders), David Day (U Syd)
- Apologies:* Will Price (Wollongong), Jo Ward (Curtin)

5. Minutes

Minutes of the meeting held Nov 24, 2008 were accepted.

6. Business arising (not dealt with elsewhere)

Nil

4. Financial Report

GB reported on the ACDS Financial Position; the report was accepted

13. Executive Director Report

The Executive Director's report is attached.

ACDS is now the cluster representative on FASTS; JR will attend if RKN cannot.

14. ACDS Website

RKN reported that the website was being updated in a timely manner.

15. Response to ACER reports on "Supply, demand and approaches to employment by people with postgraduate qualifications in Science and Mathematics".

The draft reports were circulated by RN on 13/1/09

The final report is not yet released; it will not have any recommendations.

16. ACDS conference on teaching and learning

JR reported:

The ADL&T Conference will be held in Sydney on 21-22 April, 2009.

The agenda will comprise:

- (a) The Role and Responsibilities of ADT&L's
- (b) Making ACELL into ASELL - a national quality and development system for lab classes
- (c) The recommendations of the ALTC Report on first year laboratories

17. Science ALTC Pilot Project report 2008

JR reported that the report is not yet official (needs to be endorsed by ALTC).

Some key outcomes were:

- o ACDS needs to develop a statement on the quality of learning from lab classes
- o All 1st year lab classes should provide learning objectives for the course
- o There needs to be an explicit statement about coherence between lab and theory
- o Recognition for prior learning is important
- o There needs to be a clear management structure for demonstrators

The Executive congratulated JR and the co-authors on their progress with this project and the report.

18. ACDS Response to National Curriculum Board

JR reported that the ACDS response to the NCB included:

- o The curriculum should provide science for the literate citizen, but some students need more
- o Content vs process – Process is emphasised, but specific content needs to be included
- o Disciplines are important
- o Teachers – training is vital
- o How would they now if this new curriculum is successful?
- o ACDS should be kept involved particularly with respect to training of teachers (pre-service and in-service professional development)

19. Science Meets Parliament

RKN is attending

20. Date for 2009 AGM

It was decided that the AGM will be held on 13-14 October, 2009, in Sydney

21. AGM papers

The minutes of the 2008 AGM, and papers presented at the AGM, were approved. The will be uploaded to the ACDS web site

22. Donations to charities by ACDS

In the context of interest and concern among the Executive to consider donations to the Victorian Bushfire Appeal, it was noted that the ACDS constitution does not permit donations, given the objectives of the Council. It was also noted that several Executive members intended to make personal donations.

23. 2009 Meetings of the Executive

GB to circulate.

24. Other Business

- (a) GB to write to UTS Faculty to thanks them for the use of their facilities, and send an appreciation gift to Carol Crane
- (b) Copies of ACDS reports (2) are still at UTS with Carol Crane. Will distribute at ADL&T conference and at AGM

- (c) David Finlay retires as Dean at end of June and currently represents ACDS on the Science and Engineering Challenge Council. The next meeting of the Council is in August. Replacement required.

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Action Sheet from March 2009 Executive Meeting

Item	Action	Action by:
1	Outcomes from ADL&T Conference	JR
2	Suggestions for AGM after dinner speaker, and conference speakers in general	ALL
3	Circulate Executive meeting schedule for 2009	GB
4	Upload 2008 AGM details to website	RKN
5	Write to UTS with thanks, and organise gift for Carol Crane	GB
6	Nominate a replacement representative for ACDS on the Science and Engineering Challenge Council	RKN
7	Copies of ACDS reports (2) (at UTS) to be distributed at AGM (Carol Crane to be advised – GB).	JR

