

# **PURPOSE**

The purpose of this document is to present the outcomes of the discovery phase undertaken for the Learning Progressions and Online Formative Assessment National Initiative. This document includes all the collated artefacts that will inform the **design steps recommended** to be carried out in the alpha phase.

# CONTENTS

Pur	pose	2	Outputs	:
Exe	cutive summary	4	Key audience personas	
	Key findings	6	Personas for system owners and vendors	
	Recommendations	9	Journey maps	!
Met	thodology	10	Service map	
	Approach	10	High-level user needs	
	User research framework	11	Hypotheses	,
	Key audience validation	12	Next Steps	10
	In-depth interviews	13	Sneak peek of the alpha phase	1
	Working sessions	14		
	Focus groups	15		
	Ethnography research	16		
	Field research	17		
	Consultations and stakeholder workshops	18		
	Surveys	19		
	User needs and ideation	20		
	Gap analysis	21		

In the discovery phase of the initiative, ESA was tasked with conducting user research with teachers, school leaders, students, and parents and carers. Also consulted were jurisdiction leaders and vendors of commercial products.

The user research focused on understanding the landscape in which users are working concerning monitoring student learning and supporting learning progress. Consideration was given to the challenges users are facing, existing methods and any gaps in users' ability to achieve teaching and learning goals.

A multi-modal research design was implemented to reach out to a representative sample across states and territories, sectors, regions and school levels (e.g. primary and secondary).

Firstly, a Teacher Practice Reference Group (TPRG) was established, via recommendations from AITSL's Professional Growth Network (PGN). The TPRG comprised 27 teachers and school leaders from across Australia who are representative of sectors, locations and school sizes. The TPRG's remit was sharing practice and, making contribution from prior learning and taking part in relevant contributions, user-centred design and research activities. It also included, nominating and connecting the initiative team with other school community members where more extensive views were sought from teachers, school leaders, students, and parents and carers.

#### **METHODOLOGY**

Seventy-eight school leaders (n = 24) and teachers (n = 54) participated in one-on-one, in-depth interviews across the country. A total of 26 school leaders and teachers across Victoria, New South Wales, South Australia, and Western Australia attended four 2.5-hour working sessions. Four schools from Western Australia, New South Wales, and Victoria were visited to conduct 2-hour ethnography research sessions. For a more comprehensive engagement with teachers and students, whole-day field research was also conducted in three Australian schools. Two schools in New Zealand were also visited for comparative purposes.

Moreover, six 90-minute focus group discussions were held with 18 parents and 18 students across Western Australia, New South Wales, and Victoria. The purpose of this was to collect parent and student perspectives on various topics relating to learning and progress.

An online survey was then conducted to validate the results gathered from the qualitative research methods. The respondents were 93 teachers and school leaders, 214 parents, and 290 secondary students.

Once research findings had been gathered, they were analysed and synthesised into several outputs. These outputs serve to present the research findings in a digestible format, assist decision-making in user design in the next phase of research, and build empathy with the users.



#### **OUTPUTS**

Four key audience user types emerged from these findings: classroom teachers, school leaders, students, and parents and carers. Based on these user types, 12 personas were developed to represent them. Six personas were developed for system owners and system vendors.

Four journey maps were also produced to illustrate users' experience over time (as opposed to representing their experience as a snapshot). The journey maps showed that users progress through five distinct phases when focusing on an upcoming topic or unit of work, or even within a lesson. These are identify goals; plan; teach and learn; measure; and feedback and next steps. A service map was also created to illustrate a collective summary of the users and channels, showing the different touchpoints and user interactions with various sources of information.

The most common pain points were then drawn out of the personas, journey maps, service map and raw user research data, and grouped into eight common themes of high-level user needs. These user needs were then further validated by the TPRG members through a series of mapping activities undertaken in a workshop.

#### **HYPOTHESES**

From the user needs, six hypotheses, consisting of opportunities to alleviate user pain points and needs, were developed. Furthermore, seven user stories and wireframes were designed to represent how these hypotheses might be addressed in an online system.

The hypotheses and wireframes are intended to be tested and refined in the alpha phase.



18 personas



4 journey maps



1 service map



8 user needs



6 hypotheses



7 user stories



# **KEY FINDINGS**

The findings from this research highlighted recurring themes that transcended sector, school context, preferred teaching approaches and student needs within the journey that schools undertake in supporting student learning and identifying progress.

- It was very evident that teachers and school leaders utilised a varied and fragmented suite of data sources. This practice makes collection, collation, and analysis of different types of data a tedious, and time-consuming process. It often leads to reduced time for classroom teaching and student engagement. The underlying problem is not the lack of data, but that data is everywhere.
- 2. Data from standardised assessments are more readily available and often the primary source to determine students' attainment levels. However, there is a consensus from teachers that data from these sources reflect only one part of any student's story. It does not accurately reflect what students have learned, the depth of their understanding, the progress they gained, and what they might be capable of doing next.
- 3. The majority, if not all of the teachers, rely upon developmental approaches to obtain a more holistic understanding of their students' learning and progress. However, formally recording their classroom observations is a significant challenge for most teachers due to the lack of time and efficiency. As a result, some types of formative assessment data were either not collected or not collected with rigour. Thus, there is insufficient recorded evidence that can support teacher judgement around student learning gaps and next steps.

- 4. There is also a consistent and repeating conversation among teachers around who is responsible for collecting which data. It takes time to build their practice and confidence to know which data to record, and to ensure that it is kept up-to-date with no duplication. Data collection is deemed less valuable when teachers lack data literacy skills and have minimal knowledge about how to use data effectively.
- 5. From the findings, teachers recognise and readily talk to the ideal of providing personalised learning for all students. However, the effort to differentiate for every student, every lesson, and across the curriculum, is almost insurmountable. This challenge is remarkably real in a class where there is a wide disparity in student attainment levels and capabilities. Teachers have to continually tailor the curriculum, identify appropriate resources, scaffold assessments, provide extension or remedial tasks, and shift their teaching approaches. These tasks require intensive planning that takes up a significant amount of time, and often leads to teachers sacrificing their personal time.
- 6. Despite careful and thoughtful planning, unforeseen contextual circumstances still occur that teachers must cater to in class. Less experienced teachers often find these circumstances overwhelming as they have not developed or learnt about strategies that will assist in such situations.

# **KEY FINDINGS**

- 7. While teachers have become adept at drawing from a myriad of online and offline resources, as well as tools to help in planning and designing lessons and activities, there is still a significant burden on teachers' time to find, evaluate and align these to the respective curriculum they teach. Inconsistencies in the understanding, interpretation and implementation of the curriculum aggravate this pain due to the guesswork involved. Often, this resulted in teachers being less confident in their teaching and assessing students.
- 8. Collaborative planning practices alleviate the pain slightly for teachers that are in schools that have these structures in place. Still, most recognised that direct access to quality-assured, evidence-based, research-based, and curriculum-aligned resources is a substantial information need for them. Resources that will help close learning gaps and support the next steps in teaching to ensure continuous student progress are most sought after.
- 9. Teachers reported that they were continually monitoring and assessing student learning using various methods. However, they found it incredibly challenging to provide timely, personalised feedback and differentiated next steps for each student. Students reported a lack of awareness about where they are in their learning, what their learning gaps are, and what they need to focus on next. Parents share the same sentiment and attribute their limited involvement in their child's learning as a result.

- 10. Very prominent in the research was the extensive and frequent use of technology, online resources and tools by teachers and school leaders across the phases in the journey of supporting student learning and progress. When access to technology or online tools is limited due to restrictions set by the school or sector, lack of funding, lack of staff skills, and other factors, it becomes a source of frustration, especially when it disrupts student engagement and interferes with the learning experience.
- 11. Findings showed that, in general, teachers and school leaders had significant and increasing awareness of the National Literacy and Numeracy Learning Progressions (NLNLPs). Teachers who believed they had good knowledge and understanding of the progressions and their applications, viewed them as a tool that helped in developing a common language around student learning and progress, while also creating high expectations among teachers, students and parents. The progressions were also seen as helping to diagnose where students are at and their next learning steps.
- 12. However, the slow overall adoption of NLNLPs in schools was found to be due to some common barriers. Typically, teachers (and some school leaders) describe the progressions as unwieldy and overwhelming and believe the amount of time it would take to become familiar with them would be excessive. School leaders reported concern that adoption of the NLNLPs would add to teachers' burden, primarily if it were not supported by robust professional learning. Some teachers view the progressions as providing little benefit, and others believed them to be irrelevant to their school or state.



# **KEY FINDINGS**

- 13. It was evident in the findings that teachers highly value time towards professional learning. It provides them with an opportunity to come together with peers to explore new ideas, share knowledge and reflect on their teaching approaches. Teachers and school leaders reported that among the professional learning sessions offered, they find the most value in courses and workshops that provide practical information, hands-on strategies, and modelled techniques that can be easily applied or tailored in the classroom. There is also a strong preference for the subject of professional learning to include only interventions that have clear evidence of impact on student learning and outcomes. Although most teachers may not describe independent research as professional learning, it is an activity that they regularly engage in – especially researching quality resources and tools to use in their classes.
- 14. Overall, the pain points teachers, school leaders, parents and students are currently experiencing in the process of supporting student learning and identifying progress have been refined into eight common themes of high-level user needs. These are assessment and evidence, personalisation and differentiation, resources, curriculum, learning progressions, professional learning, feedback and next steps, and technology.



# RECOMMENDATIONS

**Six hypotheses** were developed through examining the emerging high-level user needs and their impact on the current user journey in supporting student learning and identifying progress. The assumption is that these hypotheses will address the needs and improve the current user experience. These are recommended to be tested and refined in the alpha phase.

- Learning integration and visualisation will relieve users of the burden
  of collating and analysing data from varied sources, searching for
  resources linked to the curriculum and learning progressions, and
  tailoring or creating quality assessments. Learning integration and
  visualisation will enable users to better understand their students'
  current learning, provide personalised feedback, and plan differentiated
  next steps.
- 2. Alignment to the learning progressions of teaching, assessment, student and parent resources, including resources from third-party providers, and data on student learning that is available and recorded, will help users to assess students' current levels of attainment. It will also help them to identify progress, plan the next steps with confidence, and improve the applicability of the learning progressions to everyday teaching practice.
- 3. Assessment as a frequent practice will make it easier for users to record their classroom observations as evidence of learning, make assessment data readily available and easily shared, make planning and moderation among colleagues more efficient and, as a result, improve consistency and confidence in their everyday judgements. Students will be able to upload evidence of their work, which will help them to understand their learning goals in the language of learning progressions, and also lessen the time spent on data entry.

- 4. Recommendation and personalisation will make it more efficient for teachers and school leaders to plan and implement data-informed differentiation for students, according to current attainment levels and capabilities. Users will be able to easily spot groupings and outliers in class, in terms of their progress. They will also have access to recommended next steps and digital resources and assessments that will enable them to effectively support their students' next learning steps and provide personalised, timely feedback. Users will have the ability to change their class groupings to support a variety of approaches for differentiation, based on their judgements and decisions. They can also decide which data to share and who to share it with, and customise settings and reminders according to their personal needs.
- 5. Discoverability and accessibility will significantly reduce the time users spend on searching for assessment and digital resources, which are quality-assured, evidence-informed, curriculum-aligned, and practical for use in the classroom context or their specific situation. Having access to a database of curated resources aligned to learning progressions will enable users to address with greater confidence their students' learning gaps and next steps.
- 6. Evidence-based learning pathways will provide users with a starting point for using learning progressions to inform their planning and teaching practice. Users can trust that their plans are data-driven and targeted to build on student strengths, address necessary student learning gaps and provide differentiated next steps. The capacity to share these plans with colleagues will encourage consistency in practice and improve whole-school approaches.



May

**June to August** 





May



June to July

July



September

September



**User needs** 

and ideation

**TPRG** workshop

That's this

document!

October

OCTOBE

Audience profile and needs analysis

METHODOLOGY

# **APPROACH**

A multi-modal research design was implemented, based on an agreed user research framework to reach out to a representative sample across states and territories, sectors, regions and school levels (e.g. primary and secondary).



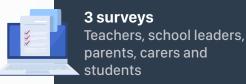
4 ethnography sessions

Teachers, school leaders and students

June



August



June to July



May to August

Consultations and workshops System owners, vendors and other stakeholders



### **USER RESEARCH FRAMEWORK**

The first activity during the discovery phase was to establish a user research framework to guide interactions with research participants and ensure user needs and pain points were central to the process.

The framework identified the user types and segmentation criteria used to select research participants. It also included the discussion guides that provided topics and questions for interviews, field research, focus groups, and any other user research activities. Additionally, the framework supported the work of third-party vendors that conducted parts of the user research.

As the team learned more about potential users, the framework was refined continuously as well as adapted as required during different modes of research.

#### OBJECTIVE SNAPSHOT

To understand the broader landscape of monitoring student learning and supporting learning progress, specific areas of current practice were identified for investigation and, in particular, pain points and challenges, including:

- 1. Roles, duties and tasks performed by teachers and school leaders on a day-to-day basis
- 2. Planning processes within schools and classrooms
- 3. Devices and tools used
- 4. How teachers and schools currently determine 'where a student is at' and 'where a student needs to progress to next' for them to achieve required learning outcomes
- 5. Available and unavailable data and the tools used to support data access and use
- 6. The methods, frequency and reasons for delivering differentiated curriculum
- 7. The levels of familiarity with and understanding of the National Literacy and Numeracy Learning Progressions (NLNLPs)
- 8. The role of professional learning in supporting student learning and assessment and the features of valuable professional learning experiences
- 9. Online assessment and learning resources accessed/used by teachers and leaders
- 10. The range of attitudes, behaviours and experiences among students and parents and carers about learning progressions and assessment at school.



# **KEY AUDIENCE VALIDATION**

In the first workshop with the TPRG, the team took the chance to validate the potential target users and refine the user research framework

During the first day, members were tasked with creating personas based on their personal experiences in small groups. Groupings were according to the segment that best fits them (e.g. leader, middle leader, secondary teacher, primary teacher, and special needs teacher). In the same groups, members worked on journey maps that presented their shared experiences, including actions, pain points, happy moments, and influences.

At the beginning of the second day, members reflected on the personas and journey maps they worked on the previous day. They were asked to discuss the connection between their personal experiences and their perception of the initiative.

Finally, they were provided the opportunity to convey what they valued most about formative assessment through a 'How might we...' activity.



#### **MEMBERS**

There were 27 members from the following schools across Australia:

- Adelaide State High School
- All Saints Catholic Primary School
- Ardtornish Primary School
- Avila College
- Beldridge Secondary College
- Blue Haven Public School
- Bonnyrigg High School
- Brooks High School
- Campbell Town District High School
- Charles Conder Primary School
- Circular Head Christian School
- Clayton North Primary School
- Gunbalanya Community School

- John Paul College, Kalgoorlie
- King's Baptist Grammar
- Larrakeyah Primary School
- Mareeba State School
- McKinnon Secondary College
- North Lakes State College
- Rossmoyne Senior High School
- Sanderson Middle School
- St Ambrose Primary School
- St Edmund's College
- St Mary's Catholic Primary School
- Stuartholme School
- Turner School
- Yagoona Public School



# **IN-DEPTH INTERVIEWS**

Interviewing users is an effective way of discovering facts, opinions, behaviours, experiences, and the needs of prospective users. It provides an opportunity to gain an in-depth understanding of their attitudes, actions and circumstances.

There were 78 interview sessions conducted with nominated school leaders and teachers by an external research vendor, YouthInsight. Sessions were approximately one hour. The discussions focused on the interviewee's role, responsibilities, technologies they used, experience in teaching and planning for their classroom/school, assessment practices, and professional learning.

Representation was sought by state and territory, jurisdictions, metro/regional/remote locations, and school levels (e.g. primary or secondary) at a minimum.

#### **SAMPLE SPECIFICATIONS**

The following shows the detailed sample breakdown of interviewees.

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Total
Metro	7	9	8	4	9	9	1	5	47
Regional/Rural		1		3			11	3	25
Remote			1						1

School leader	24
Classroom teacher	54
Small <50 students	1
Medium 50-999 students	61
Large 1000+ students	16

Primary	41
Secondary	20
Combined	13
Middle school	2
Early learning	1
Primary and special education	1



# **WORKING SESSIONS**

A total of 26 school leaders and teachers across four states participated in four 2.5-hour working sessions. These working sessions were designed to invite participation and collaboration among teachers and leaders from different schools in the region, to compare experiences and ensure that a range of viewpoints was heard.

Participants in these sessions contributed to and validated earlier learnings from interviews and focus groups while working together to map current processes with regards to understanding student learning and progression. Working sessions were facilitated by YouthInsight.



#### **SAMPLE SPECIFICATIONS**

The following shows the detailed sample breakdown of participants.

	NSW	SA	VIC	WA	Total
Participants	10	3	6	7	26

School leader	9	Primary	8
Classroom teacher	17	Secondary	17
		Combined	1



# **FOCUS GROUPS**

Parents and students from across three states participated in six 90-minute focus groups facilitated YouthInsight. Each focus group aimed to gain an understanding of the range of attitudes, behaviours, experiences, and perceptions that currently exist among parents and students about learning progression and assessment at school.

Representation was sought by state, year level and jurisdiction. Students between the ages of 8 and 12 years participated in a 'pyramid group' format, which involved them participating in discussion, both with their parents and independently. Older students engaged in their group discussions with parental consent.

The discussions focused on the following topics:

- Exploring student and parent understanding of current student achievement and how schools and teachers communicate this
- Exploring student and parent understanding of learning gaps and next steps to meet achievement standards and how schools and teachers express this.
- Understanding the tools and devices used in providing feedback to parents and students
- Identifying the student and parent benefits and pain points in their use of tools and devices to view feedback.



#### **SAMPLE SPECIFICATIONS**

The following shows the detailed sample breakdown of participants.

	NSW	VIC	WA	Total
Parents/carers	6	6	6	18
Students	6	6	6	18

	Parents/carers	Students	Total
Primary	6	6	12
Secondary	12	12	24



# ETHNOGRAPHY RESEARCH

Four 2-hour ethnography research sessions were conducted across three states among three primary and secondary schools led by teams from YouthInsight. These sessions were designed to provide contextual insights about student and teacher interaction in the classroom. These sessions also helped validate some of the findings from previous research stages through first-hand experience of classroom behaviour observations.

Due to privacy reasons, sessions were not video recorded; however, photos were taken of the classroom artefacts, showcasing resources used in supporting student learning. These photos, along with observation notes, helped crystallise what had been spoken about with teachers, students and parents in the previous stages of research.





#### **SAMPLE SPECIFICATIONS**

The following shows the detailed sample breakdown of sessions and classes observed.

