# Public submission made to the Review to Achieve Educational Excellence in Australian Schools

Submitter: Mr Tom Greenwell

Submitting as a: Teacher

State: ACT

## Summary

* The Review should conduct research and consultation, or recommend that research and consultation be undertaken to: assess the potential benefits of an Australian Government-funded Massive Open National Curriculum Resources Hub.
* This should be conceived as a national project that everyone can be invited to participate in as an act of nation building for our children.
* Australian educators still spend too much time 'reinventing the wheel'. An enhanced, centralised resources hub could save time, improve quality, increase productivity, increase transparency, and facilitate ongoing conversation, debate and innovation.

## Main submission

Introduction

1. I am a mid-career senior secondary History and English teacher. In addition to my experience as a classroom teacher, I write about education policy for Inside Story (<http://insidestory.org.au/>). In the past, I have represented educators as an official of the Australian Education Union.
2. This submission is addressed to the following questions posed in the Review’s issues paper:

* What can we do to improve and how can we support ongoing improvement over time?
* How could schools funding be used more effectively and efficiently (at the classroom, school or system level) to have a significant impact on learning outcomes for all students including disadvantaged and vulnerable students and academically advanced students?
* What actions can be taken to improve practice and outcomes?
* What evidence is there to support taking these actions?
* What institutional or governance arrangements could be put in place to ensure ongoing identification, sharing and implementation of evidence-based good practice to grow and sustain improved student outcomes over time?

1. It is submitted that the Review should recommend that research and consultation be undertaken to assess the potential benefits of an Australian Government-funded Massive Open National Curriculum Resources Hub. The goal of this submission is to persuade the Review that it is sufficiently plausible that such an endeavour is possible and desirable such that further research and consultation is warranted. It is also hoped that this submission will give the reviewers cause to suppose that the Australian Government would be uniquely suited to fund and manage this endeavour.
2. A Massive Open National Curriculum Resources Hub could be an expansion of the already existing national digital learning repository, Scootle. But the end result should be more ambitious in nature, scope and scale than Scootle as it currently exists. Using Mark Pesce’s phrase, cited below, it could be imagined as a ‘national educational Wikipedia’ – a free online national school textbook for all subjects. This should be conceived as a national project that everyone can be invited to participate in as an act of nation building for our children.
3. It is beyond the scope of this submission – and far beyond my own expertise - to specify the optimal design of the proposed resources hub. However, the following features are suggested to clarify what is under discussion in this submission.

* A website that features open educational resources organised around the Australian Curriculum
* Each page devoted to a lesson - the equivalent of an entry in an encyclopaedia – that in turn would belong in a sequence of lessons which form part of an Australian Curriculum unit
* Content generation by educators across Australia, students where appropriate, Australian cultural institutions, paid staff, and other registered users of the site
* Capacity for teachers (and other registered users) to contribute to and edit pages
* All lessons expressed in age-appropriate terms and composed and presented pedagogically (related to prior learning, chunked into comprehensible parts, related to the world beyond, practise activities etc.)
* All resources to be free to access and free to reuse and modify under a Creative Commons license
* Publicly facing pages that capture the best and most up-to-date version of the lesson, as agreed by explicitly stated rules and processes within the community, as per Wikipedia. Publicly facing pages could also include bibliographies and additional resources.
* Community-only pages for discussion, debate and upvoting of resources

The Case for Sharing

1. While the benefits of sharing and collaboration are uncontroversial, they are worth delineating. In 2010, the futurist Mark Pesce, wrote ((<https://www.scribd.com/document/33296248/Future-Present>)):

“ Sharing needs to become a foundational component in a modern educational system. Every time a teacher finds a resource to aid a student in their exploration, that should be noted and shared broadly. As students find things on their own – and they will be far better at it than most educators – these, too, should be shared. We should be creating a great, linked trail behind us as we learn, so that others, when exploring, will have paths to guide them – should they choose to follow…."

Of the then nascent National Curriculum, Pesce wrote:

"… putting everyone onto the same page, pedagogically, opens up an opportunity for sharing which transcends anything before possible. Teachers and students from all over Australia can contribute to or borrow from a wealth of resources shared by those who have passed before them through the National Curriculum. Every teacher and every student should think of themselves as part of a broader collective of learners and mentors, all working through the same basic materials. In this sense, the National Curriculum isn’t a document so much as it is the architecture of a network. It is the way all things educational are connected together. It is the wiring underneath all of the pedagogy, providing both a scaffolding and a switchboard for the learning moment…

… Nothing should be stopping us from creating collective resources – similar to an Australian Wikipedia, and perhaps drawing from it – which will serve the pedagogical requirements of the National Curriculum. We should be doing this now.”