AGENDA

**The Australian Council of Deans of Science
Executive Meeting 2007
11 May, 2009
Room 4.5.501 UTS 10am - 2pm**

- 1. Apologies**
- 2. Minutes**
Minutes of the meeting of March 2, 2009 - to be confirmed.
- 3. Business arising (not dealt with elsewhere)**
- 4. Financial Report**
GB to report on ACDS Financial Position – see attached
- 5. Executive Director Report**
JR to report on the ADT&L conference and the National Curriculum
- 6. ASELL Project**
JR to Report – see attached letter to ALTC
- 7. AGM**
Speakers/Topics/After dinner speaker – for discussion
- 8. ACDS Website**
RKN to report
- 9. Science Meets Parliament**
RKN to verbally report
- 10. DASSH invitation**
The DASSH President and Board meet in Melbourne on 18 May and are looking to invite Melbourne based members and colleagues to informal drinks and nibbles, 5.30-7pm on the same day.
The DASSH Board will have met during the day along with the newly formed Steering Committee for the DASSH Discipline Support Strategy (DSS). The Strategy is being funded by the Australian Learning and Teaching Council as part of its Learning Networks.
This is an opportunity for members and friends to meet informally and have a brief update on DASSH activities.
- 11. 2009 Meetings of the Executive**
- 12. Other Business**

13. Closure of Meeting

Running Record of Payment by Cheque

Date	Payee	Amount	Cheque No	Brief Description
2/03/2009	John Rice	\$5,000.00	235	Honorarium
4/03/2009		\$133.45	236	Lunch for Exec meeting Mar 2
11/03/2009	John Rice	\$156.00	237	Reimburse John Rice airfare to Melbourne re NCB's consultation workshop for science
17/03/2009	Marque Hotel	\$1,100.00	238	Deposit to Marque Hotel Sydney - for ADT&L conference, April
30/04/2009	Simon Pyke	\$312.40	239	Reimbursement for travel to the AGM as part of the ADT&L delegation and a teleconference

MINUTES

**The Australian Council of Deans of Science
Executive Meeting 2008
11 May, 2009
UTS 10am - 2pm**

7. Present & Apologies

- Present:* Rob Norris (Chair, Monash) (RKN), John Rice (JR), Gillian Bushell (Griffith) (GB), Russell Crawford (SwinU) (RC), Jo Ward (Curtin), Warren Lawrence (Flinders), David Day (U Syd), Will Price (Wollongong)
- Apologies:* David Finlay (La Trobe)

The meeting expressed its sincere thanks to Carol Crane (UTS) for her assistance with the organisation of the Executive meetings, and to Prof Bruce Milthorpe (UTS) for allowing the Executive the use of the meeting room, and Carol's time.

8. Minutes

Minutes of the meeting held Mar 2, 2009 were accepted.

9. Business arising (not dealt with elsewhere)

Nil

5. Financial Report

GB reported on the ACDS Financial Position (\$170,310.60 in the cash management account, \$7,033.91 in the cheque account); the report was noted and the expenditure (noted below) was approved.

25. Executive Director Report

The Executive Director's report was circulated.

National Curriculum Board (NCB)

ACDS needs to provide advice to the NCB re desired content at the various stages of learning – JR needs the names of knowledgeable people from each discipline (Maths/Physics/Chemistry/Biology/ Earth Science).

The Advisory Panel for the NCB will meet 6 times.

The NCB will then be subsumed by the Australian Curriculum Assessment and Reporting Authority (ACARA); there will also need to be a teacher accreditation board.

In service teacher training needs to involve both Science and Education Faculties.

It was agreed that the ACDS should approach Minister Gillard re the establishment of scholarships for 3rd year Maths/Physics students for study of a Masters in Science Education.

ADT&L Conference

The list of Associate Deans is on the ACDS website.

Many ADT&L have PDs but some do not.

It was agreed that the ACDS view is that an Associate Dean (T&L) should be at minimum a 50% position.

ALTC has a project on Associate Deans (in general)

26. ASELL Project

After discussion it was decided to advise all Deans that ACDS is supporting this project, and ask that each State designate one person to organise local workshops for that State (JR).