	NSW	VIC	WA	Total
Primary	2		1	3
Secondary		1		1

Year one class	2
Year three class	2
Year four class	1
Year eight class	2
Special unit class	1



## FIELD RESEARCH

Three schools were visited in New South Wales, South Australia and Victoria to gain a contextual understanding of our users, their current processes and resources, as well as the highlights and challenges they currently have in applying learning progressions and the formative use of assessment.

For comparative purposes, two schools were also visited in New Zealand to observe the highlights and challenges of using online formative assessment tools in real-life scenarios and how it integrates with learning progressions and classroom practice.

At each school, the team observed classes and interacted with students during their lessons, where they were using various digital and non-digital resources. One-on-one and group interviews with principals, assistant principals, middle leaders and teachers were also carried out. The interviews validated the team's observations and provided a deep understanding of the processes they were using, how they came about, and challenges they have overcome or still experience.

Each visit lasted a full day as the team shifted between classroom interactions and contextual interviews, as well as taking photos and recording video and audio when permitted. The field observations and the recordings helped bring to life the insights gathered from teachers and school leaders in other research activities.





#### **SAMPLE SPECIFICATIONS**

The following shows the detailed sample breakdown of schools visited and who we interacted with.

	NSW	SA	VIC	NZ
Primary	1	1		1
Secondary			1	
Combined				1

Classes	13
Teachers	15
Principals	5
Assistant principals	3
Middle leaders	4
Teacher aides	2
Researchers	2

# CONSULTATIONS AND STAKEHOLDER WORKSHOPS

Representatives of school system authorities and a cross-section of commercial product suppliers involved in online assessment and learning management, participated in several consultations mostly led by a team from the National Schools Interoperability Program.

Discussions focused on establishing an understanding of the current technical capabilities available to support formative assessment, as well as an exploration of the role of interoperability standards within possible future formative assessment approaches.

Consideration was given to the challenges and opportunities that may arise in adopting a coordinated national strategy. Further details and the full list of organisations and people interviewed are available in the Open Technology Framework Consultation Report.





### **SURVEYS**

Three surveys were conducted among 93 teachers, 214 parents and 290 secondary students to validate the findings from the qualitative stages of the user research by an external research vendor, Student Edge. Furthermore, these surveys provided an opportunity for those who were not able to participate in other research activities to have a voice.

Teachers and school leaders were recruited to participate through the TPRG members, who were then asked to share it among their professional networks.

Each survey explored the general attitudes, perceptions and feelings about learning and student progress. The topics covered followed a similar structure to the discussion guides.

In total, 597 people responded, providing a representation of teachers, leaders, parents and secondary students across all states and territories, metropolitan, regional, remote and rural areas.

#### **SAMPLE SPECIFICATIONS**

The following shows the detailed sample breakdown of respondents.

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Total
Teachers and school leaders	1	10	13	6	1	35	14	13	93
Parents/carers	24	35	2	33	31	23	35	31	214
Students	6	78	5	36	33	3	70	59	290

School type	Teachers and school leaders
Primary	34
Secondary	37
Combined (F-12)	19
Other	3

Year level	Parents and carers	Students	Total
Primary	82		82
Secondary	132	290	422



### **USER NEEDS AND IDEATION**

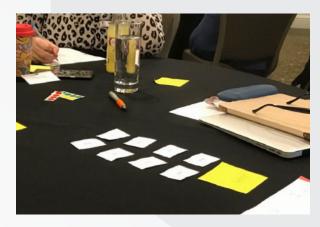
Another TPRG workshop was held to explore and validate the research insights, particularly pain points, and possible solutions to alleviate them. By this time, many of the user research outputs, including personas, empathy maps and journey maps, were shared with the members.

The workshop started by inviting members to provide feedback and insights into the outputs via gallery walks in groups of three as well as table activities. By the latter part of the day, members were familiar with the findings. On their tables, they were given the task to group pain points according to their mental models through an affinity mapping activity. An individual voting exercise followed to prioritise the grouped pain points.

The prioritised pain point groupings became the essence of a series of 'How might we...' statements. Members were asked to provide ideas to address these in the next day. Afterwards, they evaluated their ideas by mapping them based on innovativeness, feasibility, and value on an idea evaluation matrix.

Each table group had to create a storyboard by picking an idea noted as innovative and feasible, as well as a persona. They had to conceptualise how that idea would help resolve the challenges of the persona.





#### **MEMBERS**

There were 27 members from the following schools across Australia:

- Adelaide State High School
- All Saints Catholic Primary School
- Ardtornish Primary School
- Avila College
- Beldridge Secondary College
- Blue Haven Public School
- Bonnyrigg High School
- Brooks High School
- Campbell Town District High School
- Charles Conder Primary School
- Circular Head Christian School
- Clayton North Primary School
- Gunbalanya Community School

- John Paul College, Kalgoorlie
- King's Baptist Grammar
- Larrakeyah Primary School
- Mareeba State School
- McKinnon Secondary College
- North Lakes State College
- Rossmoyne Senior High School
- Sanderson Middle School
- St Ambrose Primary School
- St Edmund's College
- St Mary's Catholic Primary School
- Stuartholme School
- Turner School
- Yagoona Public School



### **GAP ANALYSIS**

Once the research findings were concrete, the outputs of the other members of the project team were analysed to highlight what users were saying and see what might have been missed. The analysis also involved examining other related documents and consulting experts related to the initiative.

Potential gaps were screened by referring back to the findings and raw research data. This process allowed the team to refine the outputs of the research further and ensure a consistent and clear voice for the users.





#### **REFERENCES**

The following outputs and experts were considered:

- Research activity facilitators YouthInsight, external research vendor
- Research vendor report YouthInsight, external research vendor
- Survey reports YouthInsight, external research vendor
- NCCD Platform: Audience profile and learning needs analysis ESA
- Literature Review: Formative Assessment Evidence and Practice AITSL
- Environmental Scan AITSL
- On-demand resources for teachers: Stocktake of learning progressions and assessment resources ACARA
- Growth to Achievement: On-demand resources for teachers (expert panel paper) Christine Cawsey, Laureate Professor John Hattie and Professor Geoff Masters
- Through Growth to Achievement: Report of the Review to Achieve Excellence in Australian Schools (Excellence Review) Review panel created by AG
- Roadmap: Assessing literacy and numeracy (ALAN) apps NSW DoE
- Review points TPRG members, Dr Heidi Leeson

A common query around the research was the seeming absence of any specific challenges around catering for students with disability. During the team's analysis, within the initiative's context, the high-level user need for personalisation and differentiation also considers the challenges in catering for students with disability. The team also referred to the learnings from the NCCD Platform that are reflected in our findings.

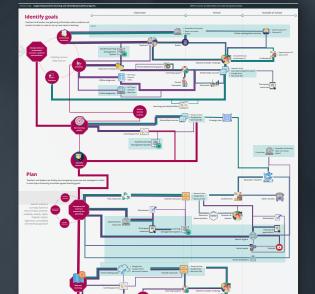
# OUTPUTS

Data, insights and feedback from the whole user research endeavour were analysed and synthesised to come up with personas, journey maps, a service map and high-level user needs.









#### OUTPUTS

### **KEY AUDIENCE PERSONAS**

# Personas in user-centred design

A persona is a description of a typical but fictitious person who is a target user of a service being designed. It is created based on user research and represents a cluster of users having similar patterns within their role, experience, behaviours, needs and what they value.

# Creating personas in the initiative

Every teacher's role is to ensure every student learns. Research for the initiative suggests that teachers' greatest challenge is managing the differentiation required to ensure every student learns, despite different starting points and characteristics. Teachers need help to differentiate in their planning, teaching, assessing and reporting.

Each of the personas captures aspects of the challenge of differentiating for teachers in different circumstances. These circumstances vary according to the school context, the needs of the students and the preferred teaching approach.

#### **USING THE PERSONAS**

Throughout the project, when making design decisions on content or features of the service, the project team should regard the personas as real people. The personas help to build empathy among the project team, especially those who were not involved in the research phase.

Persona 1 is Ruby, whose profile is described over the next two pages. Based on Ruby's persona, a possible question for the project team is:

How might we help Ruby support her students who may have fallen behind and still continue with her lessons according to agreed plans?

The answer to this question will help the project team make decisions based on Ruby's needs and requirements.

Disclaimer: Tools and resources identified in this document are identified for research purposes only and are not an endorsement of them.



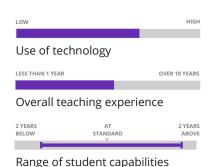
#### **Background**

Ruby has been teaching maths for six years and is currently in her third year of teaching year seven and eight students at an inner-suburban school. Her school's leadership team have firm processes in place to establish consistency in the practice of all teachers and ensure students are achieving high standards. The school has a strong academic focus and formal assessments are routinely used.

A team including Ruby, four other teachers and the school's numeracy coordinator have fortnightly meetings to plan every lesson, agree on assessments, and review and moderate their classes against the school's rubrics.

Ruby's year 7 and 8 students – all still making the transition from primary to secondary school – have come from several different primary schools and possess significantly different levels of attainment.

The planned lessons and assessments work well for the students performing at standard and above. However, Ruby feels that there is very little time to support and differentiate for students that have missed something in the process.



#### Tools used in her classroom

# Google

Centralised google drive for resources and recording data

# Mothletics

Mathletics for homework and progress checks

#### EssentialAssessment

Assessment sheet generator for tests



Mini whiteboards for daily classroom activities

#### Her goals

- Enable students to meet the school community's achievement expectations regardless of their current level of attainment
- Ensure students are progressing no matter where they started
- Ensure a consistent approach in teaching and assessment
- Ensure school processes and expectations are met in a timely and consistent manner
- Provide an encouraging environment that engages students so that they may progress and exceed outcomes
- Collaborate with parents, teachers and students regarding student learning progress and achievements

#### Her needs

- Evidence-informed strategies and resources to help tailor classroom lessons and activities, so that all students – possessing a wide range of attainment levels – can be catered for in a timely manner
- Learning gaps can be easily translated into learning goals and feedback for each student, as well as their parents
- Easy access to quality-assured teaching and learning resources that can help fill learning gaps, based on assessment results and Ruby's own classroom observations
- Assessment resources to identify progress consistently across all levels
  of attainment that can be used in the classroom, and that are aligned to
  school expectations
- A holistic picture of how a student in Ruby's class is progressing in their learning that incorporates assessment data and classroom observations
- A whole-class view that shows all of her students' progress to support in planning and moderation during fortnightly meetings
- Hands-on professional learning that helps Ruby effectively use any new tools and resources and provides guidance about how they can be tailored to her classroom and fitted into the school's lesson plans

- work colleagues
- fortnightly collaboration and moderation sessions
- school planning sessions shared on Google Drive
- school-wide rubrics
- system/sector resources
- NAPLAN
- PAT-M for diagnostic tests
- past resources being used at school including worksheets
- classroom observation notes
- collaborations with other schools in the same network

# **Pain points**

- Not feeling confident that the tools and resources in place accurately measures the learning and progress of every student
  - Not being able to find the flexibility and time to identify or tailor tools and resources to support differentiation for students across a wide range of attainment levels
    - Collecting the data to meet school standards, in addition to my own needs to move my students forward, is time-consuming I am unable to use the shared data directly since it is not timely or sufficient

## **Questions**

- Where do I go to know what my students can and can't do in their learning when I need it?
- What resources can I use to teach my students on what they need to learn next according to where they are currently at?
- How do I collect enough data and evidence to gauge where my students are at and where they need to go next consistently and in a timely manner?
- What information from teachers in other subjects do I need to know in order to consistently identify the progress for each of my students?
- How can I be confident our strategies are ensuring ongoing progress for all my students?
- How do I ensure accommodations are made in lessons and assessments? How do I find the time to do this?
- How do I ensure personalised feedback and clear cut next steps for students and parents?

- After understanding the gaps, **it is difficult to find the next steps** to get all my students to their own next level to ensure outcomes are met
  - Lack of time to personalise feedback to make sure every student is catered for and values their progress



# **Improvements**

- Tools and resources that are aligned to the school's expectations that can be used directly to identify student learning and progress
- The ability to tailor assessments according to each student's learning and progress easily and effectively for formative purposes
- Student-friendly language that explains student progress, including gaps and next steps, and allows them to understand their own learning and how to progress which will then help to provide personalised feedback
- Resources informed by gaps in my students' learning that can be used to help them progress to achieve outcomes
- An **easy way to visualise classroom observations (data) in combination with data from school-wide assessments -** to efficiently and effectively identify gaps in learning and what students need to progress and meet outcomes

# **Feelings**

- Concerned that some of my students are getting left behind but the lesson has to keep going according to agreed plans
- Worried that I may be unaware of other significant information about my students that could impact identifying their learning needs consistently
- Comforted by a transparent and collaborative community across the whole school where we decide strategies and share knowledge that gives me a confident starting point in teaching my classes
  - Regretful that plans do not always allow time to provide feedback and clear cut next steps that my students can act on
    - Confused by the data and planning that doesn't support differentiation for the needs of all my students



addressing their learning needs."

#### **Background**

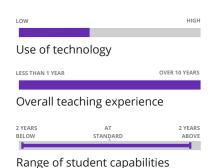
Full-time classroom teacher

Gemma has been teaching for over 10 years, in different schools and across different states in Australia. Throughout her experience, she has tried a variety of teaching and assessment approaches. This has allowed her to develop and tailor her own philosophy of taking any opportunity for students to learn and progress independently.

She is currently teaching a mainstream class of year 2 students from different nationalities with English as their 3rd or 4th language. In this class, she has several students diagnosed with autism.

Gemma is passionate about getting to know her students and understanding how each of them learn. This understanding enables her to plan and scaffold her lessons and activities in order to best assess her students' capabilities and identify progress. She aims to provide immediate personalised feedback with specific next steps for her students. She is confident in her teacher judgement but rarely has time to record or document her evidence.

Apart from being a classroom teacher, Gemma is also responsible for leading the literacy program for the year F-2 classes in her school.



# Tools used in her classroom



Diary to record her own classroom observations



Platform to showcase work, celebrate progress and provide parent feedback

ClassDojo



Platform to assess writing consistently



Progress walls and picture clues to visualise learning goals and success criteria

#### Her goals

- Build her students' confidence that all of them can make progress in their learning no matter where they started
- Provide her students the tools, resources and feedback they need to ensure continuous learning and progress
- · Ensure her assessment practices are providing her with accurate and appropriate information she needs about her student's progress and outcomes
- Provide an encouraging environment that celebrates student progress regardless of their achieved attainment levels
- Improve literacy skills of students throughout year F-2 classes in her school in collaboration with members of her literacy team

#### Her needs

- Easy access to quality-assured teaching and learning resources that are accurately aligned to the curriculum which Gemma has to teach
- · Timely and accessible evidence-informed strategies and resources with examples of how to tailor classroom lessons and activities to meet her students' wide range of attainment levels and capabilities
- Assessment resources that can be easily adapted for Gemma's students that have various levels of attainment and capabilities - to ensure progress and outcomes are identified consistently (e.g. assistive technologies)
- Seamless and intuitive way of recording her classroom observations so the data can be used directly as evidence of her students' learning and progress to support her judgement
- Learning gaps and next steps presented in student-friendly language to help build independent learners
- Effective and efficient ways of teachers working together as a team in identifying literacy gaps in learning within year F-2 classes in her school, sharing classroom solutions, planning for interventions and evaluating their impact on improving students' literacy skills

- Australian curriculum and other state curriculum websites
- past and present colleagues
- · professional associations that are focussed on literacy
- system/sector tools and resources within learning management system
- Soundwaves and Grammar rules
- Prodigy
- MAB blocks
- Youtube
- standardised tests prescribed by her school
- shared drive within school to fulfil reporting requirements
- NCCD portal

# **Pain points**

- Curriculum is too broad and open to various interpretation that leads to a lot of guess work in teaching and assessing my students
- Inconsistent interpretation and implementation of curriculum which makes finding aligned quality resources time consuming
  - It is **challenging to manage my time and focus** in class to cater for my students that are well below the standard through to those that are well above the standard

### **Questions**

- Can I refer to resources I've used in the past to make my lesson planning efficient?
- How do I close the fundamental knowledge gaps for some of my students without overlooking the rest of my class?
- How can I build consistency in assessing progress and outcomes for all my students no matter their capability?
- How do I **collect enough data and evidence to support my judgement** on all my students' learning and progression?
- What will help me enable my students to understand their own learning gaps and next steps?
- Are there resources available that my students can use to support them to monitor their own progress?
- How can I, along with my team, identify literacy learning gaps within F-2 classes that need interventions?
- How can we evaluate the literacy interventions we have put in place are making an impact on student learning?

- Lack of 'fit-for-purpose' tools to assess and identify progress consistently for my students that are across a wide range of capabilities
  - Formalising my classroom observations as evidence of learning and progress entails giving up some of my personal time
    - Lack of efficiency to provide immediate feedback and next steps for all my students



# Improvements

- Tools and resources that are aligned to the curriculum I teach and that have examples on how to tailor for my students' various capabilities
- Assessments in various forms catering to different capabilities of my students to ensure consistency in identifying progress and outcomes
- Efficient ways of capturing my classroom observations as data which can be shared as evidence that my students have progressed and help me provide immediate personalised feedback
- Language that my young students can comprehend to understand their gaps and next steps to allow for ongoing learning
- Access to appropriately aligned resources that can be used by students to help them close their learning gaps
- **Effective collaborative practice and processes** within my literacy team in order to identify problems, share classroom solutions, plan for interventions and evaluate our strategies

# **Feelings**

- Fatigued with the amount of tailoring I have to do for my lessons and activities to differentiate and engage all students in my class
- **Guilty** that potentially the students that are well above standard in my class are not getting the attention that they need.
- Overwhelmed with the different ways I need to assess my students (including my students with autism) in order to consistently identify progress and outcomes regardless of their capability
- **Hassled** that I have to formalise my observation information when I have it recorded in my own diary notes to show that my students' have made progress
  - **Eager** to find effective strategies and resources that will help each of my students know where they are at and what they need to do next in their learning
    - **Fulfilled** when my students recognise their own progress and showcase it to their parents
      - **Determined** to improve literacy skills across our year F-2 classes



**Classroom Teacher** 

# Jasper

Metro
Full-time classroom teacher

"That's why I'm sort of saying having it all in one place. It's just because we've got so much data from different places that we don't have any time to kind of consolidate it and we've tried our best but it's been slow going."

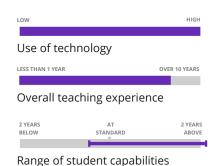
#### **Background**

Jasper is a primary school teacher at a school close to the city. He has been teaching for approximately eight years. In addition to his classroom teaching, Jasper mentors new teachers in relation to whole school assessment approaches and processes, including their learning progression rubrics.

Two years ago the school transitioned to using learning progression rubrics as a resource to address a wide range of student attainment levels across the school. This brought about an extensive tool set to collect the data needed to differentiate teaching.

