

August 2023
Review to Inform a Better and Fairer Education System - Consultation Paper

To Whom It May Concern,

Thank you for accepting this submission on the Review to Inform a Better and Fairer Education System.

Ochre Education's submission comprises:

- **Section 1:** About Ochre Education
- **Section 2:**
 - **Recommendation to include the development of an opt-in national bank of evidence-based, curriculum-linked teaching materials created by highly effective teachers as a future reform in the next NSRA. This could be complete within 3 years, and would require investment of around \$22M (\$33M if all lesson videos are produced).**
 - Comments on specific consultation questions under the following Terms of Reference of the Review:
 - What targets and reforms should be included in the next NSRA to drive real improvements in student outcomes, with a particular focus on students who are most at risk of falling behind and in need of more assistance?
 - How the next agreement can support schools to attract and retain teachers?
- **Section 3:** How this recommendation can help to achieve the original ambition of the previous NPI, the Online Formative Assessment Initiative (OFAI).
- **Section 4:** How governments can move with speed and urgency to implement this recommendation, to support the Australian teacher workforce, and its current significant and pressing challenges.
- **Section 5:** Suggested next steps

We would be happy to discuss any aspect of our submission with you further, should you have any questions.

Kind regards

Reid Smith and Caroline Reed
Co-CEOs
Ochre Education

1. About Ochre Education

Ochre Education was established in 2021 as an innovative not-for-profit organisation, to improve student outcomes and close the disadvantage gap by supporting teachers to teach, and to enable all students to access, a high-quality curriculum everywhere.

We achieve this by working with a community of teachers to develop and support the use of an expertly-sequenced curriculum, alongside a comprehensive bank of free, quality-assured, curriculum-linked teaching resources, to be adapted and used by any teacher anywhere.

The skills and experience of our two founders enabled us to see the demand for, and the potential of an evidence-based, practical library of curriculum tools for teachers. Caroline Reed had worked in the UK and in State government on education policy and delivery. Reid Smith was an experienced school leader and curriculum specialist in regional Victoria.

We are inspired by the UK's Oak National Academy, launched as an online resource for teachers during COVID school closures, and which has developed 44,000 resources with 550 teachers, and had 147m lessons downloaded. Oak has now been launched as a Government arm's length body.

Ochre was established in Australia to work in partnership to improve Australian education – perhaps dramatically – and address inequality in our schools.

We have partnered with the Australian Education Research Organisation (AERO) and schooling systems (Catholic Education Canberra Goulburn, Melbourne Archdiocese Catholic Schools, and the NSW Department of Education), as well as with philanthropic organisations, to work with over 150 expert teachers to develop a bank of over 900 rigorous and reliable lessons with over 4000 free fully-sequenced curriculum resources – including videos, presentations, worksheets and quizzes – produced and quality-assured by teachers, for teachers. This includes all of the core resources to teach primary mathematics across all grades, across the school-year.

Through this we are:

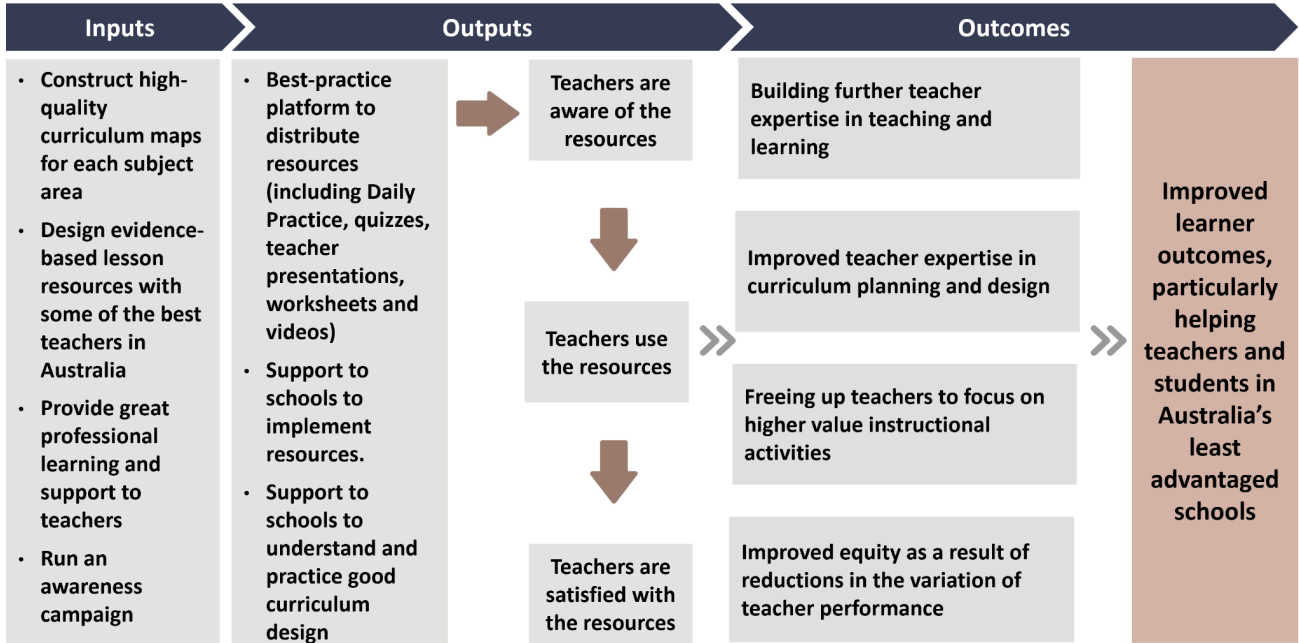
- Sharing the brilliance of expert teachers across the country;
- Providing high-quality, optional, evidence-based lessons designed to be easily adaptable through teachers' professional judgement to meet varied learning needs and contexts;
- Making lesson materials accessible and easy to find, reducing inefficient planning by freeing up teachers to focus on the needs of students in their classes;
- Providing inspiration for teachers to plan and think about their own curriculum and lesson planning, including better supporting teachers through curriculum changes; and
- Supporting teacher professional development through the creation of our materials, and through their use as practical exemplars of best practices approaches.

Over 100,000 Australian teachers have accessed Ochre resources¹. This is nearly 50% of primary school teachers. There are currently schools using these resources in many ways, reflecting their adaptability. Evaluation of the Ochre resources has been very positive.