JW and WL will work to develop a steady-state model for ASELL

27. AGM

Sessions/for discussion:

- ADT&L roles – minimum set of responsibilities (including ALTC pre-proposal from Emma Gyris
- National curriculum
- Marketing Science (JR)
- Steady-state model for ASELL

Steve Simpson has accepted an invitation to be the after-dinner speaker

28. ACDS Website

ADT&L list has been added

29. Science Meets Parliament

Interest in this event is declining

30. DASSH invitation

Russell Crawford will attend

31. 2009 Meetings of the Executive

August 3

September 14

(AGM : October 13-14)

32. Other Business

For August meeting – discussion re Executive members for 2010

Running Record of Payment by Cheque

Date	Payee	Amount	Cheque No	Brief Description
2/03/2009	John Rice	\$5,000.00	235	Honorarium
4/03/2009		\$133.45	236	Lunch for Exec meeting Mar 2
11/03/2009	John Rice	\$156.00	237	Reimburse John Rice airfare to Melbourne re NCB's consultation workshop for science
17/03/2009	Marque Hotel	\$1,100.00	238	Deposit to Marque Hotel Sydney - for ADT&L conference, April
30/04/2009	Simon Pyke	\$312.40	239	Reimbursement for travel to the AGM as part of the ADT&L delegation and a teleconference

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Action Sheet from May 2009 Executive Meeting

Action	Action by:
Identify discipline experts to provide advice to JR	ALL
Develop a steady-state model for ASELL operations	JW/WL
Report on how ASELL might interface with NCB	JR
Letter to Deans and ADT&L re ASELL	JR
ACDS letter of appreciation to Bruce Milthorpe for use of UTS room	RKN
Report on DASSH meeting	RC

AGENDA

The Australian Council of Deans of Science

Executive Meeting 3 August, 2009

Room 4.5.501 UTS 10am - 2pm

1. **Apologies**
2. **Minutes**
Minutes of the meeting of May 11, 2009 - to be confirmed.

3. **Actions Arising from May 2009 Executive Meeting**

Item	Action	Action by:
1	Identify discipline experts to provide advice to JR re National Science Curriculum	ALL
2	Develop a steady-state model for ASELL operations	JW/WL
3	Report on how ASELL might interface with NCB	JR
4	Letter to Deans and ADT&L re ASELL	JR
5	ACDS letter of appreciation to Bruce Milthorpe for use of UTS room and Carol Crane's time.	RKN
6	ACDS letter of appreciation to Carol Crane for providing support of Executive meetings	RKN

4. **Business arising (not dealt with elsewhere)**
5. **Financial Report**
GB to report on ACDS Financial Position (attached)

6. **Executive Director Report**

The Report includes

- FASTS-ACDS joint workshop on *The Changing Nature of Scientific Work*
- FASTS Budget workshop
- FASTS Board
- National Science Curriculum Advisory Panel
- ALTC Report

7. **AGM**
Mercure (Sydney) is booked
Speakers/Topics/Program – (Attachment 1 - paper for discussion)
8. **Proposal for an Ombudsman/office for scientific integrity** (Attachment 2)
9. **Potential Science Story for Campus Review** (Attachment 3)
10. **Science Hub Australia**
Invitation to contribute (attached). Should ACDS take this opportunity?
11. **Possible ACDS Interaction with Safe Climate Australia**
Rob Norris to report on recent meeting launching Safe Climate Australia by Al Gore.
12. **Changes to Funding Arrangements for Science Outreach Organisations**
Rob Norris will report on a meeting held in Canberra on July 16.
13. **ACDS Website**
RKN to report
14. **2010 ACDS Executive**
Current members to indicate if they will be renominating/continuing,
15. **2009 Meetings of the Executive**
16. **Other Business**
17. **Closure of Meeting**

Running Record of Payment by Cheque

Date	Amount	Chq No	Reason
12/05/2009	\$60.00	240	Flowers for Carol Crane - re assistance with ADT&L conference
15/05/2009	\$98.70	241	Lunch - exec meeting 11/5/09
9/06/2009	\$410.01	242	Reimburse Simon Pyke - travel to ACDS/ASELL workshop
11/06/2009	\$5,000.00	243	John Rice - honorarium
1/07/2009	\$4,095.00	244	Deposit for AGM - to Mercure Hotel Sydney

Attachment 1

2009 AGM program

Discussion paper

John Rice, July 20th, 2009

For some time the role of the Dean has been changing into one of middle management. Rather than exercising devolved responsibility for science teaching and research Deans increasingly provide advice to a senior executive. Responding or conforming to policies and initiatives that originate with the executive is the predominant situation for many faculties. This overlays the traditional role of science faculties where already they defer to departments in relations to teaching and research matters, and assume a co-ordinating role.