This year, he is teaching year five students and it is their first year with the tool set fully in place. Students in his class are assessed across multiple capabilities and can view their own progress against the rubrics. This data is then collated and evaluated as a team against the school's rubrics and the curriculum to identify student progression and attainment level.

Jasper uses additional tools in the classroom to ensure his students are truly learning and engaging with the content. Students upload their own work where they share feedback with each other, parents and himself.



#### **Tools in my classroom**

### Seesaw

Seesaw to showcase student evidence and feedback

# EducationPerfect

Platform for personalised learning experience for literacy



Platform for personalised learning for numeracy



Kahoot to quickly assess depth of learning

#### His goals

- Enable students to meet the curriculum outcomes no matter their level of attainment
- Ensure students are constantly and independently progressing no matter where they have started
- Ensure a consistent approach in teaching and assessing to align with the current school focus and is validated with evidence
- Encourage students to engage in their own learning and provide students with skills and knowledge they can use beyond school
- Providing a motivating environment for students to learn and improve
- Collaborate with parents, teachers and students regarding learning progress and achievements
- Mentor new teachers to guide them and build their capacity in implementing the the whole school approach to teaching and learning in their classroom

#### His needs

- A one-stop shop that integrates data from the school's tool set and his own to identify his students' and classes' learning gaps and next steps and improve confidence in his strategies
- Ability to align his entire toolset to the school's rubric to help establish
  a more consistent approach to assessing against the curriculum
  standards
- Easy access to a vast range of evidence-informed resources that he
  can use to keep students continually engaged in their learning,
  especially those above the standard
- Allow his students and their parents to be more involved in an integrated vision of understanding student learning progress
- Student-friendly next step resources to tailor their learning to their personal goals rather than stopping at formal assessments
- Specific professional learning that helps in effective use of new tools and resources and how they can be tailored to the classroom to assist him when mentoring new teachers and improve his own confidence

- school-wide rubrics
- Google doc, Google drive, Google classroom
- Khan Academy
- NAPLAN
- Padlet
- visible learning
- personalised learning plans
- collaboration amongst peers, learning support and leaders
- Edpuzzle
- system/sector learning management system

# **Pain points**

- Collating and analysing data takes too much time involving repeating data and steps leading to reduced time to allow me to explicitly teach
  - My students are overwhelmed with learning progressions and taking their own next steps in learning. High performing students enjoy it so I need to help out the other students while still meeting the needs of those well above standard.
    - When high performers exceed outcomes in class, I have to assign them more tasks on different platforms to keep them engaged if time allows, and this takes time away from the other students.

# **Questions**

- How do I ensure students value their progress and learning?
- What should I be doing to enable high performing students to be motivated to learn?
- How can I collate all the data to better support all of my students in their learning through timely feedback?
- What evidence can I use to prove that our strategies in addressing students' learning gaps and next steps are working?
- How do I enable students to autonomously progress at their own pace especially when they have exceeded the curriculum I had prepared to teach?
- How do I ensure my students understand the content so we can more accurately identify achievement?
- Is there anything to help me support new teachers in learning all these tools and analyse all this data?

# Sometimes I can only give feedback after the task is over rather than in the moment when it can be actioned by the student

- Not entirely confident that the online tools are gauging the depth of my students' learning in literacy and if they can apply and transfer their learning
  - There is little professional learning I can use straight away to assist me in inducting new teachers



# **Improvements**

- Single point of reference to effectively identify student data to identify progress aligned to their own school approach and the curriculum
- The same point of reference should be available to **students in a common language that is intuitive enough for them to understand** to help them evaluate their own learning as well as **inspire them to proactively take next steps**
- A variety of resources that support next steps in teaching and and assessment of learning at any level that are informed by my students' individual progress and can be tailored to my teaching style
- Resources for my students that enable them to continuously progress so they can build their own capabilities as learners to apply and transfer their learning
- Structured professional training around how to integrate learning progressions into any teacher's practice and build their confidence in their tools

# **Feelings**

- Inconvenienced with having to analyse repetitive data, taking me away from valuable teaching time
- Assured that I have more than enough evidence that shows my strategies and resources in the classroom are working and give me a good understanding of my students' levels of attainment
- Proud of what my students have attained which has improved my confidence in my teaching as well as the confidence students have in themselves through understanding their progress
  - Uncertain of how to meet the expectations of my high performing students when they are well above standard
    - **Doubtful** of our tools' capacity to build a deep understanding of the learning outcomes
      - Inspired to improve consistency in our school approach and processes to achieve even greater outcomes for our students



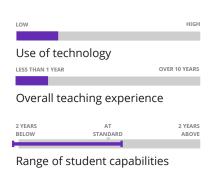
#### **Background**

Alex has been teaching humanities and social sciences to year nine and ten students since the start of the year at a school in a small community. He is currently in his third year in teaching. The school has a diverse student population due to its location, with a small number of teaching staff.

Many of Alex's students are well below standard requiring him to make adjustments to teaching and learning activities he uses in the classroom. The school is frequently impacted by internet disruptions, hence offline alternatives are utilised more often than not. It also has limited financial ability to acquire high quality resources and professional learning to support Alex in this new and challenging role.

Alex plans for learning activities incorporating his student's interests and culture as well as his own experience. When students are more engaged he feels more confident in his own teaching. However, when some students in the class are disengaged or being disruptive, he finds himself overwhelmed.

Alex's professional learning is mostly self-guided. Using the resources available in the school has been painful for him as he has often had to sift through and customise these for his class often resulting in experimentation, and he feels his students are getting left behind even more.



#### Tools used in his classroom



Folder system containing past resources and data



Excel spreadsheet to formally record data



Worksheets for formative and summative assessment



Youtube for learning resources when internet is available

#### His goals

- Encourage students to make progress in their learning to ensure they are better prepared for real life
- Ensure students are improving no matter where they have started
- Enable students to meet the curriculum outcomes
- Help students to develop practical life skills that set them up for when they leave school
- Provide a motivating environment that engages students to learn
- Collaborate with students and inform parents regarding learning progress and achievements

#### His needs

- Ability to understand gaps in his students' learning and their wellbeing that will enable him to properly cater for his whole class
- Practical strategies that can help him address his students' learning gaps to enable them to progress
- Quality resources that are consistent with his teaching approach
- Assessment resources to identify progress consistently across a range of attainment levels that can be used with limited access to internet and technology
- Suggested next steps informed by his students' learning gaps to automate parts of his planning so he can spend more time using these next steps to teach in the classroom
- Discoverable professional learning tailored to his needs and goals that builds his practice as well as his confidence - preferrably modelled by real teachers with real life experience in the classroom
- A visual and accessible way of enabling his students to understand their own progress and goals that motivates them to learn
- Celebrate student progress in a transparent way and build confidence for his students, their parents and himself

- sticky notes for classroom observations
- · Australian curriculum website
- online search engines
- independently paid online teaching resources
- NAPLAN
- work colleagues
- social platforms such as Pinterest
- system/sector resources
- · 'Behind the news' TV show and website
- email for discussion with teachers, students and parents

# **Pain points**

- Many of my **students are lacking the fundamental skills required to achieve lesson goals** that are well below the standard I teach. It is hard for them to catch up and complete assessments on an equal basis with other students
  - Some **students are not engaged in my subject when they cannot relate to the learning goal** it requires significant time and energy to motivate them
    - I seem to be conflicting with students and parents who put more value on core subjects
      - When engaging my class for learning, sometimes I feel I overlook the students in the middle. By the time I have identified them they have been coasting for a while and have fallen behind.
        - There are so many resources to teach the next steps but confidently choosing and using the one I need when I need it is the hard part - it never gets easier
          - The **internet we have is unreliable** but the resources I want to use require us to be online

- **Feelings**
- Stressed with how to manage my students to keep them motivated to learn in the classroom when the goal seems out of reach for them
- Frustrated with a curriculum that my students cannot meet at their current level of attainment and how it limits their ability to progress
- **Hindered** by a full curriculum that doesn't leave time to reteach concepts or stay at a particular topic where students are weak
- Motivated for all of my students to make progress to improve their future prospects as well as their capacity to achieve curriculum outcomes
  - Passionate to celebrate any student progress no matter how small or where they started
    - **Helpless** that I'm not confident to differentiate effectively for my students
      - Angry when the internet fails me and I cannot use a resource when my students are engaged
        - Unsure how to engage students and parents in valuing progress in my
           subject

# **Questions**

- How do I get through to the students who are well below standard and help them progress without limiting the progress of those that are at standard and above?
- How can I effectively motivate my students to learn and progress?
- How can I **confidently identify and close the learning gaps** of my students so I can tailor my teaching to their learning better?
- Where do I find worthwhile and relatable resources I can use to teach my students what they need to learn next according to where they are currently at?
- How do I **encourage my students to value their learning progress** in a timely and efficient manner?
- If students value their progress, will parents then support learning goals in my subject?
- How do I teach using this resource without the internet?



**Improvements** 

- Ability to identify gaps in all my students' capabilities so I can quickly see exactly what they need help with in any of my classes
- Assessments that can be adapted according to my students' learning gaps with examplars that allow students to be assessed according to the lesson goals
- An easy way for students and myself to view learning progress and learning goals to encourage them
  to valuing their progress and improve their future prospects
- A quality resource database with offline options that are personalised to my needs, approach, classroom, school environment (such as the internet and lack thereof) and students so I can access what I need, when I need it
- Accessible professional learning that helps me gain the confidence I need to use the resources available to me in order to build my own practice in being able to differentiate for my students and help me conserve planning time and energy so I can focus on teaching



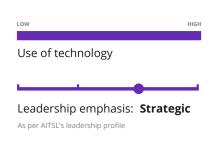
#### **Background**

Kian is an instructional leader across years F-6. He is very active in visiting other classes and engaging with students, frequently modelling for teachers and giving students and teachers constant feedback to build capacity.

He has weekly meetings with each year level teaching team and sometimes even more depending on the time of the term. During these meetings they co-design lessons, share ideas, discuss student attainment and well being, plan interventions and moderate their marking of assessments.

Kian is using the data collected by every teacher across the school to inform next steps, and the overall school focus on improving classroom instructional practices. These are then discussed with the principal who is very supportive. The collated data is used to inform reporting to stakeholders, evaluate what resources they will use and celebrate progress with teachers.

Networking online and offline is key for him, he is always searching for creative ways to improve approaches to teaching. His focus is on evidence-based and practical strategies aligned to their strategic plan.



#### Tools used at our school



Planning and reporting assessments and wellbeing



Teachers upload their formal observations

### Seesaw

Involve parents and students in the learning journey



ACER PAT to diagnose interventions

#### His goals

- To improve teacher practice to enable students to meet curriculum outcomes
- Ensure students across the school are progressing no matter where they have started
- Ensure a consistent approach in teaching and assessing that is validated by trend data
- Provide teachers with strategies to motivate students to engage in their own learning
- Provide an encouraging yet challenging environment that engages students to learn
- Collaborate with teachers and support them with their own goals
- Encourage teachers to use students' data and research-based approaches in their teaching practice
- Report on student outcomes and progress to principal and teachers

#### His needs

- Data that he can filter with ease at the student, class, year and school levels to identify and monitor student progress
- Assessments that consistently identify progress for any student that he can recommend to teachers for their planning
- Strategies and teaching practices that are proven to work in the classroom to improve student outcomes
- Resources that are engaging for students and aligned to the way the teachers teach, yet also provide input into how students are tracking in their learning
- Professional learning to help build teacher and learner capacity that he can share with all his teachers
- Teachers' learning goals to inform decisions around potential professional learning paths

- School-wide rubrics
- Australian curriculum and other state curriculum websites
- online search engines
- NAPLAN
- Microsoft Powerpoint and Excel
- Visible Learning
- NCCD and EALD
- · work colleagues and leaders
- · system/sector professional learning
- conferences
- Padlet

# **Pain points**

- There is some hesitation in which data I formally record and which data I do not. Teachers don't want to collect too much data, but it takes time to build the practice and confidence to know which data to record.
  - Collating the data to get a snapshot takes a fair bit of time I need to represent it in different formats and use it at different times to present to our teachers, students, principal and other external stakeholders

### • Learning progressions are unwieldy for new teachers, we have so many documents to reference, and if this is going to be a resource to track progress, it should be easier to understand and use since there is not enough time to work individually with teachers for them to be confident with it

- Teachers are already busy in the classroom, what would make their lives easier is if they could identify and address interventions independently when needed
  - Finding a balance between parent expectations for providing feedback in a timely manner and teaching

• Excited by innovative and updated pedagogical practices supported by evidence and research

**Feelings** 

- **Hesitant** with new initiatives from the sector that usually require time to make changes to school-based plans and resources
- Willing to invest time in supporting and adapting our approach to any new resource that will give me the evidence I need, but will allow our teachers and myself to have more time to teach and engage students for learning
  - **Rewarded** when a student can discuss their progress and act on feedback with confidence

- There should be a uniform and efficient tool to collate students' data for every level that can easily
- Differentiated professional learning around learning progressions and teaching practice that appeals to teachers at any proficiency, to build knowledge, understanding, application and transfer of resources
- Ability to meet the expectations of parents and give them the confidence that their children's needs are always being met in an evidenced-informed manner with quality resources
- Students should be exposed to learning progressions early on so they can have a deeper understanding and appreciation of their next steps in learning, value progress as learning, and have the confidence to discuss their progress with each other and their parents.

# **Questions**

- · Who are the outliers in our classes? Why are they outliers?
- Which teachers need support with their teaching practice?
- What strategies and resources are producing results? Is it for all students or only some?
- What improvements to our teaching and pedagogical practices can I make **based on the evidence** I have?
- What data do I need to give teachers a complete view of their students' progress to inspire them and celebrate progress?
- How do we ensure every student is accounted for and is provided with their next steps in their learning?
- How can students understand progress and **value it** over point-in-time results?
- Where can I find quality and evidence-based resources to support our whole school approach?



School Leader

- **Improvements**
- be filtered to identify which data I need
- An easy way to navigate learning progressions interactively that is practical in the classroom and where it is most needed to identify student progress and provide intervention where required
- **Determined** to take action with students who require intervention but may have previously been overlooked
  - Adamant in ensuring every student's progress is recognised and captured as part of everyday practice



#### **Background**

Jade has been a deputy principal for more than five years at a F-12 school in a country town. Prior to her role as a deputy principal she had been teaching in a different regional school for 10 years.

Her responsibilities range from behaviour management to helping teachers build their practice. One of her responsibilities is to compile the school's annual report on student achievements. Occasionally, she teaches classes as a relief teacher as it is hard to find casual teachers in regional areas.

The school has recently seen growth in their enrolments which has had an impact on the school's financial resources. They have restructured their professional learning model to build inschool expertise to enable and encourage collaborative practices. They are using this learning model to develop knowledge and understanding of learning progressions.

This approach has improved the direction of differentiated teaching through regular formative assessment, however it requires more evidence and knowledge of students as well as support for teachers than ever before. Jade has been supporting and managing the change.



#### Her goals

- Ensure our processes and structures are up to standard and moving according to plan
- Ensure that appropriate structures and support are in place for building teacher capacity
- Ensure a consistent whole school approach to teaching and learning that every teacher understands and can integrate into their classroom
- Report on student outcomes to stakeholders and sector collaboratively with the principal
- Collaborate with teachers, parents and students regarding outcomes and student wellbeing
- Encourage teachers to use students' data and research-based approaches in their teaching practice
- Maintain a supportive environment for staff and students
- Enable students to meet curriculum outcomes

#### Her needs

- Comprehensive student data that can be analysed at a class, year and school level to support decision-making regarding professional learning and resources
- Ensuring teacher's professional learning goals allow for them to grow and continually progress in their practice
- Demonstrable and accessible professional learning around resources and data that all her teachers can participate in that are based on evidence
- Resources aligned to the curriculum that provides her with trustworthy data that she can report on
- Transparent feedback from teachers, students and parents to see if teaching strategies are working well within their school
- Support from sector, other leaders and teachers with changes in the approaches to teaching at the school to ensure success

#### Tools used at our school



Folder system containing plans and data



Professional learning diaries to set goals for staff



Staff planning wall as reference during meetings

#### **Phonics Screening Check**

Diagnoses the starting point of new students

- school staff
- professional associations
- educational researchers
- system/sector resources, tools and professional learning
- Facebook group
- NAPLAN and PAT data
- Brightpath
- email for contacting parents and staff
- Australian curriculum
- Scootle

# **Pain points**

- We have an issue with **high staff turnover**. Teachers come and go and some have to be oriented to our school's practices which could be different from other schools. Only for **them to sometimes end up moving back to the city anyway**.
  - Some teachers are set in their ways and don't have the energy to make a change in their practice that that they cannot see immediate benefits in and seems to add what they feel is unnecessary workload that takes away time from teaching
    - The professional learning I want to use is not accessible to me in our regional area and most will involve costs we cannot afford. There are also less networking opportunities and it feels like we are missing out.

# **Feelings**

• What support do our teachers need in their classroom right now to

**Questions** 

identify progress?

- How do I bring teachers with me in the change process and see value in adopting new teaching and assessment practices?
- What evidence can I use to help inform my decisions on building teacher capacity?
- How do we gather the evidence we need without overwhelming teachers?
- Are there professional learning resources readily available to improve our teachers' confidence in new approaches to data collection?
- Which classes and teachers can we learn from?
- How do we develop a common language and create high expectations with our students and parents around learning progression?

- Teachers are not confident in using or analysing the data effectively so in turn they are less confident in applying it to their everyday teaching
  - Finding time to engage with parents to help them understand how the learning progressions are used to support student learning and reporting progress



# **Improvements**

- **Demonstrable** and practical professional learning that can be re-used to support new teachers. It should be structured to appeal to other teachers as well.
- Resources aligned to the curriculum that automate data collection to identify
  progress which will help ease the pain for teachers having to collate the data they need
- Comprehensive student data that can be analysed at the class, year and school level to help with decision making on what professional learning is needed, and any resources that could be employed at the school to support teachers and make reporting easier, as well as supporting the school vision
- Improve teacher's data literacy by building on their analysis abilities and how they can apply it to their teaching practice
- Make meetings more effective by using a common language around learning progression including teachers and parents to accelerate the process

- **Supportive** of the vision of the principal to establish a culture that builds learning capacity in the
- **Disappointed** that a few teachers are not adopting the approach

whole school

- Understanding the teachers' perspective that new changes come and go, and this might just be a new 'fad' that will change again in a few years
- Affronted when there is professional learning that she believes could build her teachers' capacity to become experts but it's not available in her area
  - Interested in ways to make the data collection process simpler and as an ongoing by-product of learning to get teachers onboard
    - Intent on getting parents on board to support teaching and learning in the
       classroom



Opal Metro

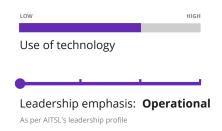
Metro Head of learning area "If I don't get that buy-in, then I don't think it's worth it to invest a lot of time because it's going to just fall to pieces. It's not enough to say, yes, this is a great idea - or that it's not. We need to make sure that it's sustainable."