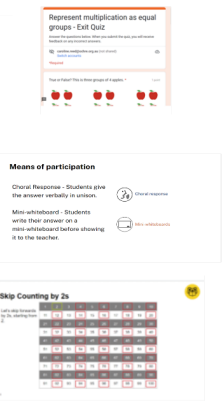
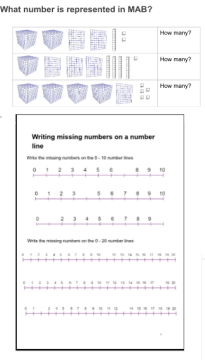
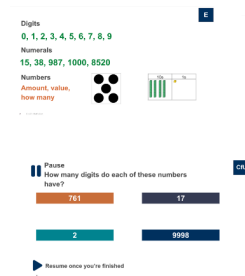
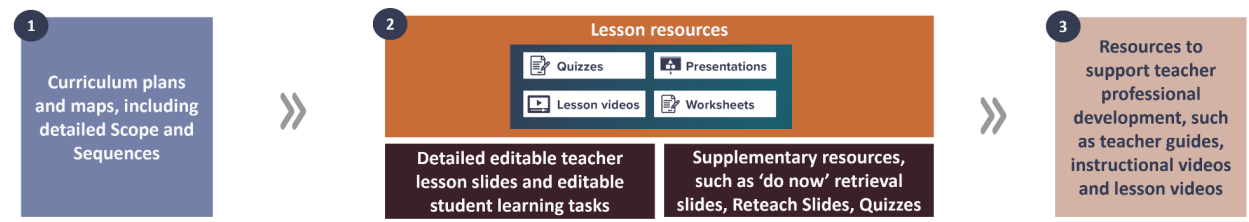
We've big plans to grow our support in the years ahead. We have ambitious goals to develop a comprehensive bank of resources across all subjects and year levels in the next two years, working with hundreds of expert teachers across the country and across schooling sectors.

¹ See note on user data Page 20

Ochre Education: Theory of Change



Ochre Education: our resources



2. Comments on specific consultation questions under the following Terms of Reference of the Review

- **Recommendation to include the development of an opt-in national bank of evidence-based, curriculum-linked teaching materials created by highly effective teachers as a future reform in the next NSRA. This could be completed within 3 years and would require investment of around \$22M (\$33M if all lesson videos are produced).**

What targets and reforms should be included in the next NSRA to drive real improvements in student outcomes, with a particular focus on students who are most at risk of falling behind and in need of more assistance?

CONSULTATION QUESTIONS:

- *What are the evidence-based practices that teachers, schools, systems and sectors can put in place to improve student outcomes, particularly for those most at risk of falling behind?*
- *How can the targets in the next NSRA be structured to ensure that evidence-based approaches underpin a nationally coherent reform agenda while allowing jurisdictions and schools the flexibility to respond to individual student circumstances and needs?*

How the next agreement can support schools to attract and retain teachers?

CONSULTATION QUESTIONS

- *What change(s) would attract more students into the teaching profession and support teachers to remain in the profession?*
- *Are there examples of resources, such as curriculum materials, being used to improve teacher workload or streamline their administrative tasks?*

a. Ochre Education was established to address what the Consultation Paper suggests is the most significant issue impacting Australian education: persistent and entrenched educational inequalities in Australia.

Ochre has been established to address what the evidence suggests is the most significant issue impacting Australian education: a significant and persistent lack of equity in student outcomes, where “students from priority equity cohorts are three times more likely to fall below minimum standards, with the learning gap increasing over time.”

Through our work, our Theory of Change enables us to take direct and meaningful action to contribute to address a number of key drivers of this issue.

b. Quality teaching is the most important in-school factor affecting student learning, but many Australian teachers face significant challenges in delivering a high-quality school curriculum.

We strongly agree with the Consultation Report’s assertion that ‘evidence-based instructional practices, supported by a well-designed and well-delivered curriculum, are key to meeting Australia’s goal of excellent and equitable learning outcomes for all students.’

We would place a carefully sequenced, knowledge-rich curriculum as the central driver of improved student learning for all students, particularly those at risk of falling behind, supported by evidence-based curriculum-aligned professional development and effective assessment practices.



The following elements are key to such an approach:

- A strategy to identify high-quality curriculum materials and procuring them, or developing them, where they do not exist.
- High-quality, curriculum-aligned teacher professional development focused on how to effectively enact specific high-quality curriculum materials.
- Curriculum-aligned student assessments that meaningfully appraise students' understanding of the curriculum they have been taught and inform teachers', schools', and systems' next steps

(adapted from Steiner et al., 2019).

c. International studies have shown the potential for the provision of high-quality instructional classroom materials to have a significant impact on student learning and the improvement of equity across school systems.

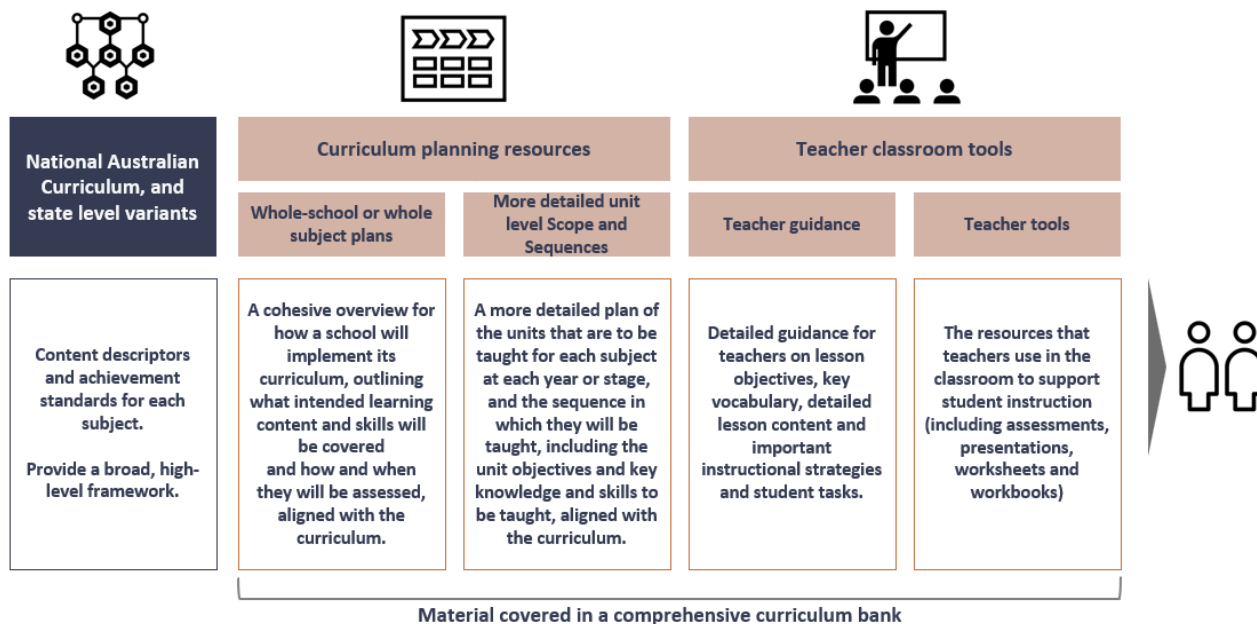
This impact has been shown to be greater than other initiatives focused on teaching quality (Steiner, 2018)². This is especially the case when partnered with professional development programs for teachers. The gain in student achievement is shown in some studies to be as large as the gain from having an experienced rather than a novice teacher. Most recently, a 2023 US study³ demonstrated further evidence of the impact of whole school, knowledge-rich curriculum, supported by provision of professional learning to teachers. It found that students who attend oversubscribed charter schools in Colorado that use a set of particular high-quality curriculum materials outperform students who applied but who were not admitted to the charter schools in Reading-English Language Arts, irrespective of income characteristics.

