



Out-of-field Teaching in Geography

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Introduction

This paper forms part of the response by the Australian Geography Teachers Association (AGTA) to two school education related recommendations put forward in *Geography: Shaping Australia's Future* (National Committee for Geographical Sciences, 2018). The recommendations are:

The National Committee for Geographical Sciences and AGTA write to the federal, state and territory Ministers of Education about the urgency of addressing 'out-of-field' teaching in geography (p. 86); and

The National Committee for Geographical Sciences and AGTA develop a submission to university education program decision-makers about the need to improve both primary and secondary teacher training in geography (p. 85).

The purpose of this response is to alert and inform Ministers of Education, policymakers, and other key Geography education stakeholders about the implications of two important issues impacting on the quality of Geography education available to young Australians in schools.

These are the shortage of appropriately educated geography teachers in primary and secondary schools, and the nature of their pre-service preparation, with a focus on their content knowledge and pedagogical skills. In a more general sense, this response represents a *call for action* in policy development around improving the quality and provision of Geography education across Australia. Such actions have the potential to raise the integrity of Geography as a discipline and enhance levels of geographical knowledge and understanding within the Australian population.

The paper commences with a nationally agreed definition of Geography and then provides an overview about the nature and extent of out-of-field teaching in Australian schools with specific reference to Geography. From there, the paper uses an evidence-based approach to explore the concerns regarding out-of-field teaching in

Geography and its implications for Geography education nationally. A set of proposed actions concludes the paper.

Defining Geography

Geography is defined as a wide-ranging and dynamic discipline where phenomena from the natural world, social world, and the humanities are integrated and studied through the perspectives of place, space, and environment. Geography provides an understanding about the world around us. This is achieved, for example through exploring the diversity of environments, places, peoples and cultures; the inequalities existing within and between these places; dependence on the environment for survival; attachment to place; and connections between places and people throughout the world (National Committee for Geographical Sciences, 2018). Geography contributes to public and academic understanding about the social, economic and environmental wellbeing of Australians and Australia through research, education, training, skills, expertise and engagement with industry and the community. Consequently, Geography has an important role in education at all levels because it brings particular ways of thinking based on a set of concepts to guide the choice of research topics, identify significant questions, and suggest explanations (National Committee for Geographical Sciences, 2018).

Out-of-field teaching

Out-of-field teaching occurs when teachers are required to teach subjects outside their field or fields of appropriate qualification or expertise (Du Plessis, 2016, 2019). Many teachers are asked to teach out-of-field during their career, especially during their early years of entry to the profession. In the secondary school context, this situation is often referred to as being a non-specialist teacher. Not only does teaching out-of-field impact on the integrity of a subject, it inevitably results in heightened levels of student disengagement, lower than anticipated achievement of student learning outcomes, and causes an increasing lack of confidence amongst teachers about their

ability to teach effectively (Caldis, 2017). Out-of-field teaching not only influences the quality of instruction, it also fuels public debate about declining teacher quality.

Qualifications considered suitable for the effective teaching, learning and assessment of a subject are achieved through completion of units in initial teacher education programs. They include both content knowledge (subject specialisation) and pedagogical content knowledge (subject methodology). Alternatively, subject expertise can also be achieved through completing at least three years of accredited professional learning in the designated out-of-field subject area (Caldis, 2017; Du Plessis, 2019; Weldon, 2016).

Nature and extent of out-of-field teaching in Geography

Out-of-field teaching in Geography occurs in forty percent of Year 7–10 Geography classes across Australia (Du Plessis, 2019; National Committee for Geographical Sciences, 2018; Weldon, 2016). This is the highest incidence of out-of-field teaching occurring in any subject area (Weldon, 2016). This means that forty per cent of teachers who are teaching a Geography class have neither specialised Geography content knowledge nor pedagogical content knowledge. Only thirty-five per cent of Year 7–10 Geography classes are taught by specialist Geography teachers (Weldon, 2016). The remaining twenty-five per cent of out-of-field teachers have obtained recognised qualifications in either (but not both) content knowledge or pedagogical content knowledge (Weldon, 2016). Content knowledge is understood to be the key concepts and structure of a subject whereas pedagogical content knowledge includes knowledge about how to represent and organise subject content using specific strategies and activities to develop student understanding and engagement with the subject (Lane, 2009).

By way of comparison, out-of-field teaching in Mathematics (often the source of considerable public attention) is just 19.6 per cent. For English it is 13.5 per cent, Chemistry 9.1 per cent and Biology 8.5 per cent (Weldon, 2016).

Implications of out-of-field teaching in Geography

One of the main implications of the increase in the incidence out-of-field teaching in Geography is the declining quality of instruction occurring in Geography classrooms compared with those classes taught by a specialist teacher. Subject content knowledge is vital to the effective teaching of Geography and is also a key attribute of a highly effective teacher (Lane, 2015; Weldon, 2016). Subject content knowledge (together

with pedagogical content knowledge) enables specialist teachers to provide a thorough and connected learning experience in Geography as they are able to apply theoretical processes to real life examples and organise connections between geographical content and concepts in a meaningful way for students. An understanding and application of geographical concepts are fundamental to the development of geographical thinking (Shreeve, 2018). It is likely that out-of-field teachers of Geography lack conceptual understanding and often fail to recognise when students are presenting incorrect ideas. In such circumstances, the significance of geographical thinking is overlooked, and the progression of geographical knowledge does not build and consolidate in a logical and discipline-specific way (Lane, 2015, Shreeve, 2018).