#### **Background**

Opal is the head of English at the local secondary school where she has been working for the past three years. There are four teachers under her leadership that come to her for support regarding their planning and teaching. She often models teaching strategies for them in their classrooms. Twice a term, they have formal meetings that involve planning and at other times can include moderating assessments. In addition to her leadership role, she is also teaching students with special needs, as well as year eleven students. Her day is quite full.

Other learning area leaders will often come to her to discuss possible overlaps in assessing literacy capabilities, as well as share recorded evidence, in their respective curriculum. Assessment data is shared with students as feedback and to support them for their individual learning goals, particularly guiding older students for future pathways. The data also informs the reporting process to stakeholders.

Occasionally, when Opal is free from her many responsibilities, she is researching innovative ways to improve their instructional approaches, networking with other schools, reaching out to other professionals for ideas and support, as well as sharing her experiences.



#### Tools used at our school



Shared data collection for her learning area





Personalised learning plans for some students



Ensure consistency in formal assessments

#### Her goals

- Ensure her team's processes are highly effective and aligned to school's strategic plan
- Build capacity of all teachers in the English faculty
- Support teachers in her learning area and students in her special needs class to progress in their learning and meeting curriculum outcomes
- Advise students on their future pathways and how they may succeed
- Liaising with leaders and teachers across the school to establish a consistent approach to teaching and assessing
- Improve existing teaching and learning approaches to ensure the school is catering for the interests of all students
- Build networks and partnerships with primary and secondary schools

#### Her needs

- Timely professional learning on every new initiative, resource and tool that she can share with her school that clearly outlines the benefits for students and teachers, and has practical application in the classroom
- Consolidated data entered by teachers from different learning areas to get a complete snapshot of every students' progress and depth of their understanding to provide guidance on their goals
- Intuitive way of aligning data to the curriculum to make moderating to standards and reporting to stakeholders easier for her teachers
- Ability to track students and classes throughout the school year across multiple learning areas to see how to best build teachers' capacity where and when they need it most
- Constant feedback from teachers and students regarding their own goals and needs
- Professional networks that value progress and practices informed by evidence

- school data analysts
- education consultants
- · learning area team
- leaders of other learning areas
- work colleagues
- books around approaches to teaching that are research-based
- system/sector resources
- conferences
- · Australian curriculum website
- NCCD and YARC

### **Pain points**

- It takes time to build practice when implementing new initiatives I don't want to force something on to time-poor teachers unless it's proven to work and is supported by research and other schools, as well as supported by being strong professional learning and alignment to the plan
  - We are constantly repeating the conversation around who collects which data especially around the literacy capability since it affects multiple learning areas and some teachers feel it is not their responsibility
    - Continuity of data is a problem when some teachers don't have a chance to put it in so we can't report/use it

Lack of data to support me in encouraging professional learning that is evidence-based

Finding the time to document it all is challenging. I need

in my learning area, and the students, all requiring

different formats and sometimes different analysis.

to report to other leaders, our principal, as well as teachers

# Apprehensive towards new initiatives that are not supported

**Feelings** 

# by proven research or professional learning

- **Encouraged** by resources that work really well in our school, research matching my experience, and can be easily shared with my network
- Burdened by the lack of continuity in our data especially around capabilities, making it hard to let everyone see that capabilities can be everyone's responsibility
- Worried that some of my special needs students, especially those that are not medically diagnosed, are not assessed appropriately in mainstream classes hence it seems that they are not meeting expected curriculum outcomes
  - Clear that I don't want to make more work for my teachers, and open to any resource that will help make collecting, collating and analysing student data easier
    - **Swamped** with all the planning and reporting that I have to do in addition to my teaching load and student guidance

### Questions

- How do we ensure we are performing to the standard?
- · Can we help students get the most out of their learning and provide them with evidence-based guidance?
- What is the evidence for this new resource and/or system?
- Is this resource aligned with our plan? If not, is there a way we can align it to the plan?
- How are other schools using this resource and is it working there? **How do we know it will work here**?
- Who should be assessing this particular capability?
- How can I ensure that my **special needs** students are being considered and assessed appropriately in mainstream classes? How will other teachers know they have to **differentiate** for them?
- Are we consistently assessing learning across our learning area?



- **Encouraging professional learning around new** resources that clearly includes the benefits and practical application in our school
- A central data source that collects all the data from teachers across every learning area, intuitive enough to be used by teachers everyday
- Ability to compare the data with other teachers easily so we can gauge the depth of understanding and capabilities of our students when incorporating multiple learning areas to guide them in their learning as well as determine teacher consistency around practice
- Professional learning resources supported by experts and informed by my teachers' feedback as well as our data **sources** to see where we need to plan and our next steps
- I need to be able to interact with the data in multiple ways, at a school, class, learning area and year level, allowing me to provide clear reports that my audience and I understand equally and help us analyse the data independently rather than always consulting data experts



**Background** 

Jet is a year three student attending his local primary school. He is one of three siblings and goes to the same school as his big brother. Although they speak Mandarin at home, he does not have any issues with conversing in English with his teachers and classmates.

The activities that he likes are anything that combine maths and science concepts. Anything to do with measurement and using tools such as thermometers and scales piques his interest.

Jet knows that he is doing well in maths because his teacher gives him year four activities during investigation tasks and these are different from what his peers are getting. He still thinks they are too easy.

He sometimes gets frustrated in his writing since he always forgets punctuation marks and at times uses them incorrectly. However, overall he is very happy in school. He is very energetic and is involved in school sports such as running and basketball. When he has completed his maths activities, he often wishes he could just go outside in the school yard to play.

#### **Favourite subjects**







Maths Science

Sports

# "I don't mind doing tests because I get to play my favourite app after."

#### His goals

- Get high grades in all his subjects just like his brother
- Get to a higher level in Prodigy higher than his friends
- Be able to write a story with no mistakes in punctuation
- Play and be really good in basketball be better than his brother
- · Perform well in NAPLAN

#### His needs

- Teacher support, instructions and feedback to help him improve his writing skills - not just highlighting the mistakes
- Sufficient challenging activities and tasks that will keep him engaged and motivated to learn and improve
- Opportunities to collaborate and help his peers
- A way to show his family, especially his big brother, that he is doing well in class even before his grades come out

#### **Interests and hobbies**



Playing and building Lego buildings with his big brother



Basketball



Swimming



Reading Storey TreeHouse

#### **Favourite apps**



The sun goes down if Jet gets an answer wrong or if the time is up before he answers



Jet is in a whimsical world solving math challenges in order to progress to another level

### **Pain points**

- My teacher will hand over my story with my **incorrect punctuation marks or pronouns or adjectives** highlighted and with a note that my work needs improvement, but **not really telling me how I can do it better next time** 
  - I feel like the activities given to me in maths are way too easy although it is already higher than what my peers are doing
    - Sometimes the **lessons** we have in other subjects are **not so interesting** and I just do what I'm told to do. But I am **not really sure what I'm learning.**

### **Feelings**

• Before I get my report at the end of the term, I do not know for sure how I'm doing in my other subjects. Sometimes, my teacher tells me in class that I did well.

 It was hard for me to find my report in our student app using my iPad the first time I wanted to show it to my brother. I do get lost in our student app often.

- Bored with year 4 maths activities, they are way too easy for me
- **Frustrated** that my teacher just writes notes that I need to improve on my story but is not telling me how to improve maybe because I'm still better at it compared to my peers
- **Proud** when I get to help my friends with their investigation tasks and my teacher appreciates my help
  - **Excited** when my teacher allows me to play my favourite apps on my iPad when I'm done with my investigation tasks
    - **Surprised** to see that I got high grades in my other subjects when I saw my end of term report
      - **Impatient** when I can't find my report or when I get lost in our student app
        - **Happy** whenever I play sports with my friends especially basketball

## Questions

- How can I improve my writing?
   Why do I keep having the same mistakes?
- Can I **get higher level maths activities** during investigation tasks? Or can I play Prodigy instead?
- Can we also do **interesting tasks in other subjects** like English or Health? Can we do something similar to what we do in Science?
- What am I supposed to learn in my other subjects like Health?
- How can I show my brother and my family that I am doing well in class before I get my end of term report?
- This is the first time I'm able to access our student app in my iPad, how do I use it? Will I be able to see my teacher feedback? Where can I find my report?
- Can I play basketball or play in the school yard more often and longer?



- I wish my teacher would talk to me about how I can improve and give me ideas to improve my writing or my story
- I wish I'd be given challenging maths investigation tasks in a level similar to my level in Sunset Maths and Prodigy
- Lessons and activities in my other subjects could be more engaging and have more opportunities for exploration as well as clear learning goals that I can understand
- A **student app that I can easily use even if its new to me**, I could go and find important information like my report without getting lost
- I wish I could **show my parents and my brother some of the work I did in my class** with my **teacher's feedback** on it even **before my report comes or before our parent-teacher night**



**Background** 

Amber is studying in a regional primary school and is in year five. She has aspirations of becoming a successful writer and a netball player which her parents fully support.

Her favourite day in school is when she gets to do free writing in class where she is allowed to write about anything that interests her - most often it is about world events and issues. Amber has become used to receiving feedback from her teacher like 'Compelling piece, Amber!'. However, she would like to receive more in depth one to one feedback like some of her peers, who her teacher spends more time with as they have more corrections.

Since she is nearing high school, she now has to do a lot of homework which she needs to submit within a week's time. She is working on an Inquiry project at the moment, which requires her to write about a country in North America that will support first time visiting travellers.

Amber's school does not use grades for reporting. Her report shows her learning gaps and next steps based on what she has achieved through out the term against each lesson's learning intentions and success criteria.

#### **Favourite subjects**







English

Interests and hobbies



Reading fantasy and adventure novels



Netball

World news and current affairs

Singing and playing the

"My report doesn't tell me a grade. I don't know if I'm an A or anything. I think I am okay at it though because I don't get many answers wrong on my tests."

#### Her goals

- Get good feedback on all her subjects in her report
- Submit her projects and homework on time and get good comments from her teacher
- Be an excellent writer
- Be really good at playing netball so she can compete in inter-school sport

#### Her needs

- Teacher support, instructions and feedback to help improve her narrative, creative writing and inquiry skills
- Access to appropriate resources, programs and approved apps that can help her with projects and homework
- Clear learning intentions and success criteria in all her subjects so that she can track how she is going in a lesson
- Coaching and more practice time to improve her netball skills

#### **Favourite apps**



Behind the news helps Amber understand events and issues happening outside her school and around the world



Amber uses Keynote for her project presentations



Amber is able to upload photos of her work into her profile to show her parents

### **Pain points**

- My teacher is **unable to provide me with feedback that relates to my own work and that will help me improve my skills** because she has to give attention to my classmates that need more help.
  - At times it is hard to complete my Inquiry projects because I am not provided with a starting point on where to
    access resources. I would often use Google and check a number of websites which are sometimes not
    appropriate for me.

### Questions

- Our teacher always lets us know the **learning intentions** at the start of every lesson but sometimes I **am not sure if I have satisfied my success criteria**.
- How will I improve with my storytelling and writing skills?
- I still have to take a **number of tests for my subjects** even though I am **not getting any grades**.
- Where do I start with my Inquiry project? Is there
  anything like Behind the News where I can start
  to look for information? What will help me to
  complete it?

- I have lots of homework, sometimes I don't get time to play netball with my friends and practice my skills
- If I'm not getting any grades, how will I know how I'm doing in class before my report comes out?



- Are there any examples of work to help me understand my success criteria?
- What is the purpose of tests in my subjects? Why do I have to take it if I am not being graded?
- Can I share some of my best work with my parents?
- What can help me manage my time between homework and netball practice?

## **Improvements**

- I wish my teacher would spend as much time with me as some of the other students, to help me improve my writing and give me ideas and strategies
- A go-to place where I can easily find resources appropriate for me as a starting point for any Inquiry or other projects. A list of approved apps would be helpful in saving time and meeting deadlines.
- **Examples of finished work** that clearly illustrates illustrates what success looks like to help my understanding and build my confidence in how I am doing in class
- **Teacher guidance or support or tools** that will help me **build my capacity to manage my time well** to ensure I don't fall behind my class and continue to work towards my aspirations

## **Feelings**

- Delighted to have the opportunity to write about the things that interest me
- **Neglected** that my teacher doesn't give personal feedback and tips for improvement on my work which I think slows me down from becoming a better writer
- **Annoyed** that it is taking so much time to find appropriate sources for the information I need to complete my project
- **Unsure** sometimes if I have met my success criteria for some of my lessons which makes me unsure of how I am doing in my class sometimes
  - Relieved when I don't get many answers wrong on my tests
    - Proud to show my work to my parents in Seesaw as well as on parent-teacher interview
      - Eager to find time to practice and play netball so
         I can represent my school



**Background** 

Crystal is a highly motivated year ten student who attends her local metropolitan high school. She is very passionate about community work and and volunteers as a volleyball coach for young kids which is helping her to develop strong leadership skills.

In class, Crystal enjoys learning opportunities that involve debating and class discussions related to politics and current events. She finds it very disengaging when required to sit in a class for an hour and do exercises directly from a textbook. This is what she usually does in maths.

She has very high regard for her teachers who take time to provide her with personalised constructive feedback. When her teachers really break it down for her as to her strengths and where she needs to focus next, she progresses and makes improvement. She realises though, that she will not always get the one-on-one time she values from all of her teachers.

Crystal is well aware that she is not a very good test taker and believes that tests are not the best indicator of what she knows. In class tests bring her stress and anxiety.

#### **Favourite subjects**





Humanities and social sciences

History



#### Interests and hobbies













### **Favourite apps**

Her needs

her grades



Crystal recognises that checking Twitter is both a good and bad habit sometimes she gets useful information, sometimes she gets junk.



"Yeah, that's the reason I'm passing

my History is because she gives me

one-on-one feedback. The grade just

slowly got up with every piece of

feedback. I was like, 'Thank you.

You're my saviour right now'."

• Be a good example and role model to the kids she is coaching for

• Teacher guidance, resources and tools that will help build her learner

Other forms of assessment apart from tests to enable her to demonstrate

capabilities and be more autonomous in her learning

development of her leadership skills

• Personalised constructive feedback to help her understand next area of focus

her knowledge and capabilities more accurately which can be incorporated in

• Resources and support that will help her in her volunteer work and build the

A flashcard app that helps Crystal go through her English exams. She's able to practice on the bus on the way to school.



Teachers assign tasks within a set period of time. Crystal earns a certain amount of points to get a certificate which can then be exchanged for a free Subway lunch.

### **Pain points**

- Only a few of my teachers are able to provide me with feedback and clear directions to help me improve my capabilities and progress in my
  learning/grades
  - Textbook work with minimum revision is very disengaging for me and is not helping me grasp the concepts I need to learn
    - Apart from my teachers and peers, I need other sources to guide me on how to study and help build my
      independent learner capability. Some of my friends have older siblings that completed high school
      recently they help them with ideas and strategies.

## **Feelings**

- Grateful to my teachers who have provided me with personalised constructive feedback
- **Unhappy** with the way some of my subjects are being taught and the activities I have to complete in class I am just doing what I need to do
- **Craving** for more one-on-one time with my teachers because that is the best way I can get an understanding of where I am at and what I need to focus on next
  - Determined to build my learner capability and and become more self-directed in my learning to prepare for year 11 and 12
    - Disappointed that there are very few opportunities to demonstrate and develop my leadership skills in school
      - **Stressed** when I have to sit for an exam in class

- I experienced **test anxiety most of the time** especially if it is in class. I would get forties or fifties which I would normally get seventies for.
  - I don't often have a chance to demonstrate my leadership skills in school, very few subjects incorporate it in their activities.
    - Crystal Student

 What am I supposed to learn in this session? What is expected of me?

How can I know how I am doing in

every subject before my report comes

- How can I **build on the feedback** that has been given to me and ensure I keep **improving on my own**?
- Are there effective strategies to study and learn independently? Where can I find them?
- What can help me perform better during exams and overcome my stress and anxiety?
- Are there opportunities for me to show and develop my leadership skills in school or class?

**Questions** 

out?

- Access to teachers, mentors, resources and tools that will help build my learner capabilities and enable me to be more autonomous in my learning
- Resources, tools and apps that will help me prepare and practice for exams to reduce my stress levels and anxiety
- Student-teacher interview, in addition to or in-lieu of parent-teacher interview, to get that first hand information of where I am at in my subjects and have that conversation regarding my own progress
- Activities that are engaging, dynamic and provide for opportunities to showcase and develop soft skills such as leadership, collaboration, and so on



**Background** 

Aimee's eldest child is eleven years old. He is in grade six and attending school along with his two younger sisters. She wants her son to go to a selective secondary school next year.

While her son is at school, he is posting updates on Seesaw. He is doing well on most of his subjects, especially math, but when there is an issue the teacher will normally contact her via Seesaw. There has not been a serious enough issue that his teacher has called her.

Twice a year she comes into the school to engage in threeway interviews with the teacher and her son. Also twice a year she receives a report detailing the progress her son has been making.

When her son comes home from music practice she makes sure he has finished his homework before he can play his video games. They discuss school with her other children. On the rare occasions he asks for support she will help him with his homework or completing practice tests for formal assessments.



#### **Biography**

Children 3

Age **39** 

Occupation Office worker

Status Married

"If they get lots of things wrong, then that will be like okay, let me see what you got wrong, so that I can work on exactly what you are struggling with.

To me that's just a clearer way of telling me how my son is doing."

#### Her goals

- Be a responsible and supportive parent
- Her son is learning and excelling in his education
- · Her son is happy, safe and is being catered for at school
- Motivate her son in his studies and extra-curricular activities
- Effectively juggle parenting and part-time work at the same time

#### Her needs

- Detailed reports that explain her son's progress, including patterns and trends, in a language she can understand with clear focus on his grades and how they can be improved
- Guidance on how to best support her son with his schooling and anything else she can be doing to ensure he is exceeding expected outcomes
- Regular updates on his progress and grades online that she can access directly when her son approaches her for help

#### How schools communicate with her



## Three-way interviews with parent, teacher and student

- Three-way feedback on learning
- · Her son showcases his work



- Her son showcases his work during his school time
- Transparency into their classroom
- · Communicate with the teacher

### **Pain points**

- Stressed with the inability to provide support to my son. School has changed so much since I was there and my son complains about being bored in math, but I do not have the resources or the confidence to help him at home even though I want to and may conflict with teachers.
  - The feedback they provide my son in subjects he is doing well is positive and transparent but in other subjects where he could do better he has little support the feedback is the same for all students in those subjects
    - There are **not enough information for me to track my son's progress in his learning as often as I'd like**, I want to be completely aware of how my son is tracking in school

## **Questions**

- How can I help my son with his learning so he can excel in primary school and beyond?
- How do I get a full understanding of what my son already knows and understand the full story of his grades?
- Why is my son not doing so well in literacy as he is in his other subjects?
- How is he tracking with his learning today? Can I get more regular updates?
- What does my son need to learn next?