However, many Australian teachers face significant challenges in delivering a high-quality curriculum. The Australian Curriculum (and its state derivatives) gives teachers incredible flexibility in creating teaching and learning programs. They offer teachers and school leaders a very broad and general framework to guide teaching of the subjects in the curriculum, including the standards at each grade level.

This means that the work of delivering or enacting the curriculum on a daily basis is a significant task. Many teachers struggle to find the time, expertise, or resources to create excellent lessons each day.

² See the Productivity Commission, Review of the National School Reform Agreement Study report

³ Grissmer et al (2023): A Kindergarten Lottery Evaluation of Core Knowledge in Charter Schools. <https://edworkingpapers.com/ai23-755>



d. There are significant gaps in much-needed detailed clarity, guidance and support for Australian teachers in planning and implementing the curriculum in all classrooms.

In particular, there is little support for teachers in developing the instructional materials that they use every day in the classroom. This is a significant driver of a lack of consistency and integrity in implementing a quality, ambitious curriculum in all classrooms, and of inequality in Australian classrooms.

Teachers are looking for more support to plan and implement the curriculum in all phases and across all areas of the curriculum, including importantly incorporating opportunities to - as the Consultation Paper points out - “authentically and respectfully reference First Nations perspectives and ways of learning.”

In addition, high-quality adaptable and tailored curriculum resources can be deployed effectively to support targeted small-group interventions, as part of a Multi-Tiered System of Support (MTSS) model, for students who are falling behind and who require extra help to get back on track, particularly in literacy, and numeracy. Such resources could help to ensure maximum impact from governments’ significant investments in such programs, and support the substantial teacher workforce that is being put in place to deliver them.

Such resources offer particular benefits for high-priority teacher cohorts (new and early career teachers; non-specialist out-of-field teachers; rural and regional small schools and new schools). These cohorts are likely to form a significant proportion of the teacher population. For example, recent estimates indicate that approximately 26 per cent of year 7 –10 teachers are teaching subjects outside of their training; this figure is significantly higher for early career teachers, with 37 per cent teaching out of field⁴.

The Grattan Institute’s report *Ending the Lesson Lottery*⁵ found that more than half of teachers are not satisfied with their school’s current approach to curriculum planning.

⁴ Australia Council for Education Research, 2016

⁵ Hunter, Haywood and Parkinson 2022.

High-equity and high-performing schooling systems offer shared instructional resources; many high-performing schools within Australia do too. However, not all Australian teachers have the same level of access to such guidance and materials. Our 2021 survey of teachers found that just under half of all teachers are teaching in schools with no school-based bank of instructional resources.

This finding aligns with results from the Grattan Institute's recent survey of teachers, which found that about one in three teachers had no access to a comprehensive bank of curriculum materials for any of their subjects, and only 15 per cent have access to a common bank of high-quality curriculum materials for all their classes. It also found that teachers in disadvantaged schools are only half as likely to have access to a common bank as teachers in advantaged schools.

There is significant variation in the capabilities of Australian schools around effective school-level curriculum design. No clear and agreed detailed view of what best practice looks like currently exists⁶. In addition, graduate teachers are currently not provided with sufficient training in curriculum and instructional design as part of their initial training⁷ (note this situation may be improved in part through implementation of the TEEP review recommendations). This leaves many schools and teachers wanting more support in this area.

The provision of such resources must not mean inhibiting school choice, or teacher judgement. Rather, the provision of completely optional, adaptable instructional materials should provide teachers with a high-quality foundational starting point, to customise using their professional judgement to cater to students' varied learning needs and contexts. Such a resource should also enable teachers to focus more capacity and expertise on the critical work to implement such materials to best suit the needs of their individual classrooms, including assistance for individual students who need more support.

e. Current options available to support teachers are not meeting teacher needs

The Grattan Institute survey also found that more than half of Australian teachers surveyed, who were aware of government provided instructional materials, did not think they were easy to find or that they met the learning needs of their students. In feedback provided to us, teachers are not turning to existing government developed materials because they are not comprehensive enough, not easy enough to use and adapt, and do not follow the best evidence about the teaching practices which are most effective in supporting student learning (all of these are features which teachers highlight as those which are most attractive in Ochre's resources).

f. This is clearly demonstrated in use of Ochre Education resources: Australian teachers are accessing Ochre resources in very large numbers; teacher feedback on our resources has been extremely positive

