Introduction

UTS applauds the Government’s continuing commitment to the implementation of the Bradley Review recommendations. The increased funding already being delivered and the Government’s commitment to an appropriate indexation model will propel the sector’s pursuit of the Government’s higher education goals.

UTS recognises the current fiscal demands on the Government. In this context, we encourages the Government to set out its medium to longer term aspirations for higher education funding even if they will need to be implemented over time as budget stringencies allow. As recommended by the Bradley Review, UTS supports a 10% increase in base funding in the shorter term as a major step forward in the Government’s continuing commitment to the reinvigoration of Australian higher education.

UTS, along with other Australian universities, has committed itself to the Government’s vision for Australian higher education, engaging with higher participation levels, equity outcomes and the pursuit of higher quality and innovation in the sector, with appropriate regulatory oversight. UTS welcomes the Higher Education Base Funding Review as a critical element of the Government’s reform program and appreciates the opportunity to contribute to the Review.

The Review’s main focus must be on the level of resourcing per student. Government funding over successive governments has not kept pace with the growth in student contributions, nor has it kept pace with government higher education funding internationally. The return to the nation from the education of its citizens places an onus on the Government to ensure that Australia competes equally internationally in terms of resourcing in order to be competitive in education outcomes.

UTS agrees with the Bradley Review recommendation that higher education funding levels be internationally competitive and appropriate for the sector. Australia’s higher education outcomes continue to diverge from its international competitors. This divergence is putting the quality of Australia’s higher education system at risk. The impacts on the economy and its international competitiveness will lag by a number of years but will inevitably compromise the performance of the Australian economy in the international context.

Indexation must be aligned with the costs relevant to the delivery of learning and teaching. In this respect, the Base Funding Review Background paper uses CPI as the indexation factor to assess real changes in funding. This is misleading. It underestimates the cost of staff remuneration and the revolution (and cost) of information technology to equip our students
for their careers. Universities have had to increase salaries in excess of CPI in order to remain nationally and internationally competitive in a severely tightening market for academic resources.

Universities Australia has assessed real funding from 1989 to 2010 using the index - a combination of professional and scientific salaries and CPI - adopted by the Government on the recommendation of the Bradley Review. Figure 1 shows that the current real level of funding per student is lower than 1989 and significantly lower than the peak of the 1990s.

Figure 1: Base Funding per Student 1989-2010 (1989 dollars)

UTS recommends that:

1. The trend of funding be assessed using the Bradley Review indexation formula: 90% of the Labour Price Index (Professional) plus the Consumer Price index with weightings of 75% and 25% respectively.

In addition to specific comments and recommendations below, UTS endorses the recommendations of the Australian Technology Network detailed in its submission.

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Comments on Specific Questions

Q1.1 Government investment in higher education has been justified in terms of delivering benefits to the economy, benefits to society and equity of access for students from all socioeconomic backgrounds. Should these principles continue to be applied, and if so how should they be used to determine the appropriate level of government subsidy for the cost of universities’ learning and teaching activities?

Q1.2 What principles should determine the appropriate balance of resources contributed by:

- Government;
- students; and
- other sources

towards the cost of undergraduates and postgraduate education?

Q1.3 What other principles, if any, should influence the level and distribution of government subsidies for tuition costs in higher education?

The justification for Government investment continues to apply. The current benefits from higher education will become even more relevant as Australia strives to remain competitive in a globalised economy. The rest of the world is investing to a much greater extent than Australia in knowledge creation and innovation. We need to maximise our human capital for our industries to keep them internationally competitive, and to promote a civil society.

There are three key principles that should be adopted as part of this review:

1. Australia should aim to have a world class University system.

2. In order to support this system the resourcing per student (the combination of government contribution plus tuition fee) must be close to our competitor countries.

3. The balance of resources contributed by government should average at least 50%, the top marginal tax rate and the rate at which the government will recover its investment.

Australian universities receive significantly less than public universities in comparator countries. Figure 1 shows comparisons of income per student (the sum of government investment plus tuition fee) received by Australian universities versus that received by public universities in California and Canada in 2008 (converted into common dollars using Purchasing Power Parity). In all cases, these figures represent funding for teaching and learning activities and do not include funding for research and other activities (in which case the differentials would be even greater).
Australian universities receive only 40% of the per student funding for teaching and learning received by the University of California, 60% received by the Canadian universities, and only 72% of even the second-tier California system. How is a world-class university system possible with this level of funding?