- In literacy the **teacher does not seem to be getting through to my son**. I've had to hire a tutor to get his grades up.
  - Teachers don't give new information in our interviews, they repeat the same information as the reports, they should be more insightful



## **Improvements**

- Guidance on how to support her son with gaps in his learning and resources she and her son can use to close the gaps at home so he can catch up
- Informative feedback that helps my son and me clearly know what he needs to work on next rather than just telling me what he did well
- Transparent access to my son's progress in his learning that I can see everyday that is easy for both of us to understand, preferrably incorporating all the apps they are using in his classes already and will give us more to discuss during our three-way conferences
- The teacher could spend more time with my son to get a better understanding of how he learns and allow them to cater for my child in the classroom

## **Feelings**

- Worried that my son transitioning from primary school to a selective secondary school can be diffucult and I want him to have the grades to enter
- **Anxious** that I cannot help my children with his learning because it may conflict with what the teacher is teaching and the learning is different to when I was in school
- **Faith in** having a tutor to help my son with the core subject of literacy and the extra tutoring is really making a difference
  - Comforted that I'm able to view my son's work twice a week with feedback
    - Unsatisfied that the teachers are always rushed to finish the interview and not allowing my son to fully discuss the feedback the teachers have provided



"No surprises but in my case I think my daughter is actually cruising... I'm waiting for the results because I want her to be challenged more and give her more work."

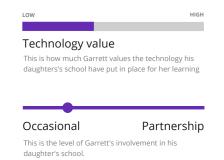
#### **Background**

Garrett's only daughter is currently in year nine at a school close by. His work has him travelling around once a month or so for a few days at a time. His daughter spends every other week with him.

Due to changing circumstances at home, his daughter has moved schools. The teaching approach is a little different, and she has picked up some new subjects as well as a new language elective. In addition to completing core subjects, his daughter has the opportunity to elect a small number of electives including a new language subject.

Garrett participates in parent-teacher interviews twice a year, however he missed the last one. Just before these interviews he receives a full report on his app about her outcomes. He only looks at the app notifications if they are regarding her progress updates - for most subjects his daughter seems to be excelling so he has little concerns about her learning other than he feels she may not be challenged enough.

The only time his daughter was falling behind he was alerted via the school app and was able to follow up with his daughter and teacher immediately.



#### His goals

- Be responsible and supportive of his daughter's wellbeing
- Help his daugther prepare for making her learning choices at school
- His daughter is feeling included and motivated at school

#### His needs

- More involvement for his daughter in her own learning
- Reports that detail next steps for his daughter so he can be assured she is getting the most out of her learning
- For his daughter to understand how feedback supports learning and not see it as negative
- How to motivate his daughter about subjects she may not see as being as valuable as others

#### **Biography**

Children

Age **45** 

Occupation **Contractor** 

Status **Divorced** 

#### How schools communicate with him

## SEQTA

- · Results of assessment tasks
- Feedback on certain assessments about what needs work
- How his daughter can prepare next time
- · Communicate with teachers



#### **Teacher-parent interviews**

- His daughter's wellbeing
- Feedback on his daughter's overall learning progress
- Any other issues

### **Pain points**

- My daughter and I don't understand the language and format of the reports as well as the language of formative assessment. We are unsure what the grades and assessments mean and the standards seems to be different than the last school she was at.
  - After moving schools, **my daughter was expected to complete the same test as everyone** else even with a new language elective that she had not been learning in her last school
    - Feedback from teachers is not useful. They usually just mark it right or wrong, rather than telling her why.

### **Questions**

- Are these grades good or bad in the overall picture of my daughter's progress?
- Can my daughter be assessed according to her progress in a subject she started later than the other students?
- How can my daughter be involved in parent/teachers interviews and be supported to describe her own learning when I am not around?
- Why does it seem she is finding the work too easy for some of her subjects?
- How can my daughter get better feedback from her teachers in a more timely way?

## She's not being challenged in some of her subjects - it feels like the teacher is too busy to accommodate her need for new opportunities to learn

- She doesn't value some subjects since neither of us see outcomes that are useful to her so hence we don't see the point
  - When I travel for work I miss the chance to attend parent-teacher interviews

## **Feelings**

- Somewhat uncertain with the overall picture of my daughter's progress and with some of the language of the reports
- Unhappy when my daughter's overall grade may suffer simply because she started a subject later than the other students in the class
- **Glad** when the teacher gave feedback and next steps in how to ensure my daughter would catch up with the others
  - Annoyed that some of the teachers do not provide her with meaningful feedback that keeps her challenged



## **Improvements**

- Layman's language for my daughter and me to get an overall idea of her progress - available when she wants it and ensures her grades are transparent
- More one-on-one time between my daughter and her teachers especially when she is new in the subject so they can have a better understanding of where she's at
- Challenging feedback that guides her in what to do next rather than tell her the correct or incorrect answer straight away so she can independently learn, as well as help me support if ever she comes to me when she receives negative feedback
- My daughter should be the one attending parent-teacher interviews, I get enough updates from her and the app
- Maybe some additional resources and tips that allows her to independently progress when she has surpassed what the rest of the class is learning

 Questioning why his daughter cannot attend parent-teacher interviews all the time or when he is unable to

#### OUTPUTS

# PERSONAS FOR SYSTEM OWNERS AND VENDORS

The vision articulated in the *Growth to Achievement: on-demand* resources for teachers (expert panel paper) emphasised that it was important that any new resource developed and/or recommended by the LPOFA initiative should be aligned to the learning progressions and, where possible, be integrated with tools teachers are already using.

Given the many tools and resources that teachers use as part of their daily practice, this discovery phase has sought to understand the features, processes and motivations of the many tools that are currently available to support teachers and schools in many aspects of the teaching and learning process.

In consulting with system vendors and owners we are better placed to understand the landscape our potential partners are working in, and how we can work and benefit together under the initiative.

Based on these consultations we have developed personas to help those designing software for the initiative with deciding how best, and if, other systems can integrate with them.

#### **GLOSSARY OF TERMS**

API	Functions/procedures that define how applications interact or access the features/data of another service
AWS	An industry leading SaaS that offers on-demand computing to automatically adapt to the number of users that are accessing a service
CSV/XLS	Data format that can be used to extract data as well as manually upload and import data into other service
ICS	An industry recognised calendar file format used across all email providers enabling users to publish and share calendar information
LMS	Applications for managing, reporting and delivery of learning and development programs
SaaS	A software delivery model where a third-party provider is responsible for hosting and managing an application in return for a fee
SIS	Applications that store and track student information, including grades and attendance records, used by teachers, students and parents
SS0	Secure single login for end users that allows seamless

access to independent applications

**System Vendor** 



## **Turk (Assessment Vendor)**

Manager

Objective

Support teachers in enabling students to progress in their learning and provide evidence-based assessment tools which assist in diagnosing a student's learning needs.

#### Platform audience







Parents

Students

Available nationwide and internationally. Paid for by some system/sectors.

#### **Capabilities supported**

**Literacy** 

✓ Numeracy

#### **Machine-readable integrations**

CSV/XLS

☐ Markbook

#### Platform features



### Interoperability

No formal integrations or available APIs, but exports on request (paid)



Analytics

Visuals that support exporting

Curriculum content





#### Scalability

Runs on Amazon web services (AWS) as a software as a service (SAAS) and easily scalable



External data providers

All produced in-house



#### Mapped to national learning progressions

Assessment data is mapped to their own progression (with overlaps to the national learning progressions)

### His background

Turk is one of the managers for a leading assessment tool used nationally. His team has demonstrated success over the decade building tools which are used by approximately two million users nationally. He is passionate about improving their tool and has developed a prioritised product road-map based on customer feedback.

#### His goals

- To provide a holistic assessment tool aligned to curriculum that would enable teachers to identify and support student progress
- Reduce operational load on teachers by embedding student and assessment data from other sources
- Focus on building a tool which is user friendly and intuitive rather than focusing on third-party integration

#### His needs

- Support from jurisdictions with integration
- · Feedback from users on usage of tool

#### **Ouestions**

- · How to efficiently transfer student data from school based Student Management Systems?
- · How do we transfer data to **Learning Management** Systems?
- Why would we need to **integrate** and be a part of this initiative?

#### **Feelings**

- · Confident that their tool is encompassing and do not need to engage in third-party integration
- **Concerned** (based on their research) that national learning progression may be adopted as a checklist and may not provide good progress information
- Constrained by the lack of automated user provisioning that could limit adoption
- **Empowered** that the product has a steady market and the research indicates they're helping teachers

#### **Pain points**

- Frustrated that student records have to be manually fed instead of an automated process
- · Tool is at times not used as intended due to a lack of formal and systematic training
- Lost functionality if schools decide to use activities and resources from the tool offline

- SSO Single Sign On for provisioning
- · Effective professional learning model that is scalable nationally
- Availability of next step resources personalised to each user to improve adoption of tool nationally



### **Sid (Assessment Vendor)**

**Chief Technology Officer** 

#### Objective

Build a system that empowers teachers to have a greater impact in classrooms to deliver a personalised and engaging learning model for student

#### **Platform audience**



Teachers







**Parents** 

Students

Subscription based product available across 1400+ schools worldwide supporting a wide range of capabilities

#### **Capabilities supported**

**Literacy** 

☑ Numeracy

☑ Health & PE

#### **Machine-readable integrations**

✓ SSO

☐ Markbook

#### Platform features



Interoperability

Integration with LMS and Single Sign On along with Google Classroom



#### Analytics

On request PDF or Excel based reporting with an API available internally only



#### Alignment

Curriculum-aligned content ensuring students are meeting all state-based learning requirements.



#### Scalability

Runs on cloud based Microsoft Azure with certain components on premise



#### External data providers

Mix of internally created as well as externally sourced tests



#### Mapped to national learning progressions

Mapped to learning progressions as well as overseas standard (eg. Academic Benchmarks)

#### Her background

Sid is the Chief Technology Officer of a leading subscription based assessment vendor. Her team have transformed the 21st century modern classroom by driving positive learning outcomes with rich data and insights with a world class service and support.

#### Her goals

- To provide personalised learning in classrooms using an online and offline teaching model
- Support a growth mindset to enable students taking ownership of their own learning journey using customised lessons, focussed on mastery, which they can complete at their own pace
- Provide student-centred learning irrespective of what the starting point is

#### Her needs

- Secure data sharing or integration with data aggregation portals (e.g. Literatu) to obtain teacher feedback used to augment student scores and get the holistic student view
- Recommendations for students on what content to progress to
- Standardised learning progressions with support and guidance for schools regarding adoption

#### **Ouestions**

- How will the implementation of a proposed tool be carried out knowing buy-in from users would be the most challenging consideration?
- · What changes in behaviour would we see in students and teachers as a result of this initiative?
- What support would we receive as a vendor to support any potential changes required, given we have thousands of users??

#### **Feelings**

- Relieved that the intention is to not build formative assessments from scratch
- **Open** to collaborate on the creation of assessment banks or a shared repository used nationally
- **Unsure** how the existing alignment with state-specific curriculum and/or progressions in their system will be impacted
- Constrained by privacy and security requirements around data sharing and obtaining teacher feedback from data aggregation portals

#### Pain points

- Adoption of our tool by schools usually requires a shift in the teaching and assessment model - support for effective formative assessment is needed especially from senior school leadership
- Lack of a machine readable capability which leads to increased time taken to make changes in their system
- Incomplete picture of student learning and progress due to insufficient data on teacher feedback
- Catering for blended learning ensuring our tool can be used in-line with traditional classroom methods is challenging

- · Increase awareness and understanding of the value of formative assessment for each student will help to get buy-in from teachers and school leaders
- Machine readable version of curriculum, syllabus or progression that will allow for systematic mapping against assessment items
- Secure way of accessing or capturing teacher feedback, classroom observations, peer reviews to obtain holistic view of student learning
- Content for students that will support next **steps in learning** informed by assessment data



## Perry (LMS Vendor)

Chief Technical Officer

Objective

To create an ecosystem that allows school communities to collaborate, manage and support student learning from Foundation to Year 12.

#### **Platform audience**



Teachers





Students **Parents** 

Available nationwide. Paid for by some system/sectors.

#### Capabilities supported

Literacy

✓ Numeracy

#### **Machine-readable integrations**

✓ ICS

 Markbook SIS (Formative data)

#### **Platform features**



#### Interoperability

Most admin systems like Tass, Maze. Limited exchanges with Civica, Synergetic



#### Analytics

Attendance, pastoral, academic achievement links for synthesized analytics



#### Alignment

Only integrated to National Curriculum



#### Scalability

Runs on AWS with some instances of On Premise



#### **External Data providers**

Pearson, Campion, ClickView, Myedonline



#### Mapped to national learning progressions

Assessment data is mapped to their own progression (with overlaps to the national learning progressions)

#### His background

Perry is the CTO of a well established LMS provider used nationally. Perry believes that the future of learning should be individualised, student led and students would be able set learning goals aligned to achievements and credentials with systems assisting them to achieve those goals.

#### His goals

- To enable students to be in full control of their learning journey with teachers guiding this journey
- To build a national product with self generated content for an entire market with less time spent on building more systems and integrations

#### His needs

- Common format for NAPLAN and PAT data that will allow for easy or programmatic insertion
- Availability of next steps resources personalised to each user to improve adoption of tool nationally
- National push to support student agency and a student led planning model

#### **Ouestions**

- Why are states not asking for formative progress of students instead of existing summative end of term reports?
- How do systems decide what comes **next for students** and impact of national learning progressions on that?
- · How do we uniquely identify students across all states?

#### **Feelings**

- Optimistic about having a product roadmap which includes alignment to learning progressions
- Perplexed why there is not an agreed data format for NAPLAN and PAT data which could enable importing it within LMS
- · Convinced that student-led learning and planning is the key irrespective of teacher recommendations
- **Proud** of product's maturity and all round capabilities and integrations

#### **Pain points**

- Lack of available APIs and open standards leading to increased time and effort to build custom build integration
- Absence of a native quiz engine thus relying completely on an external third party integration which imposes a dependency
- Lack of national alignment and common understanding of learning progressions potentially **hindering adoption in** classrooms
- · No mapping of national progressions to state curriculum in an agreed format
- Mapping LMS tool to different versions of curriculum is a challenging task

- Look at ways to integrate with statespecific curriculum
- Develop a new set of achievement standards that recognises student mastery in a learning area, linked to assessment, mapped to the curriculum, and can be used to track progressions.
- Insertion of NAPLAN and PAT data once standardised
- Progression alignment (curriculum and learning progression) to give best picture of students





Morgan **Executive Director** 

#### His goal

To roll-out the central student management system across all schools to pave the way forward for improved systemic approaches and processes in areas of need such as analytics, reporting and resource procurement

#### His needs

- · Support and cooperation from schools to ensure successful roll-out of central student management system
- Collaboration from national and other systems/sectors on effective and efficient ways to help with areas of need

### **Capabilities**



#### Procurement

There is no centrally provided content or resources apart from historic resources in Scootle. Improving this capability is currently being investigated.



#### Assessment alignment

Some alignment to standardised assessments (e.g. NAPLAN). There are also some alignment to local curricula but in a scattered approach. Following other states for possible ways of moving forward.



#### Account management

Supported by central student management system however roll-out to all schools is still in progress.



Limited to search using keywords, subject and not actively aligned to any formative processes. Reliant on nationally provided resources.



#### Resource alignment and recommendation

Recommendations are limited to reference materials to assist users. Alignment is mostly devolved to school-level practice and there are currently no approaches at system level.



This happens mainly at school level and some schools have the capability to develop useful and sophisticated analysis. Datasets relevant to system-wide analytics are yet to be identified.



Selection of quality resources that support formative learning are made at school level. Not an area of focus at system level but would welcome national services that will support.



#### Reference data

Consumes Australian Curriculum and some schools reporting against achievement standards. Following other states for efficient ways to move forward.



System level reports are only for compliance but it is expected to improve upon full roll-out of central student management system.

#### **Ouestions**

- How will a formative assessment system be rolled out to schools consistently?
- Will we be able to share and use resources from other systems/sectors?
- How can we support the schools with mindset change required to embrace formative assessment?
- How can we ease the transition to a new centralised student management system?
- How do we track progression across our system?

#### **Feelings**

- Expectant of this initiative's potential offerings especially around qualityassured resources aligned to formative assessment practices
- Worried about the declining quality of resources that are no longer being updated in line with the times
- **Keen** to see how we can apply and formalise the current capabilities our schools and other sectors are using to identify student progress
- **Excited** by the opportunity to work together to progress student outcomes

#### **Pain points**

- Lack of modern resources aligned to our **state curriculum** seems to be putting us behind other jurisdictions
- Not enough data available to standardise reporting and support for our schools
- Not confident with some schools' selfassessment and self-reported data
- Lack of integration between multiple resources and capabilities makes it difficult for school users in our sector to use resources we recommend
- · A push from this initiative may interfere with current changes our sector is implementing and may overwhelm schools in our sector

- Quality and up to date resources aligned to the Australian curriculum that can be easily accessed, mapped and customised at school level
- Resources that can be integrated into our central student management **system** with ease
- Support in effectively rolling out national changes across our sector
- Improved awareness of formative assessment and practices through working with schools that are already doing it



Pearl
Executive Director
Learning Improvement

#### Her goal

To improve assessment capability at a system level and develop assessment literacy among leaders and teachers to continue to build confidence in their professional judgements

#### Her needs

- Collaboration from national and other sectors on proven effective assessment approaches and strategies implemented at a system level
- Access to resources that are curriculum-aligned, quality assured, up to date and can be implemented at system level

### Capabilities



#### Procurement

Strong support for historical resources, although most are non-digital. Some development of new in-house resources and are aligned to the Australian Curriculum.



#### Assessment alignment

Supports teacher-created assessments. Outsourced some literacy assessment to vendor with an alignment to a learning progression that are based on NAPLAN. Tracking other states for possible ways of moving forward.



#### **Account management**

Supported by central student management system.



#### Discovery

Ability to search resources and assessment with helpful classification and alignment. Traditional content tagging mechanisms in place for non-digital resources.



#### Resource alignment and recommendation

Resources are available and aligned to Australian Curriculum but usage is strongly determined at school level. Welcomes national services that will help improve this.



#### Analysis

Existing analytics capability for centrally captured data however formative data is very limited and often not recorded at school level.



#### Quality

Some resources for primary level are tracked against the curriculum and historical metadata standards. It is more of a fragmented task aligning resources for secondary level.



#### Reference data

Consumes Australian Curriculum in machine readable format and also updates when curriculum is changed. Anticipating similar process for consuming learning progressions.



#### Reporting

Established reporting capability but with limited datasets as formative data is not often recorded at school level. Reports are available online for staff. No conceptual issues foreseen in extending to report formative data against learning progression.