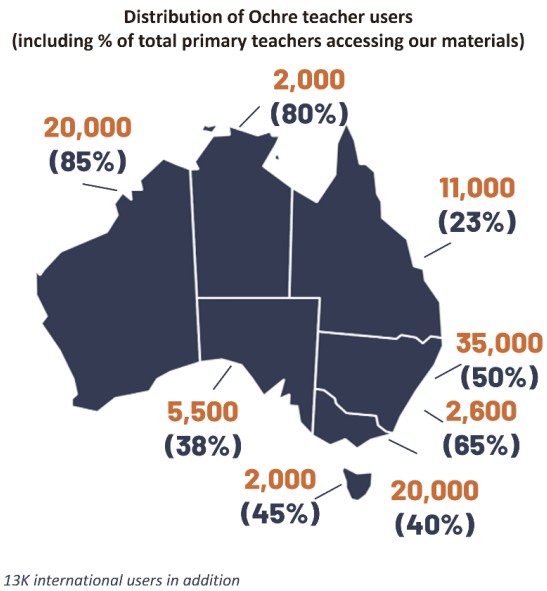
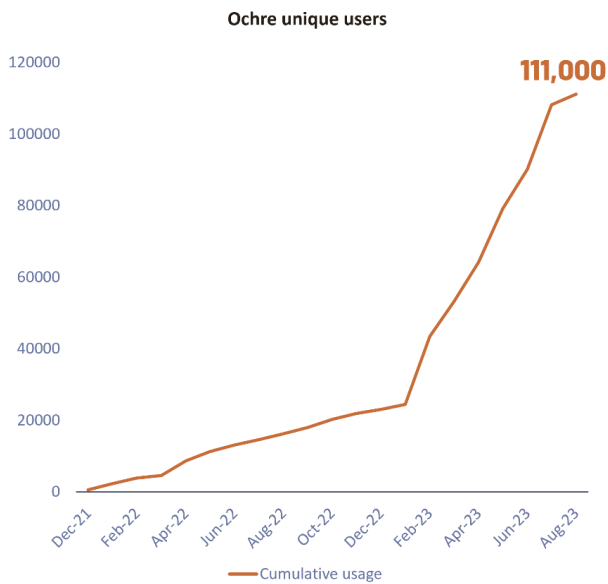
In an Ochre survey, 86 per cent of teachers reported that they would find a resource like Ochre extremely useful, with 98 per cent finding it extremely or somewhat useful. Almost all teachers said they would find editable powerpoints useful, over 60 per cent would find lesson videos, editable worksheets and curriculum documents useful⁸.

⁶ Beyond the ACER NSIT, which specifies some level of detail around systematic curriculum delivery, but remains high-level.

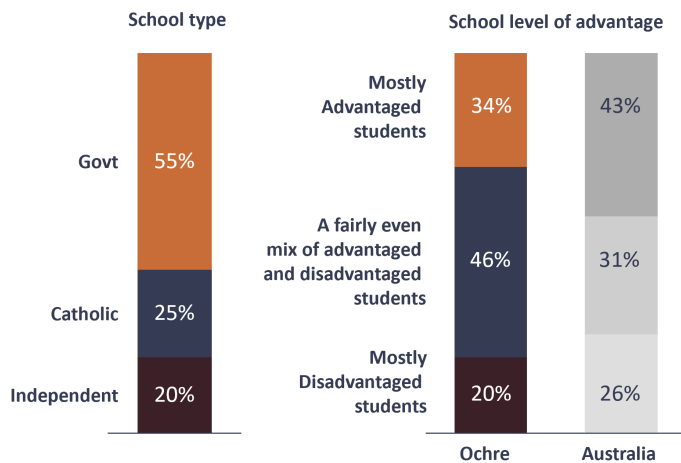
⁷ Note the Oak workload report states that: 'Despite the complexity of planning a curriculum, hardly any teacher we talked to as part of our in-depth interviews received formal training in this area.' A Teacher Tapp survey found that 39% of UK teachers would like to have access to PD on curriculum design.

⁸ Ochre survey, 2021

Over 100,000 Australian teachers have now accessed Ochre resources. This has been achieved with very limited marketing or communications investment (resources being shared by recommendation), and without any direct channels to teachers.



Ochre resources are being used across all schooling sectors; they are also being used by a significant proportion of disadvantaged schools. 66% of usage is from schools with disadvantaged students (vs a national average of 57%).



96% of teachers rate Ochre resources as very high or high quality (65% very high)⁹. Most teachers would be highly likely to recommend Ochre resources to a friend or colleague.

Our user feedback suggests that the features of our resources which teachers have found most attractive are as follows.

⁹ Ochre user survey, 2022-23, n=557

High-quality (sequenced and evidence-based)

- *"I am very appreciative of everyone behind Ochre...I feel confident that what I am teaching follows a scope and sequence and is based on research and is evidence based."*
- *"It is helping us to change our instruction to be more aligned with what we know about science of learning and memory."*
- *"Absolutely love the resources, it's reassuring to know that they are evidence based and can be used in classrooms with confidence."*
- *"a practical and helpful starting point to implementing SoL principles into our practice."*

Easy to use and adaptable

- *"Easy to follow"*
- *"They are easy to use and apply to the content I need to teach."*
- *"Love these resources...so easy to embed into daily practice, easy to use and follow and they look great/appealing."*
- *"I love that the format you have provided allows me to adapt the resource to suit my context. It's great to have a starting point, rather than starting from scratch."*

Save time

- *"What a fabulous resource you are for time poor teachers. High quality, Australian and Free!!!!...Ochre is one of the best things I've found."*
- *"Great resources, thanks for developing these. We have very limited time to develop these ourselves so you save us some time!"*
- *"Thank you for making teachers able to manage their workload, whilst providing the best to our students!"*

Free

- *"Thank you for the excellent resources that have been made free and available across all educational sectors."*

Developed by practicing teachers

- *"I am so impressed with this move of teachers supporting teachers and sharing the expertise-developed resources for free. It's truly wonderful for time deprived teachers!"*

It is in developing resources in this way, that resource providers can build critical trust and credibility in teachers, building confidence in and take-up of resources.

75% of Ochre teacher users report that Ochre resources are being used by other colleagues within their school.

- *"You have all done an amazing job at creating these resources which are so valuable. I have shared this with so many people and they have all loved it too."*
- *"The Ochre resources are excellent and I have shared them with our Maths Leader to share with all staff through the PLC meetings."*

Our resources are ensuring easy access to high-quality instructional materials. Before using Ochre materials only 1 in 3 teachers agreed they had easy access to great materials; after, almost every teacher agrees.