This is the benchmark statistic on which the Review should focus. Australia is in a global competition for staff. To attract and retain a world class workforce we need to offer salaries, workloads, research infrastructure and opportunities comparable with our competitor countries and their university systems. Currently, 47% of Australia’s university staff were born overseas. This proportion will need to increase if we are to fulfil the government’s participation agenda, especially given the internationally low pipeline of postgraduate students in Australia. This will not be possible without equivalent resourcing.

**UTS recommends that:**

2. The main focus of the Higher Education Base Funding Review must be the level of resourcing per student. This is the benchmark statistic.

3. Implementation of the Bradley Review recommendation of a 10% increase in base funding.

4. Three principles be adopted as part of the Review:

   (i) Australia should aim to have a world class University system.

   (ii) In order to support this system the resourcing per student (the combination of government contribution plus tuition fee) must be close to our competitor countries.
Q2.1 What are the best international measures of course quality that would provide appropriate benchmarks to inform judgements about the appropriate level of base funding for Australian universities?

Q2.2 What are the best international measures of student engagement that would provide appropriate benchmarks to inform judgements about the appropriate level of base funding for Australian universities?

In the absence of direct measures of quality learning outcomes, the Australian higher education system relies on two proxy measures: the Course Experience Questionnaire (CEQ) and the Australasian Survey of Student Experience (AUSSE). The development of the CEQ, which all Australian graduates are invited to complete shortly after completion of their undergraduate degree, was underpinned by research on student learning (Ramsden, 1991 and others). This research demonstrated associations between inputs to learning (course context) and students’ perceptions of the learning context. The latter in turn has been demonstrated to influence students’ approaches to learning (intention to reproduce information versus intention to transform and understand), which in turn has a strong influence on the quantity and quality of learning outcomes. Thus the CEQ has been designed to measure students’ perceptions of the learning context, perceptions that have been demonstrated to be associated with the quality of learning outcomes.

The appropriate measures of course quality are those being used in other countries, allowing us an international benchmark.

The UK for example, adapted the CEQ and has been administering the National Student Survey (NSS) for the past five years. Since a number of the questions are almost identical, comparisons can be made.

A second area of international comparison is a survey instrument developed in the USA, underpinned by a different theoretical model. Underpinning the development of this instrument was a set of seven principles of good practice in undergraduate education (Chickering & Gamson, 1987). The basic premise is that “the time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development” (Kuh, 2003). The National Survey of Student Engagement (NSSE) has been administered on a voluntary basis in the US and Canada since 2000. An Australianised version of the NSSE, the Australasian Survey of Student Engagement (AUSSE) was introduced in 2007, enabling comparison between Australia and the US and Canada over past three years.

These are referred to in answer to Q2.4 below.
UTS recommends that:

5. The Australasian Survey of Student Experience (AUSSE) be used as the key measure of student engagement and course quality and be benchmarked against the U.S. and Canada National Survey of Student Engagement (NSSE).

Q2.3 Is there a system of higher education funding in another country that would be a useful benchmark model to inform Australia’s review of base funding?

In terms of funding principles and education and other outcomes, a significant amount of detailed work would need to be undertaken to identify one country’s system as a useful benchmark for the Australian higher education funding model.

Australia regularly benchmarks its economic and social policy outcomes to the OECD average. This benchmark is useful in that it is generally the international performance level that Australia aspires to across a range of areas. It does not tie Australian models to a single option subject to the vagaries of policy change and other performance impacts in just one context. Rather, it reflects the international trends of world-leading economies. It is also useful as Australia’s higher education model has characteristics of both the European and United States models, while increasingly being influenced by emerging trends in Asia. One country’s funding model is unlikely to reflect the particular characteristics of Australia’s higher education system, particularly over time.

UTS recommends that:

6. Australia’s base funding be benchmarked to the OECD average.

Q2.4 What is the connection between the level of base funding and quality outcomes?