I propose that the AGM be devoted to addressing this issue, not by debating it directly in terms of principles, but in terms of dealing with the following issues that together constitute a watershed for the development and management of science in universities.

- The implications of the 2009 budget ; a huge investment in research, but in return for a stronger and more highly collaborative innovation system that faculties are not organized to deliver on. This will doubtless form a background to ‘compact’ negotiations, which will predispose DVC’s research to set agendas for science faculties.
- The mainstreaming of ASELL; how to draw staff and university processes into a national ‘peer review’ system for laboratory teaching. This provides a much needed paradigm for staff development of teachers and subject developers that is science specific rather than generic. It could have a substantial influence on University level policy in these areas. An articulated national approach could win substantial federal government support.
- A national policy on entry level laboratory programmes; this entails agreeing a philosophy and vision for such programs credible enough to support reinvestment in them. The government review of discipline based costs, announced in the 2009 budget, makes this imperative.
- A national policy on demonstrator training; or more importantly, on the level and structure of human resource to be delivered into entry level laboratory classes. This too is imperative as a basis for submissions in relation to discipline costs.
- A National Science Outreach Program. Develop a well articulated vacation placement scheme of undergraduate/honours students into NRA labs, along the lines of US NSF programs Awardees speak to schools and faculty about their experience. Lobby for Federal Support for the program.

The format of the AGM could therefore be an introductory address highlighting the specific issues that are proposed to be discussed, and setting them in the governance and management context described above. This would be followed by sessions of some form that came to grips with the issues.

I suggest that Bradley Smith, outgoing Executive Director of FASTS, be asked to speak about the 2009 budget along the lines of the FASTS Workshops that he conducted, and also on the Workforce Study that ACDS and FASTS are undertaking.

Some Notes

Implications of the 2009 budget for Science

These are substantial. It is an exceptional budget for science and innovation.

- 2009/10 expenditure will be \$8.6 b, a 25% increase on expenditure in 2008/9, the highest annual increase since records began.
- New funding for higher education, science and innovation is worth an additional \$5.7 b over four
- Science infrastructure spending of \$901m involves declared priority areas notably in marine and climate science, space science and astronomy and frontier industries including nano- and bio-technologies.
- key public sector research agencies - CSIRO, ANSTO, Australian Institute of Marine Science and the Bureau of Meteorology - have all received significant infrastructure investment.

While much has been given, much will be expected in return that science faculties are not in a position to deliver. This will impact on the evolving relationship between faculties and senior executives.

Workforce Study

'Science' jobs have changed dramatically in the face of the IT revolution and globalisation. Computer systems, for example, do much of the routine technical work that trained technicians used to. Globalisation has led to much stronger divisions of labour, particularly in respect of where and how R&D is carried out. If you think about how the role of the shop assistant or tradesperson has changed in the face of computers and mobile phones, then the role of the scientist in the workforce has probably changed as much.

It is worth exploring the question of what role technically trained people now play in a developed economy. How have the required skill sets and roles changed over time? Do developed economies need fewer science trained people but in higher level and more specialised areas? How has instrumentation changed the productivity of science? How do employers now identify and describe the kind of science background that they require of their recruits, and the roles that they have in mind for them? How has this changed over time? Or to pose the issue in different language – how has the 'business model(s)' of being a working scientist or scientifically trained changed in the past few decades?

Attachment 2

Proposal for an Ombudsman or an Office for Scientific Integrity

From: David Vaux
Sent: Tuesday, 21 July 2009 11:57 AM
To: David Finlay
Subject: Ombudsman/office for scientific integrity

Hi David,

I believe Australia needs to have an Ombudsman or an Office for Scientific Integrity.