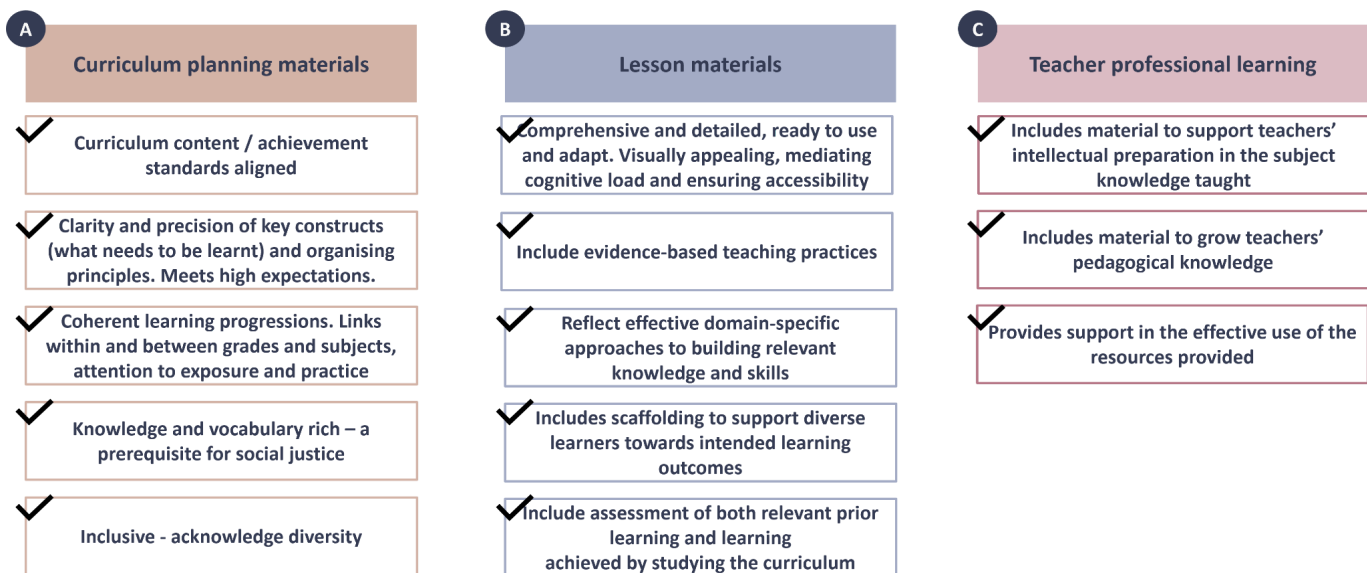
99% of teachers surveyed who have used Ochre resources agree that the Ochre materials have supported student achievement (37% very strongly).

g. Quality curriculum materials such as Ochre’s also support teachers to implement effective teaching practices

In embedding effective evidence-based practices (for example, explicit instruction, formative assessment, spaced practice and retrieval practice), a high-quality bank of resources such as Ochre’s can also support to drive the uptake of evidence-based pedagogical models in the classroom (as recently outlined in the Report of the Teacher Education Expert Panel¹⁰).

It is critical that instructional resources are aligned with an evidence-based quality framework, to ensure that educators can be confident that the resources that they are utilising are quality-assured, evidence informed resources, aligned to curriculum and which support effective teaching and learning.

At Ochre, we have developed a rigorous three-part quality framework, based on other evidence-based frameworks, which sets out the key features which we embed in our resource design and development, across: curriculum planning materials, lesson material and teacher professional learning (noting the critical role of professional learning, support and guidance to teachers on how to most effectively adapt and use the resources).



Over time, we would support the development of an independent body - as a number of stakeholders have promoted - which could quality-assure resources against such a framework. It is important that reform efforts however do not focus their initial attention on the development of such a body, to the exclusion of the development of the resources that would be assessed by such a body, and to which teachers need immediate access.

We believe that it is important that these quality standards are also underpinned by the following features covering the way our resources are designed and developed, and made available to teachers:

¹⁰ Strong Beginnings: Report of the Teacher Education Expert Panel (2023) <https://www.education.gov.au/quality-initial-teacher-education-review/resources/strong-beginnings-report-teacher-education-expert-panel>

D How materials are developed and designed

- ✓ With significant collaboration and sharing of expertise of practicing teachers, including road-testing.
- ✓ Developed by an independent trusted organisation

E How materials are made available to schools and teachers

- ✓ Made available for free.
- ✓ Gather feedback, evaluate and revise.

h. A shared curriculum bank such as Ochre’s can also cut teacher workload

Lack of shared curriculum resources is contributing to workload pressure for teachers. Better support for teachers is one factor which can help to address longstanding teacher shortages, especially in regional and remote locations, which are compounding educational inequities.

Adopting high-quality curricula can also lessen the need for teachers to search for or develop their own instructional materials, freeing up teachers’ time to be spent on the many other important aspects of teaching. Currently, time-constrained teachers are spending significant time each week creating resources, often from scratch, or sourcing material from private platforms or the internet. Teachers identify that an instructional bank which they could adapt from could save them multiple hours each week. Not only time-consuming, the work of curriculum knowledge and curriculum planning is also complex, and an area in which particularly early career teachers indicate that that they want more support.

In addition, the most common resources that teachers currently draw on to plan and deliver lessons are low-quality, with these low-quality tools being used more in disadvantaged schools.

Evidence from the Grattan Institute and the UK’s Oak National Academy suggests that such an initiative would contribute to a more sustainable teaching profession, and our own surveys of teachers confirm these results. We found that 16 per cent of all teachers are spending more than 10 hours a week developing and preparing instructional resources; over 50 per cent are spending more than 5 hours.

Oak research shows that it has reduced the amount of time the majority of teachers’ spend planning and resourcing lessons. Oak improved the workload for 42 per cent of its users, on average by 3 hours per week. Spending less time on lesson planning enabled them to shift their focus, for example on supporting vulnerable students.¹¹

For teachers who have used Ochre resources, 98% agree that they have reduced the time they spend searching for and developing instructional resources (40% by ‘a lot’).

Given the current introduction of new versions of the Curriculum in every State and Territory, supporting teacher workload in relation to curriculum planning, is even more important.

i. Following the approach of the UK’s Oak National Academy, a bank of high-quality instructional resources would provide Australia with a freely accessible national asset that ensures continuity of learning for students

As the Consultation Paper points out, such a national bank could also provide access to continuity of learning where there is disruption to classroom routines caused by pandemics, floods or other catastrophes, student illness or other disruptions to learning. The investment required to build

¹¹ Oak National Academy, [‘Workload and curriculum: what have teachers told us?’](#) (2022)

and maintain such a bank represents a sound approach to ensuring continuity of learning for all Australian students.

This support for continuity of learning could include a full suite of videos featuring practising teachers teaching each of the lessons. Our experience in producing these videos as part of the Ochre offer aligns with the experience of Oak National Academy in the UK. The videos have multiple uses - they are used by students, teachers and schools. The videos can be watched by students to support learning, either because of disruption to their normal school attendance, or as educational supports or extension of in-class teaching. Teachers have used the lesson videos as means of professional learning, particularly if teaching out-of-field. In addition, some schools have used the videos to support with coverage of absent staff, particularly during periods of very high absence.

j. Generative Artificial Intelligence (AI) offers considerable potential to support curriculum planning, create classroom resources and help individual students with their learning; it must be approached with extensive teacher expertise.