#### Questions

- What will happen to the current resources that are already available nationally? Will they be mapped to learning progressions?
- How can we map online and offline resources to learning progression?
- Will there be support provided for mapping resources to the national learning progression?
- How do we drive consistency in approaches to identifying student progress?

#### **Feelings**

- Suspicious of initiatives seeming to replicate what is already available in our sector
- Careful with alternatives to national curriculum such as learning progressions that may just be a brief trend
- Delighted with new additions to the national resource database that are aligned to the curriculum
- Interested in the possibilities learning progression offers in building formative assessment practice in identifying student progress

#### **Pain points**

- Resources that are mandated to schools are not aligned to the learning progression, she feels new resources needed to be created and aligned
- Lack of formative assessment data to identify student outcomes at a sector level and drive changes in practice
- Resources can be seen as outdated for formative assessment purposes
- Lack of consistency in teacher judgement for general capabilities
- Non-mandated initiatives could introduce discrepancies in teacher practice and judgement

- Trusted and updated resources aligned to learning progression and the national curriculum
- Easier reporting for schools against any curriculum
- Aligned assessment resources and strategies that build teacher judgement across all student capabilities
- National resources that can be customised at the sector level to ensure consistency in school approaches



### Chase

Learning Design and Development Advisor

#### His goal

To continue to develop high quality assessment and learning resources that are relevant and aligned to identifying where students are at, and where to next. To empower teachers and provide immediate support in the classroom.

#### His needs

- Learning progressions in an easy navigable and digestible format to allow resource discovery and alignment at system level
- Nationally shared resources that are quality assured based on a standard framework and that can easily be mapped to local curriculum

### **Capabilities**



#### Procurement

Extensive historical resource bank with recently created in-house content, actively managed and aligned to local curriculum. Finding an approach to making resources adaptable to multiple pedagogy models is underway.



#### Assessment alignment

Strong alignment with local curriculum and version of progression. Approaches to adapting assessment according to student's current level of attainment is being investigated.



#### Account management

Supported by central student management system.



#### Discovery

Strong discovery of resources based on local curriculum. Key focus at the moment is finding methods to align to learning progressions.



#### Resource alignment and recommendation

Strong alignment with local curriculum and version of progression. Existing support is available for pathway-based recommendations and there is ongoing work for recommendations that will support planning.



#### Analysis

Strong central analytics capability with rich insights and next steps shared with schools.



#### Quality

Some assessment reporting can be linked to appropriate resources but with no automated guidance. Focus to maximise impact of intelligent suggestions in order to ease teacher burden.



#### Reference data

Strong alignment with local curriculum and version of progression. Reference data is kept up to date. Creating consumable formats for others is a work in progress.



#### Reporting

Matured and uses a wide variety of datasets with reports available online through apps for teachers, students and parents. Capability is extensible to include formative data in the future.

#### Questions

- How do we enable effective personalisation of our resources for a variety of teaching approaches?
- What are the ways we can align resources to national and state based curricula including learning progressions?
- How do we ensure formative assessment is understood and being implemented across the sector consistently?
- How do we support schools in maintaining quality teaching practices by using learning progressions?

#### **Feelings**

- Accountable for ensuring our resources are high quality and practical for our sector
- Ready to align to a national learning progression as moving forward this will support identifying student progress
- Sensitive to the needs of their sector in ensuring everyone can work together to improve formative assessment practices and therefore student outcomes
- Anxious of the effort required to constantly manage in-house resources

#### Pain points

- Learning progressions are overwhelming for teachers to understand let alone utilise, spending time themselves to translate these for parents and students
- Some teachers may use resources for next steps as a checklist rather than a guide for their teaching
- The amount of resources to support formative assessment practices are many and requires substantial curation to identify the best

- Multiple personalised resources for next steps that are provided to teachers based on intelligent suggestion to give teachers more choices in their lesson planning
- A way to navigate learning progressions that can be used by teachers in practice and transferred to students directly
- Integration with evidence-based resources that are aligned to our curriculum
- Resources that can provide more choices in differentiating lessons according to learning progression

#### OUTPUTS

### **JOURNEY MAPS**

### Journey maps in user-centred design

A journey map is a comprehensive diagram that illustrates users' experience over time, rather than a snapshot. It works well with personas - as a persona focusses on the user profile while a journey map focusses on their experience.

### Journey maps in the initiative

Based on the research undertaken for initiative, the current journey that school's undertake in supporting student learning and identifying progress has illuminated consistent themes that transcends sector, school context, preferred teaching approaches and student needs.

Five key phases across the current journey have emerged from the research analysis based on the different actions they undertake. These are 1. Identify goals; 2. Plan; 3. Teach and learn; 4. Measure and 5. Feedback and next steps.

#### **USING THE JOURNEY MAPS**

Journey maps summarise and synthesise a large number of findings so the project team can base design decisions on a deep understanding of a target audience's broader journey.

Within each key phase in the journey map, information needs, sources of information, highlights, pain points and the feelings of the target audience are examined.

Journey maps should help the project team analyse and uncover opportunities to improve users' current experience.

#### **JOURNEY MAP BREAKDOWNS**

Each journey map has been broken down into single key phases for easier legibility on-screen and when printing to A4. These contain the same structure as the larger journey map and should be read in the same way.



When printing complete journey maps, it is recommended to print them on A2 paper or higher for best legibility.

#### JOURNEY MAPS

### **KEY PHASES**

The journey users undertake when supporting student learning and identifying progress consists of these five key phases.

These phases are interwoven, not necessarily in sequential order, and may take more or less time depending on circumstances. Teachers were observed to go through these phases as a cycle. The cycles can be across a topic or unit of work, a term, a semester or a year — or even a single lesson. School leaders go through the same phases, with a focus on the whole school approach. Parents and students are also engaged in the journey but have limited involvement in some phases.



The circumference of the circles indicates cycle frequency. Smaller circle means the cycle happens more frequently.

1.

### **Identify** goals

During this phase, teachers are gathering information about where students are in their learning, and understand what content they will need to teach. The main activity in this phase is to set learning goals to measure across other phases as well as differentiating success criteria according to students' capabilities and attainment levels.

Z

### Plan

In this phase, teachers plan and proceed with finding resources that will support them in accomplishing goals they have set in the previous phase. Teachers take into account the various success criteria for their students and plan accordingly for differentiation. In most cases, this involves collaboration with other teachers and leaders, occasionally students and parents.

3.

#### Teach and learn

This is the phase where teachers begin to implement the planning in their classrooms. Teachers implement teaching approaches, utilise resources and make adjustments to create learning experiences for every student. Students participate in learning experiences at school and outside of school.

4.

### Measure

Assessing and monitoring students' learning happens in this phase. Teachers utilise assessment tools and resources to identify student progress according to the success criteria. They also collect observations of learning through various other methods. In this phase, teachers work together to moderate agreed evidence of learning to ensure consistency and accuracy against achievement standards.

5.

### Feedback and next steps

This is the point in time where teachers provide crucial feedback and next steps to students for them to continuously progress in their learning. Here, student successes are celebrated and shared among teachers, parents and families. This would also involve reviewing and reflecting on the outcomes, including feedback from students, and identifying areas of improvement in planning, practice and assessments.

#### Identify goals Plan Teach and learn Measure Feedback and next steps Plan learning eyneriences . Know the content I need to teach · Carry out learning experiences as planned Feedback to students on measures of learning · Identify, compare and contrast resources · Monitor learning · Modify and/or adapt learning experiences . Know the students I am teaching Report to parents What are teachers doing to · Map out learning according to intention(s) · Assess learning . Define learning intention(s) · Apply teaching approaches · Report to other stakeholders · Tailor teaching and learning according to success criteria · Validate measures of learning . Define success criteria for my students · Manage classroom and students Reflect on learning · Team planning, co-designing lessons Refer to planning · Collaborate with other teachers · Refer to planning · Recognise student attainment and progress · Collaborate with other teachers Differentiation What do teachers need to complete their Student well bein Size of block indicates number of users who have this particular need tudent well bein Professional learning Teaching resources Student well being Professional learning reacher well being tudent learning data Foodback Australian Curriculum Student management system · Online search engines School leaders . Third-party resources Work colleagues Exit slips Australian Curriculum Learning management system Learning management system State/sector resources · Shared data sources Shared drive Cloud drives Shared drive State/sector resources Learning management system School leaders Surveys School rubric · Student management systems School rubric · Learning support · School leaders Past resources · Third-party resources Worksheets · System/sector resources · Learning support Presentations · School leaders, work colleagues Conferences YouTube Mini whitehoards Verhal feedback · Learning plans/journals/portfolios Work colleagues Classroom wall visuals Sticky notes/diaries Interviews · Parents, carers, students · Past assessments · State/sector resources Meetings · Learning support Worksheets · Cross-school collaboration · Third-party resources Uploaded evidence · Learning management system . Diagnostics (e.g. ACER PAT-R/PAT-M) · Learning support · Third-party resources · School rubric · School rubric · Past assessments (exemplars) · Visible learning · Personalised learning plans Pain points / highlights What was the exper teachers throughout the Negative Lack of time to ensure regular, timely and personalised feedback for 1 always tell my students when we start the school year, 'You guys don't get Learning progressions tell me more about my students. There is a large variety of resources available Students do not action past feedback. every student. golden time (free time). Being with me is golden time.' ▲ Inconsistent interpretation and implementation of curriculum 1 I've used old resources and use OneNote just to keep things and to share ⚠ There is no 'fit-for-purpose' resource that can identify progress A It is difficult to find the next steps to get all my students to their own stuff with students. Students are able to practically apply what they have learned. consistently for all my students no matter their capability. A There is little professional learning that can be directly used to assist in You have to meet the demands of the syllabus. And there's so much testing You've got to try to give the kids the advice that's just going to help them at inducting new teachers around learning progressions. 1 It would always be nicer if there were more easy to access or clearcut tools And often it would be with some of the struggling students that they'd have the level they're at. 3 Jasper a bit of a light bulb moment then, and they're often the rewarding that had everything, like every level, in front of you. Ruby required. And the pace is so fast that I really feel like it leaves some kids We talked about not only unpacking the curriculum, and then applying that moments, too. iii Gemma behind. Ruby to our lessons, and going what do we need to teach. It is looking at why we A Students do not understand the language of progress and have no need to teach it. Ruby There are so many resources to teach the next steps but confidently visibility of it or only value core subjects. A Formalising my observations and assessments takes up a lot of time. Students are engaged and enjoying the lesson. choosing and using the one I need when I need it is the hard part. Access to previous data that supports me in learning about my students Recognising success with students no matter their level of attainment Students are not engaged with learning goals they cannot relate to or Curriculum is too broad and open to interpretation, leading to a lot of There is no 'fit-for-purpose' resource that can identify progress consistently for all my students no matter their capability. guesswork in teaching and assessing my students ▲ Collating and analysing data takes too much time repeating data and feel they cannot attain. Whatever their back story is, then yeah, celebrating any progress. Yeah, steps - leading to reduced time to allow me to explicitly teach. and that progress becomes success for them. Because I can see what's not working for my students, I have to be true to They're not necessarily learning for the sake of learning sometimes. They're Finding aligned quality resources is time consuming. We've got so much data from different places that we don't have any time learning because we're telling them to. them. I can't always follow a pedagogical framework that's not necessarily to kind of consolidate it. 📓 Jasper Collaborating with students and hearing meaningful feedback from them addressing their learning needs. iii Gemma ⚠ Not being able to find the flexibility and time to identify or tailor tools The internet we have is unreliable but the resources I want to use ⚠ Unable to use the shared data directly since it is not timely or sufficient and resources to support differentiation for students across a wide require us to be online. Not convinced some resources gauge my students' depth of learning. 1'm constantly giving feedback in the moment which I find is actually more range of attainment levels We have some students who come to school with barely any oral language effective than post feedback. You know, it's more beneficial having that ▲ Managing my time and focus to cater for all my students ... sometimes sample in front of them and actually discussing it with them and reading, Resources that assess multiple capabilities simultaneously. and then you have the others on the other extreme. Page Gemma It's comforting to have a transparent and collaborative team to plan with I feel I overlook some students and they get left behind. wherever they can improve. MagGemma which gives me confidence in teaching my classes. ▲ Students are lacking fundamental skills required to meet the goals that sit Transparency in assessment allows us to work together to consistently Students are identifying next steps and assessing their own learning. Parents do not understand the language of progress/reports or only below the achievement standard I teach. identify progress. The focus is always on improving the learning, rather than simply assessing The main goal you really want to teach them is to be able to read, and marking whether they have or haven't achieved a particular outcome. understand, analyse ... Unfortunately these kids ... They require a lot of scaffolding, as they are well below expected level. After understanding the gaps, it is difficult to find the next steps to get all Some students are overwhelmed with learning progressions and taking my students to their own next level to ensure outcomes are met. their own next steps in learning. Ruby Worried Jasper Inconvenienced, yet inspired Ruby Comforted Jasper Assured Jasper Inspired, yet uncertain Ruby Somewhat confused Jasper Doubtful Jasper Proud Ruby Concerned Ruby Regretful Gemma Determined Gemma Exhausted, yet eager Alex Helpless Alex Stressed Gemma Overwhelmed and hassled Gemma Fulfilled Alex Passionate, yet somewhat unsure Alex Frustrated, yet motivated Gemma Guilty Alex Frustrated

Feedback informs the next goal in order to move forward with the content in continuous cycles to identify progress

#### **IDENTIFY GOALS** 1.

In this phase, teachers are gathering information about where students are in their learning, and understand what content they will need to teach. The main activity in this phase is to set learning goals to measure across other phases as well as differentiating success criteria according to students' capabilities and attainment levels.

#### Actions

What are teachers doing to move to the next phase?

- Know the content I need to teach
- · Know the students I am teaching
- Define learning intention(s)
- Define success criteria for my students
- · Collaborate with other teachers

#### Needs

What do teachers need to complete their

Size of block indicates number of users who have this particular need

Sources of information

access these information

What resources do teachers use to currently

### Curriculum

- · What year level achievement standard
- concepts I need to teach?

· Australian Curriculum

· State/sector resources

· Parents, carers, students

School leaders, work colleagues

· Learning management system

School rubric

#### Student well being

What might affect their

### Student learning data

- · Where are my students at?
- · What are the gaps in my
- What are their learning

#### **Feedback**

- What did my students learn before
- to our overall goal?

#### Differentiation

How do I adapt the intention?

#### **Professional learning**

- Student management system
- · Shared data sources
- Learning support
- Learning plans/journals/portfolios
- Past assessments
- · Diagnostics (e.g. ACER PAT-R/PAT-M)

- Learning progressions tell me more about my students.
- A Inconsistent interpretation and implementation of curriculum
- A There is little professional learning that can be directly used to assist in inducting new teachers around learning progressions.
- 🕠 We talked about not only unpacking the curriculum, and then applying that to our lessons, and going what do we need to teach. It is looking at why we need to teach it. Ruby
- Access to previous data that supports me in learning about my students.
- Collating and analysing data takes too much time repeating data and steps – leading to reduced time to allow me to explicitly teach.
- We've got so much data from different places that we don't have any time to kind of consolidate it. **[a] Jasper**
- ⚠ Unable to use the shared data directly since it is not timely or sufficient
- We have some students who come to school with barely any oral language
- A Students are lacking fundamental skills required to meet the goals that sit below the achievement standard I teach.
- In the main goal you really want to teach them is to be able to read, understand, analyse ... Unfortunately these kids ... They require a lot of scaffolding, as they are well below expected level.
- After understanding the gaps, it is difficult to find the next steps to get all my students to their own next level to ensure outcomes are met.

\* For the full journey map, please refer to page 57

Feelings What were teachers feeling in this phase?



Positive

Negative

Pain points / highlights What was the experience of teachers throughout the

phases?

Ruby Worried



Gemma Determined



**Jasper** Inconvenienced, yet inspired



### **PLAN**

In this phase, teachers plan and proceed with finding resources that will support them in accomplishing goals they have set in the





- There is a large variety of resources available
- 1've used old resources and use OneNote just to keep things and to share stuff with students. **Alex**
- It would always be nicer if there were more easy to access or clearcut tools that had everything, like every level, in front of you. **Ruby** 
  - There are so many resources to teach the next steps but confidently choosing and using the one I need when I need it is the hard part.
  - There is no 'fit-for-purpose' resource that can identify progress consistently for all my students no matter their capability.
- Finding aligned quality resources is time consuming.
- Not being able to find the flexibility and time to identify or tailor tools and resources to support differentiation for students across a wide range of attainment levels
- It's comforting to have a transparent and collaborative team to plan with which gives me confidence in teaching my classes.

Feelings

What were teachers feeling in this phase?



Ruby Comforted



**Mail Gemma** Exhausted, yet eager



**Jasper** Assured



### **TEACH AND LEARN**

This is the phase where teachers begin to implement the planning in their classrooms. Teachers implement teaching approaches, utilise resources and make adjustments to create learning experiences for every student.

#### Actions What are teachers doing to move to the next phase?

- · Carry out learning experiences as planned
- Modify and/or adapt learning experiences
- Apply teaching approaches
- Manage classroom and students
- Refer to planning

#### Needs

What do teachers need to complete their actions?

Size of block indicates number of users who have this particular need

Sources of information

teachers use to currently

access these information

What resources do

#### Differentiation What works best for these

Shared drive

YouTube

Third-party resources

 Learning support School rubric

students at this time?

Learning management system

- · Where can I find information

#### Student well being

· What has worked best for these students at this time?

#### Teacher resources

learning experience?

- · School leaders
- · State/sector resources
- Worksheets
- · Classroom wall visuals

### **Professional learning**

- Student resources
- engage students right now?

#### Teacher well being

- I always tell my students when we start the school year, 'You guys don't get golden time (free time). Being with me is golden time.'
- Students are able to practically apply what they have learned.
- And often it would be with some of the struggling students that they'd have a bit of a light bulb moment then, and they're often the rewarding
- Students are engaged and enjoying the lesson.
- Students are not engaged with learning goals they cannot relate to or feel they cannot attain.
- They're not necessarily learning for the sake of learning sometimes. They're learning because we're telling them to. **Alex**
- The internet we have is unreliable but the resources I want to use require us to be online.
- Managing my time and focus to cater for all my students ... sometimes I feel I overlook some students and they get left behind.
- Students are identifying next steps and assessing their own learning.
- The focus is always on improving the learning, rather than simply assessing and marking whether they have or haven't achieved a particular outcome. **Ruby**
- Some students are overwhelmed with learning progressions and taking their own next steps in learning.



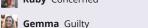
What were teachers feeling in this phase?

Pain points / highlights What was the experience of teachers throughout the



Negative

Ruby Concerned





**Jasper** Inspired, yet uncertain



<sup>\*</sup> For the full journey map, please refer to page 57

### **MEASURE**

Assessing and monitoring students' learning happens in this phase. Teachers utilise assessment tools and resources to identify student progress according to the success criteria as well as collect observations of learning through various other methods.