Clifford Picton suggested I contact you to see if the Australian Council of Deans of Science could help make this happen, and provide advice to ensure the optimal model is adopted.

Could you please let me know if you think an ombudsman/ORI would be worthwhile, and if & how the ACDS might be enlisted?

I'll briefly outline my arguments for why we need an ombudsman/ORI, and propose a model:

An ombudsman/ORI would:

- *Collect data on the incidence and character of scientific misconduct.
- *Provide advice to institutions, whistleblowers, accused persons
- *Act as an avenue of appeal
- *Promote institutional compliance with the Australian Code of Research Conduct
- *Maintain a list of "designated persons" at institutions carrying out research.
- *Receive expressions of concern from Australia or overseas.
- *Modify and improve the Australian Code of Research Conduct
- *Facilitate publication of corrections in the literature, whether their cause was deliberate or accidental
- *Provide a disincentive for scientific misconduct
- *Reduce the likelihood of cases appearing in the popular press or going to court.

The ombudsman/ORI would cover all research that is published, including that funded by the NHMRC, ARC, charities, CSIRO, universities, industry.

It could receive expressions of concern from within Australia or from overseas.

It would not require routine filling out of forms, and there would be no ongoing "policing" or "inspecting"; rather activity would be triggered by someone expressing a concern.

It would register notification of cases from designated persons, pass concerns to designated persons, and receive reports of outcomes.

Most cases would be investigated by the host institution, but the ombudsman/ORI would establish ad hoc investigations if requested by the institution, the whistleblower or the accused.

The ombudsman/ORI would make findings and recommendations, including withdrawal of grant funding from an individual or institution, but it would not have the power to terminate employment.

The ombudsman/ORI would be funded by Kim Carr, Department of Innovation etc.

It would be governed by a board with representation from AAS, ATSE, Humanities & Social Science, CSIRO, NHMRC, ARC.

My impression is that the great majority of researchers would be in favour of establishment of an ombudsman/ORI. However, I detect some resistance, e.g. from the heads of the NHMRC and ARC, and some representatives of Universities Australia. Kim Carr is supportive, I don't know Nicola Roxon's opinion (but there is potential for departmental rivalries), the Academy Of Science has a bit too much inertia, ICSU (the International Council for Science) recommends establishment of ombudsmen/ORIs in all countries.

I look forward to hearing any sage advice from you or ACDS.

Cheers,

David

Attachment 3

Potential Science Story for Campus Review

Dear Rob

I'm thinking ahead to the next Faculty Focus feature on science that I have to write, for our issue of 15 September. I came across the article (Volume 23 | Issue 7 | Page 63) on *The Scientist's* website (www.the-scientist.com), and wondered if there might be an Australia-centric article waiting to be written. Is there a comparable Australian program or programs? If so, would there be value in writing about how to make internships work more smoothly? And if there is nothing comparable in Australia, perhaps it's worth writing about why not?

I'd value your advice in due course.

Thanks and regards

Jeremy

JEREMY GILLING
Journalist
Campus Review

In relation to the above, JR notes:

The Primary Industry Centre for Science Education (PICSE), based in Tasmania but operating, at least to some extent in Queensland, northern NSW, SA and WA, appears to have a well organised system of industry placements for secondary students and teachers. Its website is <http://www.picse.org>

MINUTES

**The Australian Council of Deans of Science
Executive Meeting 2009
3 August, 2009
UTS 10am - 2pm**

10. Present & Apologies

Present: Rob Norris (Chair, Monash) (RKN), John Rice (JR), Gillian Bushell (Griffith) (GB), Jo Ward (Curtin), Warren Lawrence (Flinders), David Day (U Syd), David Finlay (La Trobe)

Apologies: Will Price (Wollongong), Russell Crawford (SwinU)

11. Minutes

The minutes of the meeting of May 11, 2009 were confirmed.