At Ochre we are already using generative AI to contribute to our curriculum and lesson design and development process, under the judgement and assurance of expertly trained teachers, and we will continue to explore this developing potential. Currently inaccuracy remains a significant risk in use of AI. Whilst AI offers significant potential to support curriculum and lesson development, extensive teacher expertise will continue to be needed to mitigate the risk of inaccuracy, and develop lessons aligned with teacher judgement and the best evidence. We believe that a totally reliable, freely available open-sourced lesson bank can support the development of AI products.

k. Such an initiative must be championed by governments, and has clear cross-jurisdictional benefits

If left to the market alone, such resources will not develop with sufficient quality, scale and speed¹². In addition, with cost as a barrier to entry, there will be significant access issues for many schools. This is especially important for small schools (most often in regional and remote geographies, which experience significant barriers to equity), which are unlikely to have sufficient scale to purchase commercially provided resources, particularly across all subjects.

Given the resources available to governments, it is right that governments take primary responsibility for developing such resources. However, given the scale and importance of this task, they could be supported by philanthropic investment within Australia. This would follow the situation overseas, where in the US in particular, philanthropic investment has underpinned the development of curriculum supports for several decades.

Such an approach has clear cross-jurisdictional benefits. It supports the implementation of the Australian Curriculum across all States and Territories, including the latest version of the Curriculum which schools will be required to transition to over the next two years. A national resource bank would fill a genuine gap in current support for schools, and delivering it as a national project would maximise scale to deliver more productive outcomes across jurisdictions and schooling systems. This would particularly benefit those smaller systems which may find it challenging to generate such support by themselves at scale and speed, and which could also seek to gain most from the benefits of such an approach.

¹² See the work of [Michael Watt](#)

There is a significant risk that larger jurisdictions decide to move ahead in developing resources for their context and schools independently. This risks significant inefficiency, and delay to providing quality resources to all teachers and their students. Resources should be designed and developed from initiation with a national purpose in mind. They should also be shared across schooling systems and jurisdictions.

The longer-term savings associated with teachers' use of materials such as those Ochre is providing as part of their lesson preparation are considerable. Taking a conservative estimate of 40,000 Australian teachers making use of a single lesson resource each week over the course of an academic year (our access has been 100,000 teachers to date), we could observe a total time saving of 1.52M hours per year, or an equivalent cost adjustment of \$58 million in Year 1. This would represent a benefit cost ratio of 2.6 on a \$22M investment.

Using the methodology of Hanushek (2011), we can make estimates of the discounted net benefit accruing from a year of teaching by a teacher using Ochre for a fraction of their lessons. Assuming that the Ochre materials lift the quality of the average teacher quality from the 50th to the 53rd percentile, 40,000 teachers using Ochre for one lesson a week could be expected to accrue an effect on student lifetime earning of almost \$142M. This represents a benefit cost ratio of 6.5 on a \$22M investment. Note that the assumption of student gain is based on the recent Oak independent evaluation, which showed an improvement of teacher quality up to the 55th percentile. A conservative estimate has been used above, due to differences in extrapolating Oak data into a non-pandemic situation.

I. To deliver a coherent and comprehensive offer, and produce high-quality resources as swiftly and effectively as possible will require governments to commission the development of new resources, aligned to Australian curricula.

One approach that has been suggested to developing such a bank of resources is to audit existing supports, for governments to quality assure these existing resources, and then to fill any gaps. Or alternatively, for this effort to build on existing content that resides within jurisdictions.

The biggest challenge to such approaches is that they are likely to be incredibly slow to deliver (requiring agreement to a detailed quality framework and then significant work to quality-assure resources, and then potentially realign to the Australian context). Some have also suggested building on existing national resources. However, these resources do not offer anything like the scale of materials required for this approach to be useful. Other existing resources provided by governments are clearly not meeting current needs in full. Building on them would be likely to require a significant amount of work, and will not deliver the required coherence or consistency needed given the vast range of formats, sequences and purposes across these materials.

Such an approach also risks continuing to make the offer to schools piecemeal. This would mean teachers continuing to have to spend significant inefficient time pulling together existing resources, with little change to the current status quo. Consistency supports accessibility, upholds technical and quality standards, and creates familiarity for teachers and students.

Take-up and impact of Ochre resources has been significantly increased when we have been able to offer a substantial end-to-end resource that teachers can readily utilise to support their everyday practice.

To develop such resources would require investment of around \$22M (\$33M if all lesson videos are produced). This includes curriculum maps and lesson resources for primary and secondary (F-10) English, Maths, Science, History Geography, PE, Creative Arts (~7.5K lessons). It also includes professional learning resources. Total investment would be \$33M, including developing lesson videos for all lessons.

m. To enable this change to be most effective, the development of a comprehensive resource bank should be accompanied by an increased focus on quality curriculum implementation as a critical lever to drive improved student outcomes.

The implementation of such a resource bank should occur alongside a continued substantial focus at the whole-school level on strong school leadership with a sustained commitment to building a shared understanding and knowledge base of curriculum, a consistent assessment framework, and an underpinning shared instructional model. At a system-level, there needs to be a more sustained focus on the quality of curriculum design and implementation within schools.

3. How this recommendation can help to achieve the original ambition of the previous NPI, the Online Formative Assessment Initiative (OFAI)

Improved formative assessment practices are critical to enable teachers to assess a student's knowledge, skills and understanding, identify and support next steps in learning through evidence-based resources, and track progress over time. This is particularly important to address the need to ensure targeted support for students who are falling behind in their learning. This was the ambition of the OFAI.

As the Productivity Commission's report points out, the current agreed model for progressing the OFAI - a pooled assessment bank - "appears to fall short of this ambition". In particular, the current approach lacks the ability for teachers to identify and support next steps in learning.

All Ochre's lessons include consistent adaptable formative assessments (in the form of multiple choice quizzes at the lesson and Unit level). Each lesson also embeds Checking for Understanding as the backbone of instruction - as formative (on-going) assessments. As the evidence strongly recommends, teachers are supported to use their professional practice to collect information about students' understanding almost continuously, and make adjustments to their teaching on the basis of their interpretation of that information. We are also investigating how additional formative assessment resources and tools could support teachers in implementing Ochre materials, identifying skill or knowledge areas to focus on, identifying and supporting students who need extra support, and providing information on student performance. Intuitive technology could support this.