Actions What are teachers doing to move to the next phase? Needs

actions? Size of block indicates number of users who have

What do teachers need

to complete their

this particular need

### Sources of information

What resources do teachers use to currently access these information needs

### · Monitor learning

- Assess learning
- · Validate measures of learning
- · Refer to planning

Assessments

assess the learning in this

· How can I assess the depth of

the student's understanding?

Third-party resources

Mini whiteboards

Worksheets

School rubric

• System/sector resources

• Learning management system

#### Moderation Are there any examples to help

- me assess? Am I consistent with other
- Are we addressing the achievement standards

#### **Professional learning**

- in monitoring and assessing the learning that happens in
- student learning?

#### Differentiation

- · Have assessments measured what we intended?
- What were the students
- success criteria?

#### Curriculum

· What did I learn about the

#### Student learning data

#### Work colleagues

- School leaders
- Learning support
- Sticky notes/diaries
- Cross-school collaboration
- Past assessments (exemplars)

Negative

Positive

Pain points / highlights What was the experience of teachers throughout the

phases?

Students do not action past feedback.

There is no 'fit-for-purpose' resource that can identify progress consistently for all my students no matter their capability.

You have to meet the demands of the syllabus. And there's so much testing required. And the pace is so fast that I really feel like it leaves some kids behind. Ruby

A Formalising my observations and assessments takes up a lot of time.

A Curriculum is too broad and open to interpretation, leading to a lot of guesswork in teaching and assessing my students

Because I can see what's not working for my students, I have to be true to them. I can't always follow a pedagogical framework that's not necessarily 

Not convinced some resources gauge my students' depth of learning.

Resources that assess multiple capabilities simultaneously.

Transparency in assessment allows us to work together to consistently identify progress.

Feelings

What were teachers feeling in this phase?



Ruby Somewhat confused



Gemma Overwhelmed and hassled



Jasper Doubtful



\* For the full journey map, please refer to page 57

### **FEEDBACK AND NEXT STEPS**

This is the point in time where teachers provide crucial feedback and next steps to students for them to continuously progress in their learning. This would also involve reviewing and reflecting on the outcomes including feedback from students, and identifying areas of improvement in their planning, practice and assessments.

#### Actions

What are teachers doing to move to the next phase?

- · Feedback to students on measures of learning
- · Report to parents
- Report to other stakeholders
- Reflect on learning
- · Recognise student attainment and progress

#### Needs

What do teachers need to complete their actions?

Size of block indicates number of users who have this particular need

Sources of information

teachers use to currently

access these information

What resources do

needs

#### **Feedback**

- · Did the student meet their

- engaging?
   Who do I need to share data

Verbal feedback

· Visible learning

• Third-party resources

• Student management systems

Exit slips

Surveys

### **Differentiation**

- Did the students meet the
- · Who did we teach well, and who
- What affected them meeting the criteria?

#### **Professional learning**

- and to my school leaders?

#### Student learning data

- Where are my students at now?
- What does good progress look like

#### Student well being

- What other factors have impacted my students learning?

#### Curriculum

- · Australian Curriculum
- · School rubric
- Presentations
- Uploaded evidence
- Personalised learning plans

- Interviews



Negative

Lack of time to ensure regular, timely and personalised feedback for every student.



It is difficult to find the next steps to get all my students to their own



You've got to try to give the kids the advice that's just going to help them at the level they're at. | Jasper



Students do not understand the language of progress and have no visibility of it or only value core subjects.



Recognising success with students no matter their level of attainment

Whatever their back story is, then yeah, celebrating any progress. Yeah, and that progress becomes success for them. **Alex** 



Collaborating with students and hearing meaningful feedback from them

I'm constantly giving feedback in the moment which I find is actually more effective than post feedback. You know, it's more beneficial having that sample in front of them and actually discussing it with them and reading, 

Parents do not understand the language of progress/reports or only value core subjects.

Feelings

What were teachers feeling in this phase?

Pain points / highlights What was the experience of teachers throughout the



Gemma Fulfilled



**Jasper** Proud



**Alex** Passionate, yet somewhat unsure

#### Feedback informs the next goal in order to move forward with the content in continuous cycles to identify progress — Identify goals Feedback and next steps Monitor planned assessments and validate measures of learning. · Review teachers' reporting on student learning and progress · Know the national and state curriculum content · Identify and evaluate resources · Meet with teachers to understand how processes and · Monitor data collection and collation · Recognise student attainment and progress with students, teachers and parents · Build and/or share the school's vision, strategic plan and approach Identify assessment resources and tools strategies are being applied What are school leader Assess impact of programs to identify student learning and progress Fulfil reporting requirements to parents and stakeholders · Know teachers' capacities and individual goals . Plan and tailor professional learning according to teacher needs and goals · Support, mentor and coach teachers doing to move to the next · Assess impact of teaching strategies and approaches · Reflect on the impact of teaching strategies and approaches Know the students' attainment levels within learning areas or year levels. Collaborate on pedagogical approaches and strategies. Teacher modelling, co-teaching and peer observation · Assess impact of professional learning . Provide feedback to teachers and discuss their next learning steps · Establish teaching teams and their respective goals · Collaborate and co-design lessons with teaching teams · Implement interventions (case management) · Refer to planning · Facilitate feedback among teachers . Plan learning interventions for students who are at risk Refer to planning tudent learning data What do school leader Teaching resources need to complete their Professional learning Teacher data Student well being number of users who have Student well being Professional learning Student resources ecocemonte Student well being Eagdhark Australian Curriculum · Student management system Learning management system · Online search engines · Learning management system · Australian Curriculum · Work colleagues Surveys · Australian Curriculum State/sector resources Shared data sources · Shared drive Cloud drives Shared drive Third-party resources School leaders · Student management systems School rubric School-wide rubric · Learning support · Work colleagues Past resources · Third-party resources · Learning management system Learning support Feedback Presentations school leaders use to · School board, work colleagues · Learning journals/portfolios · Parents, students Conferences · Learning support · System/sector resources · Sticky notes/diaries · Third-party resources Interviews · Parents, students Meetings School rubric · Mini whiteboards · Cross-school collaboration Evidence-based research Uploaded evidence School plans State/sector resources · Learning support · Third-party resources · System/sector professional learning Worksheets · System/sector professional · System/sector professional learning · Learning management system · System/sector professional learning System/sector professional learning · Classroom observations, staff meetings · School rubric learning Pain points / highlights school leaders throughout Teachers create the lesson plans according to the whole school Teachers can innovate and update their strategies and approach The teachers could get data quickly from assessments. Some parents do not understand their child's progress report. Teachers know the learning progressions. approach and curriculum. supported by evidence and research to meet their student needs. We are constantly repeating the conversation around who collects We have an issue with high staff turnover. Teachers come and go and Very little time to document progress, analyse and report to stakeholders some have to be oriented to our school's practices. It is great to see the collaboration between teachers. 1t's teacher discretion to adapt and change and meet the needs of The problem is in secondary it's very different because we teach so many Learning progressions are unwieldy for new teachers. We all go about it the same way, really, but having that ability to plan The assessment data could help teachers to decide next steps for the students. It becomes a little bit of whose responsibility is it, who's going to together is what makes the difference. 🌆 Kian whole class and each student. I work a lot on making sure staff have what they need or feel supported in have the time to do that, how are we paying for that? All of that is a Teachers are less confident in applying plans and known data what they're doing. 🌉 Jade Collaboration between teachers help them understand the learning to their everyday teaching Resources may not be reliable or not suitable to meet desired outcomes. progressions better. Teachers don't want to collect too much data, but it takes time to build Teachers know the whole school approach. Teachers have little time in class to identify and address There is a diverse pool of resources for teachers to build their lesson the practice and confidence to know which data to record. The planned professional learning helps teachers improve their capacities. interventions independently. Well at the moment really our whole school strategic focus is to use data Continuity of data is a problem when some teachers lack the time to to inform teaching practice and to differentiate. 🌆 Kian Some teachers are set in their ways and don't want to change New initiatives introduced by national or sector bodies to ensure Supporting and adapting our approach to any new resource takes up our their teaching approach. students progress always take time to make changes to school-based The last cycle was successful. The teachers and students are using the progression tool to keep plans and resources. track of learning progress. It has to come from a place of slowly showing people that there is a Data collection, collation and analysis are clear. It needs to fit with our philosophy which is about the evidence - we don't take The professional learning I want to use is not accessible to me in our different way that you can do things. 🎇 Jade Students can discuss their progress and reply to feedback with chances on kids' learning. We need to make sure that it's evidence-based and Collating the data to get a snapshot takes a fair bit of time. the research is solid and always looking for improvement. 🌆 Kian The teachers are engaging students in learning, during class $% \left\{ 1,2,\ldots ,n\right\}$ using resources identified in team planning. Professional learning supports teachers in using resources and tools. We wanted our students to be assessment capable, and we knew one If I don't get that buy-in, then I don't think it's worth it to invest a lot of Continuity of data is a problem when some teachers don't have a way of doing that was through a development of a progression tool time because it's going to just fall to pieces. It's not enough to say, yes, chance to put it in. I kind of think the tools don't matter, it's the way that you strategically use them and the matter is the way that you strategically use A learning sequence where the starting point is always: what do we that they could access, not just teachers. 🌉 Jade this is a great idea - or that it's not. We need to make sure that it's There's no point collecting a whole lot of data if staff do not have the data them and the way that you build the capacity of your staff to use them at sustainable. 🔬 Opal want our students to learn, how are we going to know when they're We're quite strong in giving that real-time feedback on how to get to the literacy skills or the knowledge to be able to use it effectively. 🧥 Opal the right time. 🌉 Jade learning it and what we'll do if they don't? benchmark, or what they're doing right at that level. It's about getting to There are ways to improve data collection to make it simpler and as an ongoing by-product of learning. the next step, is probably something that we still need to work on. Lack of data to support me in encouraging professional learning that Plans are established and teachers are confident to start teaching their At a leadership level, you can see if any problems are occurring, and you can act in a way to support that teacher, which obviously then supports the Challenging to find a common time to engage parents to help them We can use the data as a basis for creating learning programs or understand learning progressions as a tool for reporting progress. students and has that flow down. 38 Jade interventions Kian Willing Kian Determined Kian Rewarded Kian Driven to action Opal Apprehensive Opal Encouraged Opal Burdened Kian Adamant, yet hesitant Opal Swamped Jade Understanding Jade Supportive Jade Disappointed

lade Interested

### **IDENTIFY GOALS**

The main activity in this phase is to set learning goals to measure across other phases as well as differentiating success criteria according to students' capabilities and attainment levels.

• Know the national and state curriculum content

Know teachers' capacities and individual goals

Establish teaching teams and their respective goals

Teacher data

What are the teaching strategies

Student learning data

· What are the current

students' learning?

work in the classroom?

# Pain points / highlights What was the experience of school leaders throughout the phases? • Build and/or share the school's vision, strategic plan and approach • Know the students' attainment levels within learning areas or year levels Curriculum • What is the appropriate school approach that aligns with national, state or local What are the expected outcomes based on the curriculum? Student well being What other factors affect student learning? **Feedback** What are the teachers saying

Negative Teachers know the learning progressions. We have an issue with high staff turnover. Teachers come and go and some have to be oriented to our school's practices. Learning progressions are unwieldy for new teachers. I work a lot on making sure staff have what they need or feel supported in what they're doing. 🌉 Jade Teachers know the whole school approach. Well at the moment really our whole school strategic focus is to use data to inform teaching practice and to differentiate. 🌆 **Kian** The last cycle was successful. Data collection, collation and analysis are clear. Collating the data to get a snapshot takes a fair bit of time. Continuity of data is a problem when some teachers don't have a chance to put it in. There's no point collecting a whole lot of data if staff do not have the data literacy skills or the knowledge to be able to use it effectively. 🧕 **Opal** Lack of data to support me in encouraging professional learning that is evidence-based. We can use the data as a basis for creating learning programs or interventions. Kian Driven to action **Opal** Apprehensive

What resources do school leaders use to currently access these information needs?

Sources

Actions

nhase?

Needs

actions?

What are school leaders

What do school leaders

need to complete their

Size of block indicates

this particular need

amount of users who have

doing to move to the next

- · Australian Curriculum
- · State/sector resources
- School-wide rubric

Professional learning

· What resources/tools can the

· How do we ensure that timely

for every new initiative?

professional learning is available

differentiate learning and identify

capabilities?

their students?

- School board, work colleagues
- · Parents, students
- Learning management system
- System/sector professional learning
- · Student management system
- Shared data sources
- Learning support
- Learning journals/portfolios
- School plans

What were **school leaders** 



feeling in this phase?



lade Supportive

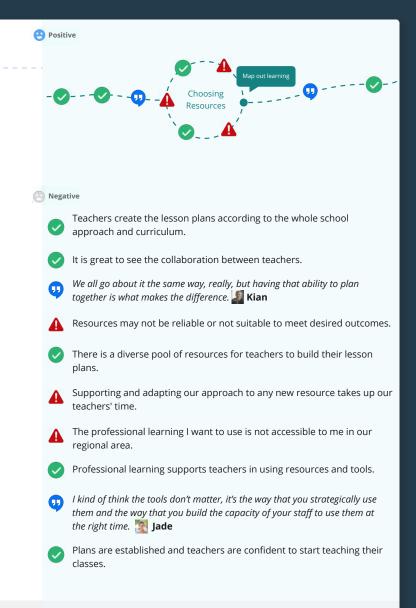
Positive

<sup>\*</sup> For the full journey map, please refer to page 63

### PLAN

In this phase, teachers take into account the various success criteria for their students and plan accordingly for differentiation. In most occasionally students and parents.

#### cases, this involves collaboration with other teachers and leaders, and • Identify and evaluate resources · Identify assessment resources and tools Actions What are school leaders • Plan and tailor professional learning according to teacher needs and goals doing to move to the next Collaborate on pedagogical approaches and strategies phase? Collaborate and co-design lessons with teaching teams · Plan learning interventions for students who are at risk Validation Teaching resources What are the teachers setting as Needs **Professional learning** What resources/tools can learning goals and success What do school leaders teachers use in the classroom criteria? · How can we help the teachers who that can help meet expected need to complete their Are these aligned with our student outcomes ? actions? school's vision and approach? resources/tools? What are the necessary learning interventions? planning? Size of block indicates Are the resources evidencenew initiatives? amount of users who have Teacher data · How are other schools doing it? this particular need Who needs support in planning What capabilities do the · How do we help teachers plan for differentiation in order for Curriculum Assessments · Are the resources evidence-based? What assessment resources/tools national, state or local · What are the best practices in can teachers use in the classroom assessment? Are there any that can help identify progress examples? consistently and accurately? · How are we building teachers' pedagogical expertise? · What are the teachers saying? · Learning management system · Online search engines Shared drive · Cloud drives Sources What resources do Work colleagues · Past resources school leaders use to Parents, students Conferences currently access these information needs? State/sector resources Meetings • Third-party resources Learning support System/sector professional learning



\* For the full journey map, please refer to page 63

What were school leaders feeling in this phase?

Pain points / highlights

What was the experience of school leaders throughout the phases?

Kian Willing



Jade Understanding



**Opal** Clear

### **TEACH AND LEARN**

This is the phase where teachers begin to implement the planning in their classrooms. Teachers implement teaching approaches, utilise resources and make adjustments to create learning experiences for every student.



Positive Pain points / highlights ·-- •• ·-What was the experience of school leaders throughout the phases? Negative Teachers can innovate and update their strategies and approach supported by evidence and research to meet their student needs. It's teacher discretion to adapt and change and meet the needs of whatever learners you've got at that time. **\( \Delta \)** Opal Teachers are less confident in applying plans and known data to their everyday teaching. Teachers have little time in class to identify and address. interventions independently. Some teachers are set in their ways and don't want to change their teaching approach. It has to come from a place of slowly showing people that there is a different way that you can do things. [8] Jade The teachers are engaging students in learning, during class using resources identified in team planning. A learning sequence where the starting point is always: what do we want our students to learn, how are we going to know when they're learning it and what we'll do if they don't? 🌆 Kian

\* For the full journey map, please refer to page 63

Feelings feeling in this phase?



Kian Determined

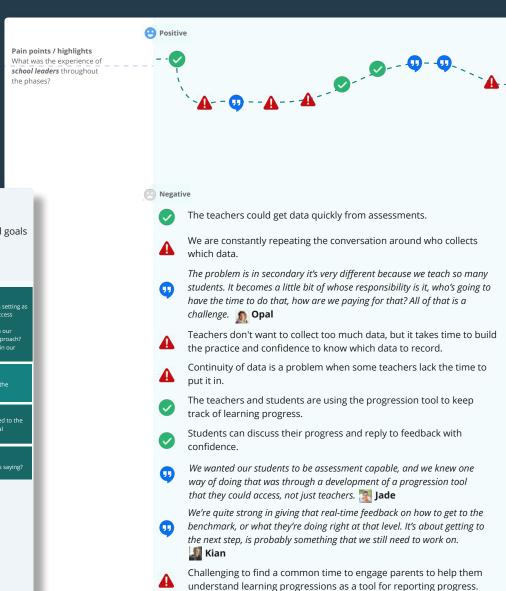


**Opal** Encouraged

### **MEASURE**

Assessing and monitoring students' learning happens in this phase. In this phase, teachers work together to moderate these agreed evidence of learning to ensure consistency and accuracy against

#### achievement standards. • Identify and evaluate resources · Identify assessment resources and tools Actions What are school leaders Plan and tailor professional learning according to teacher needs and goals doing to move to the next Collaborate on pedagogical approaches and strategies nhase? Collaborate and co-design lessons with teaching teams · Plan learning interventions for students who are at risk Validation Teaching resources What are the teachers setting as Needs **Professional learning** What resources/tools can learning goals and success What do school leaders teachers use in the classroom criteria? · How can we help the teachers who need to complete their Are these aligned with our student outcomes ? actions? school's vision and approach? resources/tools? · What are the necessary learning interventions? planning? Size of block indicates Are the resources evidencenew initiatives? amount of users who have Teacher data How are other schools doing it? this particular need Who needs support in planning What capabilities do the How do we help teachers plan for teachers need? differentiation in order for Curriculum Assessments · Are the resources evidence-based? What assessment resources/tools national, state or local · What are the best practices in can teachers use in the classroom assessment? Are there any that can help identify progress examples? consistently and accurately? · How are we building teachers' pedagogical expertise? · What are the teachers saying? · Learning management system · Online search engines Shared drive · Cloud drives Sources What resources do Work colleagues · Past resources school leaders use to Parents, students Conferences currently access these information needs? State/sector resources Meetings Learning support Third-party resources System/sector professional learning



\* For the full journey map, please refer to page 63

What were school leaders feeling in this phase?



