Teacher Education Ministerial Advisory Group Consultation 2014

SUBMISSION

NAME OF ORGANISATION OR INDIVIDUAL MAKING SUBMISSION

The Regional Universities Network (RUN) comprising CQUniversity, Federation University Australia, Southern Cross University, the University of New England, the University of Southern Queensland and the University of the Sunshine Coast.

AREAS FOR RESPONSE

1. What characteristics should be fostered and developed in graduate teachers through their initial teacher education?

1a. Regional universities are major educators of teachers who work in regional schools and our institutions have a long and established history of teacher education.

Successful graduate teachers are characterised by personal qualities and attitudes which should be evident from the time they commence teacher education programs. These qualities include:

- A passion for teaching and a commitment to achieve the best outcomes for students;
- A commitment to education and life-long learning;
- A willingness to work collaboratively with colleagues and parents;
- A strong educational foundation coupled with effective literacy and numeracy skills; and
- Resilience, maturity, social competence and confidence.

It is the university's responsibility to identify candidates with the potential to become successful graduate teachers and to support them to acquire the necessary skills, experiences and knowledge. Traditionally, universities have selected students on the basis of their year 12 performance. However, the quality of graduates is not simply determined by their ATAR scores. Furthermore, attempts to mandate entry level or subject requirements do not necessarily attract the best candidates to the teaching profession.

Admission on the basis of year 12 performance is also inappropriate for students with significant post-school experience. The Australian Institute for Teaching and School Leadership (AITSL) claims that more than 70% of students were admitted to initial teacher education programs (graduate and undergraduate) in 2011 on the basis of criteria other than their year 12 performance[1]. Among RUN universities, which attract a higher proportion of mature aged students, around two thirds of students enrolled in *undergraduate* education programs are older than the school leaver cohort, and 45% are aged over 25 years[2].

Therefore, RUN supports the use, as appropriate, of flexible approaches to entry including prior tertiary studies, written applications, interviews, additional testing and prior work history. Shortly after commencing their courses, all students should participate in a professional placement so that they can gain a better appreciation of what is involved and whether they wish to pursue teaching as a vocation. RUN would welcome additional research that investigates the value of these various mechanisms in predicting likely future success.

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[1] AITSL (2013*) Initial Teacher Education: Data Report*, page 17

[2] *Good Universities Guide 2014* pages 136-138.

1b Beginning teachers need to possess the personal qualities and attitudes cited above, to have been exposed to a wide range of educational experiences, and to have acquired the skills and knowledge to satisfy the graduate competencies consistent with the Australian Professional Standards for Teachers[3]. These competencies include:

- a sound understanding of the curriculum for their discipline;
- a thorough knowledge of teaching literacy and numeracy; and
- skills in understanding how children learn, programming, classroom management, dealing with behavioural issues, assessment, differentiating the curriculum, and engagement.

4. What balance is needed between understanding what is taught and how it is taught?

4.6 Why does Australia face a shortage of maths, science and language teachers?

The shortage of maths, science and language teachers is particularly acute in regional Australia. Relevant issues include: a lack of infrastructure and support for teachers; high staff turnover (>20% p.a.) and difficulty filling vacancies, in particular for secondary science, Information and Communication Technology (ICT), and mathematics positions[4]. Some of the reasons include: limited choice of courses available in small regional schools; difficulty in attracting teachers to rural locations and teaching staff without specialist training in maths and science. The difficulties in attracting and retaining teachers in these areas have been associated with teacher perceived inequalities in access to professional development opportunities, lack of professional connectedness and isolation, and a lack of material resources and support personnel .

4.7 What can be done to encourage teaching students to develop a specialisation in these areas?

Regional universities have a fundamental role to play in encouraging teaching students to develop a specialisation in maths and science (and languages), and encouraging them to work in regional Australia. Students who are trained in the regions largely work in the regions.

The Commonwealth, through its Australian Maths and Science Partnership Program, funded the project "Regional Universities Network (RUN) Maths and Science Digital Classroom: a connected model for all of Australia" which uses the network universities, in partnership with regional schools, to inspire students to study maths and science by improving the quality of maths and science education. It is hoped that the initiative will lead to more students studying maths and science at university, including potentially in the area of teacher education. The project is also delivering professional development for teachers who are teaching maths and science in regional schools.

The Commonwealth is in a unique position to be able to provide funding for projects to address this issue across state boundaries – schools linked with RUN universities in Queensland, New South Wales and Victoria are involved in the project. It is hoped that the program will be continued to make a lasting difference to the number of students who study maths and science in school, and who may potentially become maths and science teachers in the future.

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[3] AITSL (2011) Australian Professional Standards for Teachers

[4] *Lyons, T., Cooksey, R., Panizzon, D., Parnell, A., & Pegg, J. (2006).Science, ICT and Mathematics Education in Rural and Regional Australia: Full report of the SiMERR National Survey. UNE: Armidale. Retrieved from: http://www.une.edu.au/simerr/pages/projects/1nationalsurvey/Report/FullReport_Full.pdf*

In addition, RUN universities have strategies in place to encourage non-maths/science teacher education students to take up maths/science as a second stream in undergraduate training. We have enabling, skills development and refresher subjects in maths and science that teacher education students can take to get them up to university level maths and science. We also offer regular summer schools, workshop and professional development programs for STEM teaching.