A high-quality resource bank should act as the foundation to realise the original objectives of the OFAI, by significantly increasing the ability for teachers to use effective assessment practices, and support teachers to provide responsive teaching, once next steps in learning have been identified. This could be complemented by additional assessment tools and resources (diagnostic assessments aligned to the Australian Curriculum and state variants, and the National Learning Progressions). There are a variety of current assessment platforms and tools available to schools which could be built on in this work, rather than governments building new tools from scratch.

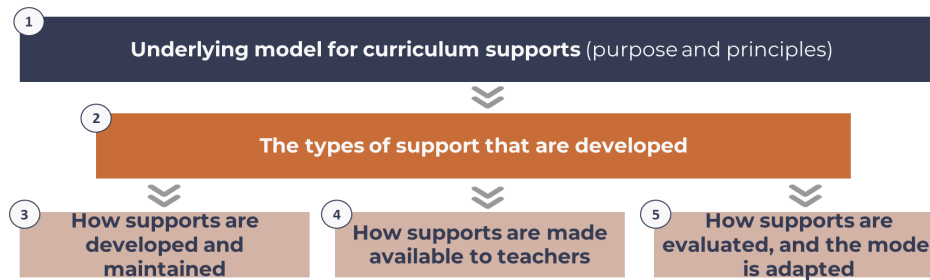
4. How governments can move with speed and urgency to implement this recommendation, to support the Australian teacher workforce, and its current significant and pressing challenges

- a. **Based on our experience, and the experience of other jurisdictions, governments commissioning a suite of curriculum materials is not only desirable, but clearly achievable within a relatively short timeframe.**

Given the significant and pressing challenges affecting the teacher workforce at present, work to develop the bank should commence immediately, and be flagged as a reform that will be developed further through the implementation of the NSRA. If left solely to be implemented as part of the NSRA, work to create such a bank could not commence before 2025, with materials not available until likely 2026. This would represent an unacceptable delay.

In the National Teacher Workforce Action Plan (December 2022), Ministers tasked ACARA with: “examining ways to develop and make available to teachers, optional supports to assist the implementation of the national curriculum.” We understand that advice has been provided to governments and additional advice commissioned. This progress is far too slow, given the clear benefits of this work, teacher demand and need, and international examples of governments acting successfully with speed and urgency on this issue. Ochre Education - and other key stakeholders - have been pressing governments to commence this work since 2021. In the time since, we have created over 900 lessons, and all of the core materials for primary mathematics, supporting 100,000+ teachers and hundreds of thousands of Australian students.

We suggest that the following elements are the key aspects which would need to be agreed to take such a model forward:



1. The Underlying Model for Curriculum Supports

Curriculum supports should be understood as the range of supports that assist schools and teachers to implement the Australian Curriculum (and State curricula). Supports include curriculum plans, instructional resources and professional learning (see below).

Given the resourcing and implementation gaps that are evident within Australian schools, the primary purposes of curriculum supports should be to enable schools to both design an effective school-based curriculum and to enact that curriculum effectively, including supporting the use of evidence-based teaching practices.

This means supporting the implementation of the Australian Curriculum in those jurisdictions which adopt the native version, whilst also aligning supports to assist implementation of State and Territory curricula to ensure maximum utility for all schools.

Given this primary purpose, the priority must be to develop a comprehensive offer of curriculum supports, with full adaptability for teachers. There are other supplementary purposes, which can also be considered as secondary benefits. These should be considered in design, but they should not become the primary drivers for such an initiative. Such secondary benefits include: for parents and students to access, as supplementary resources to support in-school learning; to support targeted small group tuition; as a remote education contingency; providing consistent examples of quality curricula and effective teaching practices to support PL programs.

a. Design Principles

It would be useful for governments to collectively agree on some transparent design principles that would underpin how such curriculum supports should be brought together and offered to teachers.

We suggest that these principles could include the following:

- *Aligned to the Australian Curriculum and State curricula.*
- *Designed to provide maximum practical benefit to teachers' everyday practice, including the significant, active involvement of practising teachers in their design and development.*
- *Evidence-informed, supporting effective teaching and learning.*
- *That teachers can use flexibly, including being adaptable and customisable.*
- *Easy to use, including being made available at the point of need (e.g. to support implementation of new national or State curriculum).*
- *Optional.*
- *Free.*

b. Prioritisation of supports

Governments should prioritise the commissioning of flexible, comprehensive resources in high-impact subjects (English, Maths, Science, Humanities in the first instance), and phases (e.g. primary maths). Considerations such as proportion of teachers teaching out-of-field (e.g. lower secondary maths) should also be taken into account in making decisions about the prioritisation of supports.

Governments should also consider the need to develop resources to support changes to the curriculum, particularly in areas where there is a significant shift in emphasis. Resources should be developed across whole phases within each subject to maximise curriculum coherence.

Following this (or potentially alongside), governments should consider developing resources in more specialist areas, where teachers often plan and teach alone (e.g. languages, arts, some social sciences). This would be especially important for regional and remote schools, where out-of-field teaching in these areas is particularly prevalent.

2. The types of support that are developed

- Given the wide variation in context across Australian schools, Governments should prioritise offering a suite of flexible supports over a more prescriptive program (which has to be followed in full) to enable teachers to use such a resource bank as a starting point for their professional judgement.

- Supports should include:
 - Overall school-based curriculum plans (to ensure coherence, and provided as models).
 - Adaptable classroom-level resources for teachers (ensuring that these can also have utility for students direct as a remote contingency)
 - Guidance and support / professional learning resources. Noting that the evidence is clear that the provision of high-quality resources combined with actionable professional learning for teachers, significantly increases effectiveness¹³.

a. Quality benchmarks

Governments should collectively establish a quality framework for each of these elements. This should be done at the national level. The quality standards that we have developed at Ochre provide one model for such a framework (see page 10).

3. How supports are developed and maintained

The most effective approach to develop supports is for governments to commission new resources from external providers. This allows governments to draw on external capacity and expertise, which - especially when delivered by not for profit organisations - can be provided at relatively low cost and therefore at exceptional value, including with attractive IP arrangements (such as open-source Creative Commons licensing). It also means that governments can develop resources at speed and scale. As the Productivity Commission Report pointed out, commissioning resources from a trusted provider also allows governments to ensure 'vital buy in' from teachers¹⁴.