1. Making sharing ‘a foundational component’ of Australian education remains critical to improving educational outcomes for Australian school students - and using funding for school education as efficiently as possible. There is a straightforward productivity case for sharing. A significant part of the work of teaching involves producing resources: hand-outs, activity sheets, presentation slides, videos and the like. It’s the part of teaching that typically comes under the heading ‘lesson prep’ (and that constitutes an enduring record of the lesson, beyond that which resides in memory). This component of teaching work may vary significantly depending on factors like the degree of centralisation of the curriculum in a given system or school, the size of the publishing market for the curriculum in question, and the grade or subject area being taught. Allowing for that variation, it remains the case that resource production generally forms a significant part of teaching work (even in large, centralised systems). The first potential benefit of increased sharing is that it will reduce duplication of this work and therefore save time.
2. A study (<http://research.acer.edu.au/cgi/viewcontent.cgi?article=1028&context=tll_misc> ) conducted by the Australian Council of Educational Research (ACER) for the Australian Education Union Victorian Branch found that “Around 90 per cent of teachers indicated that their workload at some stage has had a negative effect on their quality of teaching.” Other research (<https://www.asg.com.au/doc/default-source/Report-card/asgaceteachers_report_card.pdf?status=Temp&sfvrsn=0.4823379207354037>) jointly conducted by the Australian Scholarships Group and the Australian College of Educators found that “48 per cent of educators feel stressed either ‘most of the time’ or ‘fairly often’ in a typical week.” Of teachers surveyed for the Hunter Institute of Mental Health ‘Start Well’ report (<http://s3-ap-southeast-2.amazonaws.com/everymind/assets/Uploads/Summary-Report.pdf> ), “over 60% of early career teachers felt they did not have a good work-life balance; Two thirds of all early career teachers said that time management and a large workload are some of their biggest challenges; More than half noted they felt they did not have enough time for collaboration or planning, preparation and assessment time.” The most recent Staff in Australian Schools (SiAS) survey in 2013 (<https://www.acer.org/sias>) found that the average hours per week worked by Australian primary school teachers had increased from 45.8 in 2010 to 47.9 in 2013. Average secondary teacher hours per week had increased from 46 to 47.6. Given well documented workload pressures on teachers and the potential for these pressures to affect teaching quality and staff retention, it is highly desirable that duplication of resource-generation is eliminated where possible.
3. The potential for a large-scale sharing culture to save teachers’ time is especially great for new educators, who generally have not developed their own archive of lesson materials and who face all the pressures associated with entering a new profession.
4. As well as saving time, enhanced resource sharing could increase the average quality of teaching and learning resources. If educators can readily access high quality (and modifiable) learning materials, they can devote more time to refining them for the specific learning objective they have in mind and differentiating the materials to address the individual needs of students in their class. Access to the work of others means the starting point is closer to the end goal.
5. If the Australian school education system could generate a large-scale sharing culture, it would support greater utilisation of specialised expertise. Teachers could invest large amounts of time in producing resources in areas where they have extensive familiarity, in the knowledge that in other subjects in which they are less familiar, they will benefit from resources produced by others.

University of Queensland researcher, Nick Kelly writes (<http://www.aare.edu.au/blog/?p=1365>): “… there is much value in having massive communities involving many thousands of members. The reason for this is that, in general, the amount of experience held within an online community grows with its size. The more teachers there are in an online community, the more likely it is that someone in that community can help with whatever support it is that you are looking for. Massive communities can have enormous utility in professions where all members of that profession know that there is a single community in which re-usable knowledge is shared.”

1. A large-scale sharing culture could enhance diffusion and adoption of best-practice pedagogy. As Kelly writes, “…currently teaching resources are stored in many different sites on the web and it can be confusing for a teacher trying to find a quality resource. Over time it is likely that, as with other professions, there will be some form of convergence on a single massive community where resources are curated and can be re-used.”
2. A large-scale sharing culture could help ensure consistent access to a rich cutting-edge curriculum for students of all ages and abilities in all locations.
3. A massive open online community with large stores of re-usable curriculum resources would mean that ‘lessons’ become a place as well as a temporal experience. Lessons could be visited in advance and returned to again and again. Given the widely accepted need to differentiate learning experiences to meet individual learning needs, this is highly desirable. Such an approach could also help facilitate enhanced participation of parents and tutors in supporting learning.