The level of base funding has a strong influence on the learning context since it influences aspects of students’ experience such as staff student ratio, levels of support available, and the learning environment. The decrease in funding to Australian higher education, in comparison to an increase in other countries, has led to Australia falling behind other countries on a range of measures.

Figures 3, 4 and 5 below show how Australia compares to the U.K. on measures of the CEQ / NSS referred to in Q2.2. In all cases Australia is significantly below the much more highly resourced U.K. system in areas of common questions, and the difference is widening.
Figure 3: Overall I was satisfied with the quality of this course

Figure 4: the teaching staff worked hard to make their subjects interesting

Figure 5: Staff are good at explaining things
In the student engagement surveys referred to in Q2.2 there is also a significant gap between Australia and the U.S. and Canada as clear in figures 6 to 8. On every scale, students from the U.S. and Canada report higher levels of engagement, but the biggest gaps exist in the areas most affected by funding: student staff interactions, and enriching educational experiences.

Figure 6: Student Engagement: U.S. / Canada and Australia 2008

![Figure 6](image1)

Figure 7: Student Engagement: U.S. / Canada and Australia 2009

![Figure 7](image2)
It is very clear comparing these results to figure 2 in terms of resourcing that there is a direct empirical link between resourcing and quality education.

Q3.1 Do the current funding relativities reflect the relative cost of delivering undergraduate courses in particular disciplines? What, if any, relative weightings should be afforded to various discipline groups and why?

The core issue is that base funding for ALL disciplines is underfunded and does not provide a platform for any institution to deliver internationally competitive courses. This is the fundamental matter that the Review needs to address. In differentiating funding on a discipline basis, the key is to provide resources per student per discipline such that there is no financial incentive for under-provision of a key discipline or skill-shortage area.

The cost of delivery of undergraduate courses in a discipline will vary with the mix of teaching pedagogy (i.e. theoretical vs laboratory vs experimental) and technology (distance v face-to-face) and a one-size-fits-all calculation will not be easy. Fortunately, this calculation does not have to be exact, as most universities can and do cross-subsidise depending upon their strategic objectives.

Teaching modes and technologies are not fully interchangeable. Students are demanding greater use of technology to facilitate their learning as well as face-to-face interaction. As a result course delivery costs are increasing.

International exposure and experience through courses, for both staff and students, is critical to Government’s and Universities’ goals but adds a significant premium to course delivery.

In general, the background costs of running a university are much higher than 20 years ago. In particular, compliance and regulatory costs are significantly higher.
Across disciplines, the funding cluster relativities reflect the different cost structures in broad terms; that is, the higher cost disciplines get higher cluster funding. However, it is UTS’s experience that the level of underfunding for some disciplines does vary from this broad pattern. Science and Engineering are significantly underfunded given the high level of infrastructure and operating costs required to support world class teaching and research programs. All Australian universities have to cross-subsidise their science and engineering programs from other sources to deliver the high quality programs on offer. Similarly, areas of the creative industries (media, animation, sound, design) have a very high and costly technology base, which is not reflected in the historical funding base for these areas. A case also can be made for the languages, where necessarily smaller class sizes are not reflected in the relevant funding cluster.

UTS will contribute more detailed information through its contribution of data to the project being undertaken by Access Economics on behalf of the Review panel.

UTS recommends that:

7. The funding relativities of discipline groups ensure that there is no financial incentive for under-provision of a key discipline or skill shortage area.

3.2 What are the costs to universities of improving the quality of teaching and the quality of the student learning experience at the undergraduate level and to what extent should they be reflected in the base funding model?

Questions 3.2 to 3.6 hold the implication that quality improvement, scholarship, research and student support are discrete elements of teaching and learning that could be funded separately or funded as a disparate bundle. While understanding the need for the review panel to be able to justify funding recommendations, it is critical that this does not result in an assumption that one or more of these elements is discretionary in terms of performance or funding.

Base funding must cover an integrated package of teaching; scholarship; quality improvement and innovation; staff time for research that underpins the majority of Australia’s research performance; learning and teaching support for students; a high quality learning environment that maximises students’ learning outcomes and promotes their work-readiness; pastoral support for students to ensure they are able to continue their learning and maximise their personal and academic outcomes. Base funding must fully support these activities as an integrated package, as treating some elements as discretionary funding will inevitably degrade the quality of Australian learning and teaching.