Such an approach would be significantly more effective than other available options, many of which have been tried unsuccessfully in Australia and overseas. For example, government developing resources in-house (slow, often lacking capacity and independence); remapping and repurposing existing resources from external providers (expensive and would require significant rework and time); funding schools to collaborate and share materials (various degrees of quality, challenges to ensure adequate coverage).

a. Mechanisms to evaluate against quality benchmarks

Governments should use the agreed quality standards to support a commissioning process, alongside technical standards. As resources are developed and delivered, these technical and quality standards would be audited. There should also be significant opportunities for road-testing and feedback from teachers.

b. Commissioning process

Governments should set a national funding bucket, potentially supporting the development of full resource sets in some subjects, and pilots in others (e.g. specialist subjects).

In considering how to structure a commissioning process, governments should prioritise coherence, consistency and ease of use (building choice into the resources themselves), over full flexibility and choice of options from a large number of multiple providers. For example, in the UK, Oak National Academy have recently commissioned resources in subject lots for this reason

¹³ Mathematica, [Evaluation of the Teacher Potential Project](#), 2019

¹⁴ Productivity Commission, [Study Report, Review of the National School Reform Agreement](#), 2022

(selecting one provider per subject lot). It should be noted that the UK market is already significantly more developed and mature than the Australian market.

There could be options for governments to co-design and co-deliver in some aspects (for example, support from curriculum experts; training of teachers).

Governments should be transparent about the national funding bucket and required timeframes for resources to be developed. They should closely specify the requirements for resources up-front, and could request detail on unit pricing from suppliers. Governments should clearly outline the commissioning schedule up front (noting, it is our estimation that based on previous procurements, this could be completed in less than six months end to end).

Maintenance of resources over the term of a contract should be included in the commissioning process (for example, three years post development).

IP arrangements should be specified up front. For maximum value for governments, these should be required to be set at Creative Commons International 4.0.

Our experience demonstrates that it is possible to develop significant volumes of high-quality resources, at speed, with the right model in place. We have completed the development of all core primary maths resources (every lesson for F - 6) in less than one year. Primary English would be a similar timeframe. More specialist subjects would take longer to develop, primarily due to the availability of Teacher-Creators in our model.

We estimate that we could complete the development of all primary and secondary resources (F-10) in English, Maths, Science, History in 2 years. Developing primary and resources in Geography, PE, Creative Arts would take an additional 2 years. Given the obvious benefits and need, we urge urgency in commencing and completing a commissioning process. Establishing such processes to provide maximum certainty to providers through contract duration would also support effective delivery.

4. How supports are made available to teachers

a. Marketing and communications

There is a clear need for the development of resources to be accompanied by a significant marketing campaign, to make teachers aware that resources are available to support them in their practice. This could be driven by States and Territories and schooling systems. There would also be some significant efficiencies in a collaborative national approach.

b. Technology and platform

Equally, resources need to be distributed on a fit-for-purpose platform with a highly effective user experience for teachers. As a 'one stop shop', this could be developed once as a collaborative national approach. Equally, the provision of such a platform could also be considered as part of the commissioning process outlined above. The platform would ideally present materials emphasising their coherence. This would involve them being available in units of work rather than individual activities where connections and scheduling are difficult to determine.

How resources are made available to teachers should be a significant priority as part of such a project, and will need investment to deliver to scale and speed. Such a platform could also house

professional learning support for teachers relating to how to most effectively implement resources within classrooms.

5. How supports are evaluated and the model is adapted

a. Evaluation

Rigorous evaluation should be put in place, which puts listening to the experience and expertise of teachers at the heart of this work. Research should include quantitative and qualitative surveys, interviews and focus groups of the teacher population. This could be developed in-house or commissioned from an independent organisation, where appropriate.

There would be significant opportunity to conduct external evaluations with rigorous study designs (such as randomised control trials), as in the US through the US Department of Education's Investing in Innovation grants. These would ideally seek to evaluate the impact of curriculum and professional learning support, not only on teacher workload and teaching practice, but also on student progress and achievement.

b. Adaptation

Learnings from evaluation would enable governments to understand how teacher needs evolve over time, and how an offer would need to be adapted and improved to meet them.

5. Suggested next steps

1. **By end 2023. All Governments to commit** to the development of a bank of quality-assured, sequenced, evidence informed teaching resources that are aligned to curriculum and support effective teaching and learning. This should be a major initiative within the next NSRA. Given the significant and pressing challenges affecting the teacher workforce at present, work to develop the bank should commence immediately.
2. **By end 2023. A national fund to be established** to kick-start this work. Priority should be the development of resources in primary and secondary Mathematics, primary and secondary English and primary and secondary Science, given Australia's decline in international tests in these areas (as well as in national standardised tests). Our estimation is that a fund of around \$10M would be required for English and Maths and an additional \$2.5M in science. Governments to announce their intention to establish a broad-system-wide partnership, and identify suppliers through an open procurement. Resources to be available to support teachers from 2025. A lead delivery agency to be agreed at the Commonwealth-level to develop this work, with relevant resources. This agency would be given full accountability to deliver this work. A consultative group to be established with other relevant national bodies, States and Territories and school authorities to provide advice on the process. Additional consultative groups of key stakeholders may also need to be established.
3. **Q1 2024.** Governments to publish **draft design principles**, and a proposed **schedule for procurement**. Government to decide on platform development options. Market-engagement activities to begin.
4. **Q2 2024. Procurement process to commence.**

5. **Q3 2024:** Successful partners announced and curriculum package development commences.
6. **Term 4 2024:** Resources road-tested in schools.
7. **Term 1 2025:** Resources made available to all Australian schools via agreed platform.

Notes on Ochre user data

Possible sources of overcounting:

- Unique users could include double counting of people who switch devices, switch browsers, or clear their cookies. However, as resources need to be downloaded, most teachers will be accessing via a desktop.

Possible sources of undercounting:

- Data only includes resources accessed via the Ochre site, and not those accessed via our partners (e.g. via the AERO website direct, or diocese intranets).
- 75% of our users report that our resources are being shared with and used by others at their school (e.g. we know that schools are downloading our resources on their own google classroom and then allowing all teachers at the school to access). Our user numbers do not count these users.
- In our reporting we assume all users are teachers (our registration shows 99% of our users are teachers) and all teachers are primary teachers (our data shows 96% of our users are primary teachers).
- Data on numbers of teachers is taken from ACARA (National Report on Schooling in Australia, staff numbers dataset).
<https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal/staff-numbers>.
- Note that ACARA uses FTE; so a standard ratio of FTE to headcount has been assumed in each State to derive headcount (1:15). We have used ACARA data to define proportion of teachers which are primary teachers (52%).