12. Actions Arising from May, 2009 Executive Meeting

Item	Action	Status
1	Identify discipline experts to provide advice to JR re National Science Curriculum	See agenda item 6
2	Develop a steady-state model for ASELL operations	See agenda item 6
3	Report on how ASELL might interface with NCB	See agenda item 6
4	Letter to Deans and ADT&L re ASELL	On hold
5	ACDS letter of appreciation to Bruce Milthorpe for use of UTS room and Carol Crane's time.	Drafts were circulated to the Executive for comment; RKN to finalise and send
6	ACDS letter of appreciation to Carol Crane for providing support for Executive meetings	

13. Business arising (not dealt with elsewhere)

Nil

14. Financial Report

GB reported on the ACDS Financial Position; the report was noted and the expenditure (noted in the agenda) was approved.

Members noted that ACDS supported JW and WL to attend the ASELL workshop.

Executive determined that Annual Subscriptions should remain at current levels. RKN agreed to modify the paperwork used last year for annual subscriptions and to distribute invoices and receive subscriptions (See Other Business item).

15. Executive Director Report

The Executive Director's report was circulated with the agenda.

ASELL workshop:

WL and JW attended the ASELL workshop and reported that:

- The current process is time-intensive
- It is not clear whether the process provides attendees with the appropriate tools for lab improvement and dissemination of those improvements
- A small number of institutions to trial ASELL labs; surveys to provide feedback

National Science Curriculum:

JR gave a confidential verbal report

JR will send yr11/12 curricula (with clear instructions) to Executive. Executive to circulate in confidence for feedback re how this should guide K-10 syllabus.

FASTS:

- Invite Bradley Smith to the AGM to talk about Federal budget (RKN)
- Report from FASTS Board Workforce study – JR will circulate outcomes

ALTC report:

- has been accepted and is on ALTC website
- 200 copies have been mailed out

16. AGM

Topics

ASELL:

- Vision statement re ASELL (JR)
- ASELL lab experiences/demonstrator training/peer review system

Research funding and the Federal budget:

- Implications of the Federal budget (Bradley Smith)
- Research funding (David Day)

ALTC report

Outreach

A/D T&L role

Detailed program to be finalised at next Executive meeting (Sept 14)

17. Proposal for an Ombudsman/office for scientific integrity (Attachment 2)

ACDS membership would not have a uniform view on this matter.

Really part of a wider agenda better handles by FASTS

18. Potential Science Story for Campus Review (Attachment 3)

JR/RKN will respond to Jeremy Gillings

ACDS not aware of any schemes similar to the NSF scheme.

Encourage Jeremy to carry out some research

- 19. Science Hub Australia**
RKN will circulate information to members.
- 20. Possible ACDS Interaction with Safe Climate Australia**
Rob Norris reported on recent meeting launching Safe Climate Australia by Al Gore. Executive determined it was not appropriate for ACDS to be a sponsor.
- 21. Changes to Funding Arrangements for Science Outreach Organisations**
Rob Norris reported on a meeting held in Canberra on July 16. Significant changes in funding for science outreach projects is forecast for mid 2011 (for example, the Olympiads will move from DIISR to DEEWR). Under review are the Eureka prizes, Science Week, PM and Clunies Ross prizes, etc. RKN noted that an informal "Outreach Working Group" had been formed and that in due course the group (and possibly ACDS separately) should write to the Minister(s) involved seeking clarification and support.
- 22. ACDS Website**
RKN will write to members to remind them to advise changes to contact details.
- 23. 2010 ACDS Executive**
GB will contact several members to ascertain interest in becoming a member of the Executive.
- 24. 2009 Meetings of the Executive**
Next meeting is September 14
- 25. Other Business**
Invoices for membership subscriptions to be distributed (RKN)

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Action Sheet from August 2009 Executive Meeting