The expectation that schools consistently deliver a high quality of teaching, learning and assessment is often linked to the results a school achieves in high-stakes testing. School leaders experience pressure to lead their schools toward visible progress, resulting in a greater focus on results rather than the enhancement of human capital and wellbeing (Du Plessis, 2016).

It is AGTA's contention, supported by research, that the exceptionally high level of out-of-field teaching in Geography has had a detrimental impact on student results and affected the level of student engagement in the subject. This, in turn, results in a declining candidature in Geography across the senior secondary years of schooling and discourages the study of Geography at the tertiary level. It is also important to note that teachers teaching out-of-field often feel overwhelmed by the complexity of the content and the pedagogies required to effectively deliver it. As a result, they are often dissatisfied with their performance as a teacher (Du Plessis, 2016).

Subject knowledge is considered a key attribute of effective teaching (Weldon, 2016). Research has demonstrated that students often hold alternative (mis)conceptions – ideas that are inconsistent with scientific evidence. These ideas need to be recognised and addressed by teachers or they will persist. It is unlikely that teachers will be able to do this if they themselves have incorrect and imprecise ideas (Lane, 2015).

For secondary school teachers, the Australian Institute of Teaching and School Leadership (AITSL) specifies a minimum of six units of study in their 'first' teaching subject, with no more than two units at first year level. The adequacy of this requirement for teaching geography depends on what these units are, because while the school curriculum requires knowledge of both

physical and human geography, many university geography majors do not.

Proposed actions

To address the high incidence of out-of-field teaching in Geography, relative to that of other subjects, AGTA encourages educational stakeholders to adopt the following proposed actions:

- *That the requirements of Initial Teacher Education Programs be adjusted to require (i) those studying to be a secondary Geography teacher to complete a minimum of six units of study across both physical and human Geography; (ii) those studying to be a secondary History, Commerce, Economics or Business Studies teacher to complete a minimum of four units of study across physical and human Geography because typically, History teachers will also be required to teach Geography in the junior years; and (iii) those studying to be a primary teacher be required to study at least one content-based unit in Geography.*

It is AGTA's belief that such an adjustment to program offerings would provide sufficient preparation in subject content knowledge for the effective teaching, learning and assessment of Geography in schools.

- *That, in addition to the above, Initial Teacher Education Programs should be modified to offer a distinct Geography methodology course in Bachelor of Education and Master of Teaching degree programs. Furthermore, these courses should be delivered by specialist Geography educators and made compulsory for those studying to be specialist Geography, History, Commerce, Economics or Business Studies teachers.*

It is AGTA's belief that such a requirement would provide sufficient preparation in pedagogical content knowledge for the effective teaching, learning and assessment of Geography in schools.

- *That non-specialist teachers of Geography be provided with additional and conditional support to complete further education to develop their subject content and pedagogical content knowledge in Geography.*

Such provisions could occur through incentivisation to complete postgraduate studies or complete Geography education-related action research projects with partnering universities (Lane & Caldis, 2018). Alternatively, the role of universities could be expanded to become active professional learning providers. Furthermore, a systematic method of distilling current knowledge in a form that teachers can readily access

and use could be developed. Geography academics, educators and experienced teachers could be asked to collaboratively review contemporary knowledge on topics in the Geography curriculum and these reviews be made available via appropriate platforms, or accredited as part of professional learning hours (National Committee for Geographical Sciences, 2018).

- *That the study of Geography in schools should be made nationally compulsory up to Year 10. In so doing, students will have the opportunity to study important topics not available elsewhere in the suite of core-learning subjects.*

Such topics include the environmental basis of agriculture, food production and food security, people's connections with places through communication technologies, and human wellbeing from the personal to global scale. The compulsory study of Geography up to Year 10 will develop the visibility and integrity of Geography as a discipline, increase the exposure of students to Geography throughout their years of schooling, and over time, ultimately lead to enhanced levels of geographical knowledge and understanding amongst the Australian population (National Committee for Geographical Sciences, 2018).

- *Finally, that AGTA and the other professional associations represented on the National Committee for Geographical Sciences be formally recognised by Ministers of Education as salient stakeholders in geographical education, curriculum development for Geography, and the provision of teacher-centred resources that enhance the development of subject content and pedagogical content knowledge (Caldis, 2014 National Committee for Geographical Sciences, 2018).*

Such recognition will acknowledge the Associations as key stakeholders in Geography education and should, therefore, ensure an invitation to roundtable discussions and similar activities with Ministers of Education about strategies with which to move forward in response to addressing the occurrence and implications of out-of-field teaching in Geography across Australia.

Conclusion

The paper outlined a nationally agreed definition about Geography and provided an overview about the nature and extent of out-of-field teaching, contextualised to Geography education in Australia. An evidence base was used to highlight ongoing concerns about the extent of out-of-field teaching occurring in Geography and its resultant implications for Geography education across

the country. A set of proposed actions for policy development around improving the quality and provision of Geography education was outlined. The purpose of this paper, and its set of proposed actions, is not only to respond directly to *Geography: Shaping Australia's Future* (National Committee for Geographical Sciences, 2018) but to actively take steps in raising the quality of teaching, learning and assessment of Geography. In doing so, we hope to enhance the integrity of Geography as a discipline, which will in time, enhance the levels of geographical knowledge and understanding amongst Australia's population.

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