UTS recommends that:

8. Base funding address the integrated package of teaching and learning requirements: teaching; scholarship; quality improvement and innovation; staff time for research that underpins the majority of Australia’s research performance; learning and teaching support for students; a high quality learning environment that maximises students’ learning outcomes and promotes their work-readiness; pastoral support for students to ensure they are able to continue their learning and maximise their personal and academic outcomes.
Q3.3 What are the costs of engaging low SES students in undergraduate education?  
Should such costs be a factor in determining base funding?  How might support for low SES students be maintained in the future?

The University of South Australia has calculated that the envisaged 2013 funding for equity students (HEPPP) will meet only half of the actual cost of supporting those students. UniSA’s analysis shows an additional funding requirement of $2,062 per EFTSL, offset $1,004 per EFTSL by HEPPP, leaving a funding shortfall of $1,058 per EFTSL.

While low SES students form a significant equity target group for the Government and universities, consideration needs to be given to other equity groups that benefit from support in achieving participation and progress at university.

UTS has considered the additional cost of supporting students with disabilities. The current level of funding through the ASSD program does not meet the additional support costs incurred by UTS. UTS recommends that the ASSD direct cost refund program be discontinued, replaced by funding of $75 per EFTSL as part of base funding.

Underfunding equity group support costs, in addition to universities incurring costs in the administration of fragmented low-value funds, runs the risk of providing a disincentive for universities to reach equity group participation rates that should reflect Australian society.

UTS recommends that:

9. Base funding account for the costs of supporting equity groups including Low SES support of $2,062 per EFTSL and $75 per EFTSL for support for students with disabilities.

Q3.4 What additional costs are involved in the provision of work integrated learning and should these be considered in setting the level of base funding?

UTS is committed to providing students with a range of opportunities for work integrated learning. In some of these cases in particular, such as nursing, education, engineering and information technology practicums and internships, the cost of supporting such experiences is significantly greater than the funding provided, if any.

UTS Engineering students undertake two internships as part of their course. In the past, the Government recognised the value of these programs in producing work-ready engineers and the cost in administering them by funding ¼ EFTSL while students undertook their internships. Some years ago that funding was abolished. While UTS continues to include the internships in its program, it does so at its own cost. UTS has not undertaken a full review of the cost of supporting these programs, but by way of example, the direct costs of the unit that organises and coordinates internships is $700,000p.a. This equates to about $1,000 per internship. UTS suggests that an option for funding such high quality work integrated learning is to designate a funding rate for approved subject load.

Currently clinical placements in nursing and practicums in education received additional funding as part of the relevant funding clusters. In 2011, the relevant loadings are $1126 per EFTSL for nursing and $773 per EFTSL for education. The most recent full cost review
undertaken by UTS for these areas was in 2005. This was following a DEEWR request to all institutions in establishing 2006 Funding Agreements. The sector responses to that request may be useful for the panel.

The UTS response made the following points, which we believe are still relevant. The loadings only partly recognise the additional costs of clinical and practicum education, and UTS remains deeply concerned at the inadequate recognition of the full cost of clinical and practicum education. As detailed below, three major facts are pertinent to this issue:

1. UTS has estimated that clinical and practicum education costs approximately at least $1,400/full-time student/year in 2005 in addition to teaching a program without such a mode, which is over 66% higher than the approximately $620/EFTSL student increase made to CGS rates.

2. As far as UTS is aware, most analyses of the clinical and practicum loading adjustment have failed to recognise that the real shortfall is actually higher than that indicated above. For example, the cost of clinical education is related to the enrolled student load in a nursing or midwifery program. However, universities only receive the clinical loading for the taught load classified as in the Nursing disciplinary cluster. At UTS every enrolled nursing undergraduate student does, on average, approximately 85% of their load in Nursing cluster load and 15% in Science cluster load. As a result, UTS only receives the loading for 85% of nursing students even though 100% undertake the clinical training.

3. The 2005 practicum costs for UTS’s primary education program were $1,400 per enrolled student, and $2,185 per enrolled student for the secondary education program.