The Current State of Sharing in Australian Education

1. The digital environment facilitates collaboration and sharing on a previously unimaginable scale. A range of government-supported, commercial and non-profit initiatives already enable resource sharing. These include websites and platforms as diverse as Scootle, TES, The Learning Place, EdModo, Schoology, and Teachers Pay Teachers. The Open Educational Resources movement continues to grow. Khan Academy’s library of micro-tutorials is just one famous example of the range of resources students and educators have access to. Additionally, search and social media enable students and educators to connect and discover like never before. From exchanges of insights and observations in Twitter chats to individuals like the Sydney Maths teacher, Eddie Woo, who publishes his lessons on YouTube, professional educators are at the heart of this sharing culture. This complements the sharing that occurs within schools and between networks of colleagues. It could reasonably be held that the benefits of sharing are already being fully realised; the prospects of improving on current arrangements minimal.
2. It would be short-sighted to not explore whether we can do better. None of the available platforms and repositories, either individually or collectively, have made sharing of teacher-generated resources on a national scale an easy, natural and reflex practice. Nor have they succeeded in establishing definitive go-to locations that house, link to, or refer to all our collective resources in relation to units of the Australian Curriculum, let alone the lesson-sized chunks of knowledge which make up units of curriculum. While we take it for granted that the common effort of globally dispersed volunteers has created a ubiquitous free online encyclopaedia (free to access, free to reuse), we have not yet co-ordinated the effort of professional educators to create a ubiquitous free online national school textbook. We should ask why.
3. Search and social media are clearly highly powerful tools for locating and sharing learning resources. However, the value of learning resources is highly context-specific. Notwithstanding the enormously beneficial digital tools available to educators today, significant time is required to locate already existing resources and to modify them to be appropriate for the specific age, ability, culture of students being taught, the scope of the lesson, and scope and sequence of the unit.
4. Sites that charge for access to resources or resource-sharing platforms do not, by definition, contribute to a project of making a corpus of foundational knowledge freely available to all citizens. In the 21st century networked knowledge economy, we should insist that the right to a free public education goes beyond the right to a place in a school. It should include free access to the corpus of foundational knowledge that is imparted through schools.
5. Sites, like The Learning Place, are state-based and therefore do not possess the scale of a nationwide entity.
6. Scootle most closely approximates the Massive Open National Curriculum Resources Hub proposed in this submission. At the moment, however, Scootle does not occupy anything like the central place in the lives of Australian students and teachers that Wikipedia does. It may be that a significantly greater investment is required. It may also be that further work needs to be done to cultivate professional norms around large-scale sharing of resources, using mechanisms like the Australian Professional Standards for Teachers. However, there are also design elements that could be reviewed. Scootle makes curriculum resources available to registered educators, and their students, only.

Scootle, as it is currently conceived, does not seek to generate the free online national school textbook for all subjects, envisaged in this submission. By not being part of the open web, Scootle’s profile is inevitably diminished – amongst educators as well as amongst the general public. Editable, publicly facing pages that capture the best and most up-to-date version of any given lesson, as agreed by explicitly stated rules and processes within the community - as per Wikipedia – could potentially induce a higher level of participation, debate and exchange.

The goal of a free online national school textbook would incorporate but extend further than resource sharing. It would be a mechanism by which we make our corpus of knowledge transparent to ourselves (to the educational community specifically and to the broader community. It could facilitate continuous reflection, iteration and revision as i) faults are identified, ii) scholarly consensus amongst relevant experts changes, iii) pedagogy changes, iv) the background and cultural knowledge and aspirations of students changes.

1. No element of compulsion is being advocated in this submission in regard to either contributing resources to a commonly owned corpus, or in using them. If educators or others do not want to contribute, that’s that. But it should not be because contributing and sharing is not possible, promoted and celebrated. Similarly, it would be wrong to imagine a national online textbook as an attempt to standardise curriculum. It would be there for teachers to use as they see fit.

A Massive Open National Curriculum Resources Hub:

Some Potential Questions for Further Research

1. How much time do Australian teachers spend locating, modifying and generating teaching and learning resources?
2. On a national scale, how much duplication occurs in the production of teaching and learning resources? How much are Australian teachers still reinventing the wheel?
3. What kind of variation is there in access to quality teaching and learning resources across different educational contexts?
4. What level of investment in enhancing sharing and collaboration within Australia’s education workforce could be justified by consequent productivity gains?
5. What are the major learnings from Scootle so far, in terms of successes and challenges in facilitating and inspiring a culture of sharing of teaching and learning resources?
6. What can Australian schools and school systems learn from Wikipedia around motivating and co-ordinating distributed effort on a shared project?