Item	Action	Action by:
1	JW/WL to write to RKN outlining outcomes of the ASELL workshop; RKN to liaise with ASELL, then communicate to Deans	JW/WL RKN
2	Vision statement re ASELL at AGM	JR
3	JR will send yr11/12 curricula (with clear instructions) to Executive. Executive to circulate <u>in confidence</u> for feedback	JR All
4	Contact Bradley Smith to invite him to AGM	RKN
5	Circulate outcomes of FASTS workforce study	JR
6	Respond to Jeremy Gillings	JR/RKN
7	Circulate information re Science Hub Australia to all members	RKN
8	Invoices for membership subscriptions to be distributed	RKN
9	Remind members to advise any changes to contact details	RKN
10	Contact re possible interest in Executive membership	GB

A G E N D A

The Australian Council of Deans of Science

Executive Meeting 14 September, 2009

Room 4.5.501 UTS 10am - 2pm

- 1. Apologies**
- 2. Minutes**
Minutes of the meeting of August 3, 2009 - to be confirmed.
- 3. Actions Arising from August 2009 Executive Meeting**

Item	Action	Action by:
1	JW/WL to write to RKN outlining outcomes of the ASELL workshop; RKN to liaise with ASELL, then communicate to Deans	JW/WL RKN
2	Vision statement re ASELL at AGM	JR
3	JR will send yr11/12 curricula (with clear instructions) to Executive. Executive to circulate <u>in confidence</u> for feedback	JR All
4	Write to Bradley Smith to invite him to AGM	RKN
5	Circulate outcomes of FASTS workforce study	JR
6	Respond to Jeremy Gillings	JR/RKN
7	Circulate information re Science Hub Australia to all members	RKN
8	Invoices for membership subscriptions to be distributed	RKN
9	Remind members to advise any changes to contact details	RKN
10	Contact re possible interest in Executive membership	GB

- 4. Business arising (not dealt with elsewhere)**
- 5. Financial Report**
GB to report on ACDS Financial Position.
- 6. Executive Director Report**
- 7. Proposed 2009-2010 Executive**
GB to report

8. AGM

Program details to be decided (Program outline attached)

Proposed Topics:

ASELL:

- Vision statement re ASELL (JR)
- ASELL lab experiences/demonstrator training/peer review system

Research funding and the Federal budget:

- Implications of the Federal budget and the ACDS/FASTS Workforce Study (Bradley Smith)
- Research funding – implications for Science Faculties (David Day)

ALTC report

Outreach

A/D T&L role

(JR discussion paper re the AGM is attached)

9. ACDS Website

RKN to report

10. Other Business

11. Closure of Meeting

Running Record of Payment by Cheque

Date	Amount	Chq No	Description
4/09/2009	\$5,000.00	245	John Rice - Honorarium

MINUTES

**The Australian Council of Deans of Science
Executive Meeting 2009
14 September, 2009
UTS 10am - 2pm**

26. Present & Apologies

Present: Rob Norris (Chair, Monash) (RKN), John Rice (JR), Gillian Bushell (Griffith) (GB), Jo Ward (Curtin) (JW), Warren Lawrence (Flinders) (WL), Will Price (Wollongong) (WP), David Finlay (La Trobe) (DF).

Apologies: David Day (USyd), Russell Crawford (SwinU)

27. Minutes

The minutes of the meeting of August 3, 2009 were confirmed.

28. Actions Arising from August, 2009 Executive Meeting

Item	Action	Status
1	JW/WL to write to RKN outlining outcomes of the ASELL workshop; RKN to liaise with ASELL, then communicate to Deans	Completed
2	Vision statement re ASELL at AGM	AGM
3	JR will send yr11/12 curricula (with clear instructions) to Executive. Executive to circulate <u>in confidence</u> for feedback	Completed
4	Write to Bradley Smith to invite him to AGM	Completed
5	Circulate outcomes of FASTS workforce study	Completed
6	Respond to Jeremy Gillings	Decided against
7	Circulate information re Science Hub Australia to all members	Completed
8	Invoices for membership subscriptions to be distributed	Completed
9	Remind members to advise any changes to contact details	Completed
10	Contact re possible interest in Executive membership	Ongoing

29. Business arising (not dealt with elsewhere)

Nil

30. Financial Report

GB reported that the financial status is healthy, annual subscriptions are yet to arrive. The payment made by the single cheque listed in the agenda was confirmed.