4. As the clinical and practicum loading is embedded in the Commonwealth Grant Scheme funding level for the Nursing and Education clusters its real value declined since its introduction due to the lack of adequate indexation during the intervening years.

**UTS recommends that:**

10. Significant work integrated learning programs be supported through base funding.

Q3.5 What proportion of a higher education teacher’s time should be spent on scholarly activity and how could the costs of scholarship be included in the base funding model?

As noted above in response to question 3.2, UTS holds the view that base funding needs to address a range of activities that form an integrated approach to the achievement of high quality teaching and learning outcomes.

As a general guide UTS suggests that base funding could be assessed in cost terms as 50% direct teaching, 30% research, and 20% scholarly and other activities.
Q3.6 Should any research activity continue to be supported by base funding?

Research is an important part of keeping curriculum up to date, as current research informs disciplinary knowledge and professional practice in an Australian setting.

To have a world class university system, universities require a mix of research intensive staff, generally funded from research agencies and industry, and research and teaching academics for which only the project costs (not their infrastructure or salaries) are funded by external funding agencies. This is a very efficient way to maximise our research effort and keep the important nexus between teaching and research.

Time for research and scholarship should continue to be funded by base funding because it improves teaching and learning outcomes. A measure of this is the relationship between learning outcomes and the research environment in which students learn. Figures 9, 10 and 11 below show the relationship between standardised learning outcomes (FTE, progression, retention) and research environment (as measured by ERA scores) averaged for the four main disciplinary fields (business and law; science and engineering; health; and arts and social sciences) by field and by university. The learning outcomes have been standardised to take account of field of education, ATAR score, full time / part time / external attendance, and Indigenous, gender and disability status.

Thus, these relationships represent the additional explanatory power of the research and scholarship environment on learning outcomes. In all cases the correlations are strong and significant. A scholarly environment improves progress and retention rates and thus represents a more efficient return on Government investment.

Figure 9: University discipline correlation of full time employment and research environment
As noted above, as a general guide UTS suggests that base funding could be assessed in cost terms as 50% direct teaching, 30% research, and 20% scholarly and other activities. The base funding for students must support this integrated mix of activities. If not, the Government’s research and innovation agenda will collapse.
This reflects the Government’s long held view that 30% of base funding is for research broadly undertaken by teaching and research academics. It should be noted that direct research funding accounts for only a small proportion of Australia’s research outcomes. That means that the majority of Australian university research is resourced through the current integrated base funding. Any reduction of research base funding will not only have a serious impact on the quality of teaching and learning but will also have a critical impact on Australia’s research performance generally.

Q3.7 Should infrastructure investment continue to be supported by base funding?

Infrastructure investment should be supported by base funding. The Capital Development Fund (CDF) has now been abolished but was administratively extremely costly for the level of potential funding. The Education Investment Fund (EIF) provides significant funding for the sector but does not facilitate planning as it provides no certainty of funding, nor allows for incremental capital investment over time.

UTS recommends that CDF funding should be reinstated and rolled in to base funding with an allocation from EIF distributed on the basis of proportional load distribution. The remainder of EIF should continue to be allocated for major individual projects identified in a competitive process.

This arrangement will allow universities to plan growth and infrastructure renewal in a coherent way rather than a jerky progression that necessarily lags the identification of major growth areas.

The roll in of particularly the small capital funds will alleviate what is a costly bidding process for relatively small potential returns. This will contribute to the reduction of administrative and subsequent compliance load for universities.

**UTS recommends that:**

11. The value of the Capital Development Fund be rolled into base funding with an allocation from the Education Investment Fund distributed on the basis of proportional load distribution. The remainder of the Education Investment Fund to be allocated to major projects in a competitive process.

Q4.1 Is there a higher relative cost for postgraduate coursework degrees? If so why is there a difference and what is the extent of the difference compared to an undergraduate degree in the same discipline?

Cost differences for postgraduate degrees are greatly exaggerated and are primarily due to class sizes. They are similar in costs to upper year undergraduate teaching in terms of staffing, infrastructure needs and student support.

We continue to believe:

i) That substantial funding should not be channelled to postgraduate education at the expense of undergraduate education in a resource-constrained environment; this funds
some students for two degrees while denying other students funding for any, hardly an equitable outcome and not consistent with the Government’s participation agenda;

ii) If funded, postgraduate places should be available equally to all universities in a transparent manner. To provide some universities with government subsidised postgraduate places and provide other universities with no such places (such that they must all be full fee) violates national competition policy. Where such a situation currently exists there should be a clear transition arrangement to an equitable system.

There is no clear justification for higher rate of funding for postgraduate coursework. Higher postgraduate funding, particularly in the absence of clear evidence that there is a general significant cost differential, will create an incentive for universities to move courses from undergraduate to postgraduate simply to take advantage of the funding differential.

**UTS recommends that:**

12. Postgraduate coursework courses should be generally full-fee. Where Government funding is provided for postgraduate coursework, it should be at the same level as undergraduate coursework. The system of funding postgraduate courses should be transparent across the sector.

**Q4.2 Are there other factors that contribute to the costs of postgraduate coursework degrees that should be acknowledged in the base funding?**

No.

**Q5.1 Are there general principles that should determine the maximum contribution a student should make towards the cost of their education in a publically funded higher education system?**

**Q5.2 In what circumstances should the level of students’ contribution towards the cost of their courses be based on factors other than the cost of their tuition?**

The contribution should average 50% Commonwealth funding and 50% student funding.

The two other principles that relate to Government versus private contribution are:

(i) the expected additional income obtained by graduates in different occupations; and

(ii) the extent of skill shortages in different sectors.

The difficulty of translating these principles into funding arrangements is that not all graduates in particular disciplines enter that profession, and not all sectors suffering skill shortages rely on staff trained in one particular discipline. For example, only 42% of students graduating in law enter the legal profession. Other graduates who go into politics, human services and community organisations make valuable contributions to society but their private return is less.
Relative to the current cluster funding arrangements, an obvious economic principle is that where there is no skill shortage and excess demand for that course, the private contribution should be increased. Where there are skill shortage areas and low demand, the government contribution should be increased and the private contribution lowered. Finally, in areas of continuing skill shortage the Review panel should consider a HECS write-off scheme for every year a graduate works in a skill-shortage occupation.

The taxation system provides a more effective tool than discipline related estimates of private return on education for the Government to recoup its contribution to Australia’s education system. The taxation system targets actual private economic returns on education rather than a generic estimate for cohorts of students which carry significant internal variation.

If the Government chooses to reduce student contributions for particular courses, those reductions should be offset by additional Commonwealth funding. If not, there is a significant disincentive for universities to expand intakes in these areas where funding is relatively lower.

**UTS recommends that:**

13. Government investment in higher education should average at least 50% of funding required for a world class system.

14. Incentives for student participation in priority areas such as skill shortage areas should be determined as follows:

   (i) Where there is no skill shortage and excess demand for that course, the private contribution should be increased;
   
   (ii) Where there are skill shortage areas and low demand, the government contribution should be increased and the private contribution lowered;
   
   (iii) In areas of continuing skill shortage there should be a HECS write-off scheme for every year a graduate works in a skill-shortage occupation.

15. If any reductions in student contributions are implemented for priority areas they must be offset by Government funding.

**Q5.3 Should the basis for determining the level of contribution by the student towards the cost of their tuition be different at the postgraduate level?**

Postgraduate courses should be generally full-fee. Where postgraduate courses are Commonwealth funded there should not be different levels of funding for undergraduate and postgraduate. The system of funding postgraduate courses should be transparent across the sector.
Q6.1 To what extent does the base funding model provide incentives for institutions to invest in and deliver high quality teaching?

Universities have the incentive to deliver the highest quality teaching possible for given resources because teaching and learning income is the largest resource base. As noted above, international evidence shows that we are below other countries in this regard.

Q6.2 Does the base funding model provide incentives for institutions to maintain strong academic standards?

Academic standards are linked to quality outcomes. Universities will set the highest possible standards given their resource limitations. All universities recognise that to do otherwise compromises the university’s ethos, reputation and performance outcomes.

Q6.3 What features could be incorporated in the design of a new base funding model to make it more simple, transparent and responsive to higher education providers?

The new funding model should recognise the true costs of education for a world class system. It should be transparent and it should not provide incentives for universities to shift load in order to benefit themselves at the expense of the cost to the whole sector.
References