31. Executive Director Report

The National Curriculum

ACDS has considerable concern about the direction this is taking for Science – this is a radical reform agenda with insufficient time and resources being devoted to it. There is a disconnect between K-10 and years 11/12. The writers do not see the whole picture and the capability to write a coherent, credible curriculum is lacking.

FASTS

- The new Executive Director commences in November
- The FASTS/ACDS Workforce study progresses but APESMA has launched a separate study with funding from DEEWA

Relative funding model

The major opportunities and threats in relation to this to be discussed at the AGM

32. 2010 ACDS Executive

GB reported on interest expressed, and agreed to follow up the two further possible nominations for the Executive.

33. AGM

A draft program was determined

- Contact details for the Mercure to be distributed with the program
- Members to organise own accommodation, advising the hotel that it is with the ACDS meeting (Reference Code #ACDS1210)

34. ACDS Website

RKN reported that this is working well and had been recently updated in preparation for sending out the Annual Subscription Notices and the details for the AGM.

35. Other Business

- ASELL workshop report (JW/WL)
This was tabled and will be circulated with the minutes.
- *An enumerated history of the PhD in Australia* by Ian Dobson
JR raised the issue of supporting Ian Dobson's latest study (on the PhD – title above). Should ACDS wish to contribute funds towards this? No decision was taken.
- Involvement/support of ANZAAS
RKN tabled an email from Dr Mike Murray, ANZAAS, Victoria (see Appendix 1). The general consensus was that this was a return to the past (ACDS arose from Meetings of deans held seriatim with ANZAAS) and ANZAAS although staging a minor revival (at least in Victoria) now represented one of many organisations attempting to raise the interest of school-age youth in science generally (Science Communicators, Science Youth Forum, In2science, Siemens Summer Experience etc were/are examples). The Executive agreed that ACDS support of ANZAAS should not be pursued

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Action Sheet from September 2009 Executive Meeting

Item	Action	Action by:
1	Draft AGM program to be sent to RKN/JR	GB
2	Introductory statement to AGM Program	JR
3	Program to be finalised/distributed <ul style="list-style-type: none"> • Contact details for the Mercure to be distributed with the program. • Members to organise own accommodation, advising the hotel that it is with the ACDS meeting (Reference Code #ACDS1210). • Registration form for members attending the AGM to be prepared and distributed. 	RKN
4	Executive members for 2009-10 (continued)	GB
5	ASELL workshop report from JW/WL to be distributed with minutes	GB

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Appendix 1:

Email re ANZAAS Membership from Mike Murray to Rob Norris:

Many thanks Rob,

As I mentioned in my last email ANZAAS-Vic presents one evening talk each month by a locally based distinguished scientist.

Last month for the first time we included in the evening's programme a short preliminary talk given by a University of Melbourne research student. The format proved to be very successful. This month an RMIT research student will present. We still need to line up a research student for October and I wondered if you could recommend one of yours. (The choice of science discipline we leave to you) The date of the meeting is Wednesday 21 October. Start time is 6.30pm, and the venue is the Gene Technology Access Centre (GTAC) at University High School in Parkville. (Incidentally the main presenter that evening will be Jamie Rossjohn) The opportunity gives the student a chance to 'showcase' his/her work to the wider world and pitch the talk for a lay audience. Next year we shall guarantee each Victorian University taking part in the programme at least one of these speaking slots and there will be extra slots to fill.

In return we ask that each Science Faculty subscribes to corporate membership of ANZAAS at an annual subscription of \$135 (3 X individual membership annual subscription). This also enables the Faculty to nominate three staff members as ANZAAS representatives with virtually identical rights to ordinary members. Also, as mentioned below, ANZAAS will also give you the facility to place advertisements for your public science events on our ANZAAS website (Victorian webpages). In addition the Monash University logo will, at your request, be included on our Corporate Members page.

I shall write to all Victorian Deans of Science with the same proposition.

I hope that Monash University can lead the way in the introduction of this new venture.

Please let me know if you have any questions.

Mike Murray