Kian Rewarded



**Opal** Burdened

### **FEEDBACK AND NEXT STEPS**

This is the point in time where teachers provide crucial feedback and next steps to students for them to continuously progress in their learning. This would also involve reviewing and reflecting on the outcomes including feedback from students, and identifying areas of improvement in their planning, practice and assessments.

#### Actions

What are school leaders doing to move to the next nhase?

#### Needs

What do school leaders need to complete their actions?

Size of block indicates amount of users who have this particular need

#### Professional learning

· What improvements can we make in our teaching practices?

• Review teachers' reporting on student learning and progress

• Fulfil reporting requirements to parents and stakeholders

Reflect on the impact of teaching strategies and approaches

• Provide feedback to teachers and discuss their next learning steps

• Recognise student attainment and progress with students, teachers and parents

Are there gaps in professional learning for teachers?

Facilitate feedback among teachers

- · What do other schools do that are effective? · What could we do differently?

#### Feedback

- · Have teaching teams met their respective goals?
- · Who do we need to share reports and data with?
- Do we need to improve our reports based on feedback given to us?

#### Curriculum

- · What outcomes have we not met?

#### Student learning data

- to inform decisions for the whole school?
- · What do I know about our students now?

Sources What resources do school leaders use to currently access these information needs?

- Surveys
- Student management systems
- Feedback
- Third-party resources
- · Evidence-based research
- · Australian Curriculum
- School rubric
- Presentations
- Interviews
- Uploaded evidence

#### Where to next?

- What outcomes have we met?

#### Student well being

- System/sector professional learning





Positive

Negative

in different formats.

progressions better.

plans and resources.

whole class and each student.

Pain points / highlights

What was the experience of school leaders throughout the phases?

**Kian** Adamant, yet hesitant

sustainable. 🤵 **Opal** 

ongoing by-product of learning.

students and has that flow down. [8] Jade

Some parents do not understand their child's progress report.

Very little time to document progress, analyse and report to stakeholders

The assessment data could help teachers to decide next steps for the

Collaboration between teachers help them understand the learning

New initiatives introduced by national or sector bodies to ensure

the research is solid and always looking for improvement. **III Kian** 

If I don't get that buy-in, then I don't think it's worth it to invest a lot of time because it's going to just fall to pieces. It's not enough to say, yes,

There are ways to improve data collection to make it simpler and as an

At a leadership level, you can see if any problems are occurring, and you can

act in a way to support that teacher, which obviously then supports the

this is a great idea - or that it's not. We need to make sure that it's

students progress always take time to make changes to school-based

It needs to fit with our philosophy which is about the evidence - we don't take

chances on kids' learning. We need to make sure that it's evidence-based and

The planned professional learning helps teachers improve their capacities.



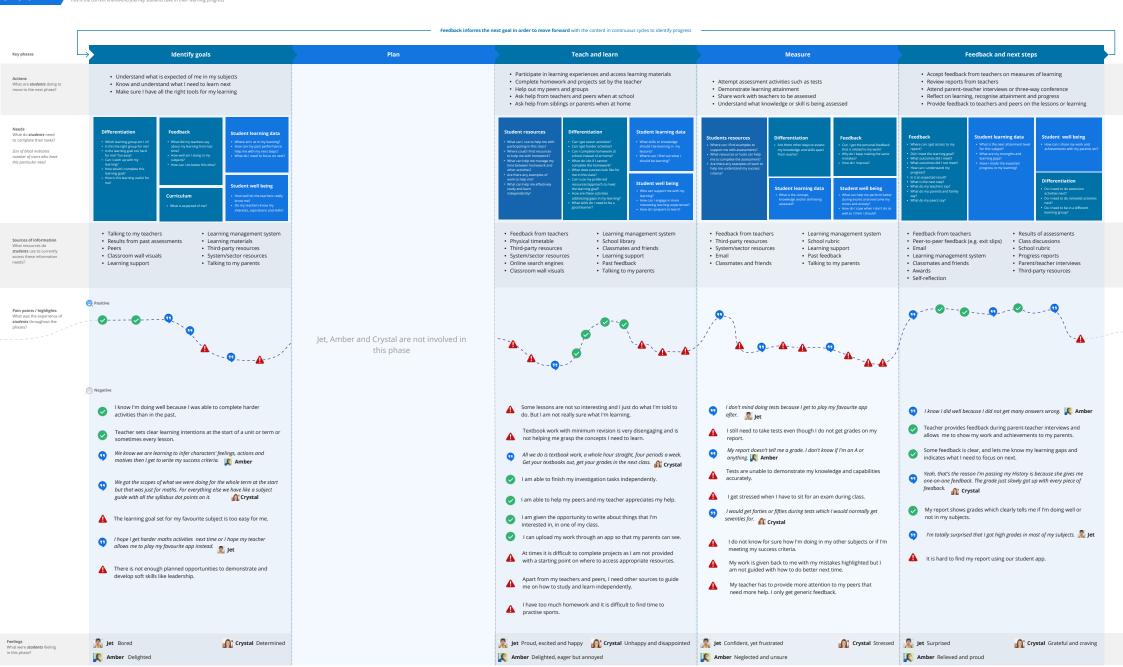
**Opal** Swamped

eelings



lade Interested

\* For the full journey map, please refer to page 63

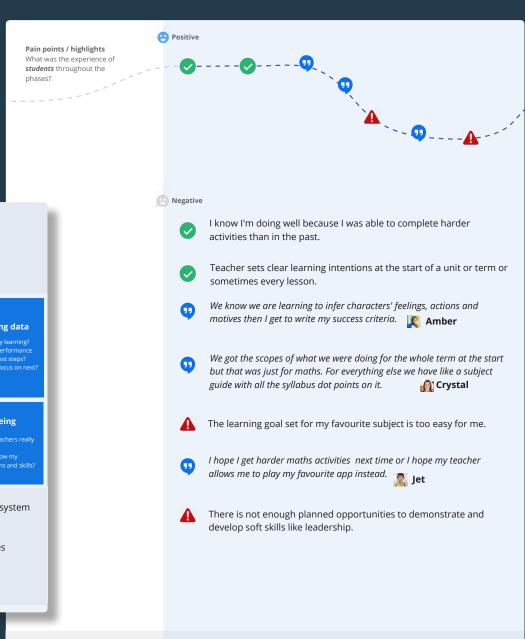


#### Journey map breakdown / Student

### **IDENTIFY GOALS**

The main activity in this phase is to set learning goals to measure across other phases as well as differentiating success criteria according to students' capabilities and attainment levels.





\* For the full journey map, please refer to page 69

Feelings What were students feeling in this phase?



Jet Bored



Crystal Determined

### **PLAN**

Jet, Amber and Crystal are not involved in this phase.



What are **students** doing to move to the next phase?

#### Needs

What do **students** need to complete their tasks?

Size of block indicates amount of users who have this particular need

Jet, Amber and Crystal are not involved in this phase

**Sources of information** What resources do **students** use to currently access these information needs?

\* For the full journey map, please refer to page 69

Negative

Pain points / highlights What was the experience of

students throughout the

phases?

Positive

Jet, Amber and Crystal are not involved in this phase

Feelings

What were **students** feeling in this phase?

Journey map breakdown / Student

### **TEACH AND LEARN**

Students participate in learning experiences at school and outside of school.

Pain points / highlights What was the experience of students throughout the phases?



#### Actions

What are **students** doing to move to the next phase?

- Participate in learning experiences and access learning materials
- Complete homework and projects set by the teacher
- Help out my peers and groups
- Ask help from teachers and peers when at school
- Ask help from siblings or parents when at home

#### Needs

What do students need to complete their tasks?

Size of block indicates amount of users who have this particular need

#### Student resources

- What can I use to help me with
- · Where could I find resources
- What can help me manage my other activities?
- independently?

#### Differentiation

- · Can I get easier activities?
- What do I do if I cannot
- · What does success look like for me in this class?
- How are these activities.

#### Student learning data

- What skills or knowledge

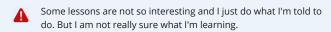
#### Student well being

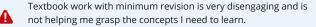
- How do I prepare to learn?

#### Sources of information

What resources do students use to currently access these information needs?

- Feedback from teachers
- Physical timetable
- Third-party resources
- · System/sector resources
- Online search engines
- · Classroom wall visuals
- · Learning management system
- School library
- · Classmates and friends
- Learning support
- · Past feedback
- Talking to my parents





All we do is textbook work, a whole hour straight, four periods a week. Get your textbooks out, get your grades in the next class. Questal

- I am able to finish my investigation tasks independently.
- I am able to help my peers and my teacher appreciates my help.
- I am given the opportunity to write about things that I'm interested in, in one of my class.
- I can upload my work through an app so that my parents can see.
- At times it is difficult to complete projects as I am not provided with a starting point on where to access appropriate resources.
- Apart from my teachers and peers, I need other sources to guide me on how to study and learn independently.
  - I have too much homework and it is difficult to find time to practise sports.

\* For the full journey map, please refer to page 69

#### Feelings

What were students feeling in this phase?



Jet Proud, excited and happy



Crystal Unhappy and disappointed



Negative

Amber Delighted, eager but annoyed

## Journey map breakdown / Student

#### 4. **MEASURE**

Assessing and monitoring students' learning happens in this phase. Teachers utilise assessment tools and resources to identify student progress according to the success criteria as well as collect observations of learning through various other methods.

## Actions • Attempt assessment activities such as tests What are **students** doing to move to the next phase? · Demonstrate learning attainment Share work with teachers to be assessed Understand what knowledge or skill is being assessed Needs What do students need Students resources Differentiation **Feedback** to complete their tasks? · Can I get the personal feedback Size of block indicates amount of users who have this particular need Are there any examples of work to help me understand my success criteria? Student well being Student learning data · Feedback from teachers · Learning management system Sources of information • Third-party resources School rubric What resources do • System/sector resources Learning support students use to currently access these information Email · Past feedback needs? Classmates and friends Talking to my parents

Positive Pain points / highlights What was the experience of students throughout the phases? Negative I don't mind doing tests because I get to play my favourite app after. 🤵 Jet I still need to take tests even though I do not get grades on my My report doesn't tell me a grade. I don't know if I'm an A or anything. **\(\big(\) Amber** Tests are unable to demonstrate my knowledge and capabilities accurately. I get stressed when I have to sit for an exam during class. I would get forties or fifties during tests which I would normally get seventies for. Crystal meeting my success criteria.

- I do not know for sure how I'm doing in my other subjects or if I'm
- My work is given back to me with my mistakes highlighted but I am not guided with how to do better next time.
  - My teacher has to provide more attention to my peers that need more help. I only get generic feedback.

Feelings What were students feeling in this phase?





Crvstal Stressed

\* For the full journey map, please refer to page 69

Jet Confident, yet frustrated



Amber Neglected and unsure

Journey map breakdown / Student

#### 5. FEEDBACK AND NEXT STEPS

This is the point in time where teachers provide crucial feedback and learning. Here student successes are celebrated and shared among

next steps to students for them to continuously progress in their teachers, parents and families. · Accept feedback from teachers on measures of learning Actions Review reports from teachers What are **students** doing to move to the next phase? • Attend parent-teacher interviews or three-way conference

#### What do students need **Feedback**

Needs

to complete their tasks?

amount of users who have

Sources of information

students use to currently access these information

What resources do

needs?

Size of block indicates

this particular need

- report?

- What do my parents and family

## Student learning data

· Reflect on learning, recognise attainment and progress

• Provide feedback to teachers and peers on the lessons or learning

## Student well being

#### Differentiation

- learning group?

#### Feedback from teachers

- Peer-to-peer feedback (e.g. exit slips)
- Email
- Learning management system
- · Classmates and friends
- Awards
- Self-reflection

- · Results of assessments
- Class discussions
- School rubric
- · Progress reports
- · Parent/teacher interviews
- Third-party resources

# Negative

I know I did well because I did not get many answers wrong. 📗 Amber



- Teacher provides feedback during parent-teacher interviews and allows me to show my work and achievements to my parents.
- Some feedback is clear, and lets me know my learning gaps and indicates what I need to focus on next.
- Yeah, that's the reason I'm passing my History is because she gives me one-on-one feedback. The grade just slowly got up with every piece of feedback. Crystal
- My report shows grades which clearly tells me if I'm doing well or not in my subjects.
- I'm totally surprised that I got high grades in most of my subjects. 🙎 Jet
- It is hard to find my report using our student app.

\* For the full journey map, please refer to page 69



What were students feeling in this phase?

Feelings

Pain points / highlights What was the experience of

students throughout the

phases?



Jet Surprised

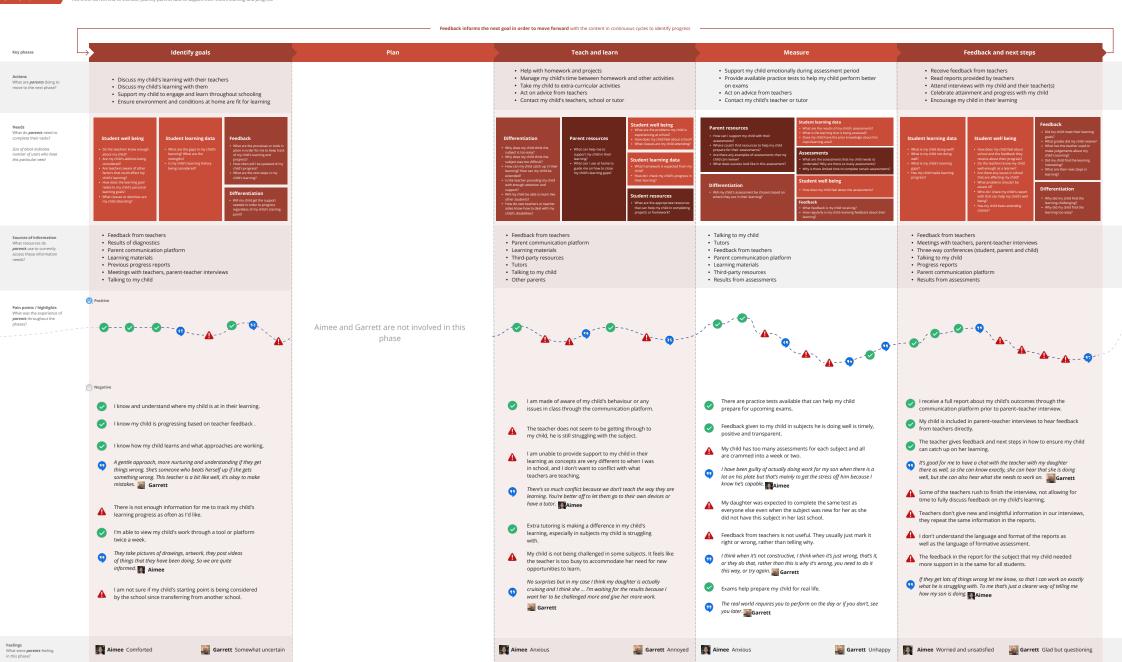


Crystal Grateful and craving



Amber Relieved and proud

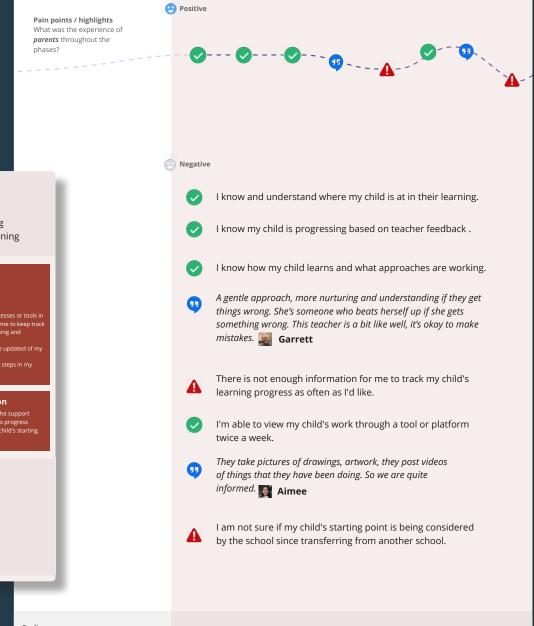
Journey map / Parents This is the current end-to-end user journey parents take to support their child's learning and progress



## Journey map breakdown / Parent

## **IDENTIFY GOALS**

The main activity in this phase is to set learning goals to measure across other phases as well as differentiating success criteria according to students' capabilities and attainment levels.



#### Actions

What are *parents* doing to move to the next phase?

- Discuss my child's learning with their teachers
- Discuss my child's learning with them
- Support my child to engage and learn throughout schooling
- · Ensure environment and conditions at home are fit for learning

#### Needs

What do *parents* need to complete their tasks?

Size of block indicates amount of users who have this particular need

#### Student well being

- Are teachers aware of other

## Student learning data

#### Feedback

#### Differentiation

#### Sources of information

What resources do parents use to currently access these information needs?

- Feedback from teachers
- · Results of diagnostics
- Parent communication platform
- Learning materials
- Previous progress reports
- Meetings with teachers, parent-teacher interviews
- Talking to my child

\* For the full journey map, please refer to page 75

Feelings

What were parents feeling in this phase?



Aimee Comforted



**Garrett** Somewhat uncertain

**PLAN** 

Aimee and Garrett are not involved in this phase.

Positive Pain points / highlights What was the experience of parents throughout the phases? Negative Aimee and Garrett are not involved in this phase Feelings What were *parents* feeling

Actions

What are *parents* doing to move to the next phase?

#### Needs

What do *parents* need to complete their tasks?

Size of block indicates amount of users who have this particular need

Sources of information What resources do parents use to currently access these information

needs?

Aimee and Garrett are not involved in this phase

in this phase?

\* For the full journey map, please refer to page 75

## Journey map breakdown / Parent

## **TEACH AND LEARN**

Students participate in learning experiences at school and outside of school.

## Positive Pain points / highlights What was the experience of parents throughout the phases?

Negative

#### Actions

What are *parents* doing to move to the next phase?

- · Help with homework and projects
- Manage my child's time between homework and other activities
- Take my child to extra-curricular activities
- · Act on advice from teachers
- Contact my child's teachers, school or tutor

#### Needs

What do *parents* need to complete their tasks?

Size of block indicates amount of users who have this particular need

What resources do

needs?

parents use to currently

access these information

#### Differentiation

- subject was too difficult?
- with enough attention and
- child's disabilities?

#### Parent resources

- What can help me to support my child in their learning?
- What can I use at home to my child's learning gaps?

#### Student well being

#### Student learning data

- What homework is expected from

#### Student resources

What are the appropriate resources that can help my child in completing projects or homework?

#### · Feedback from teachers Sources of information

- · Parent communication platform
- Learning materials
- Third-party resources
- Tutors
- · Talking to my child
- Other parents

I am made of aware of my child's behaviour or any issues in class through the communication platform.

The teacher does not seem to be getting through to my child, he is still struggling with the subject.

I am unable to provide support to my child in their learning as concepts are very different to when I was in school, and I don't want to conflict with what teachers are teaching.

There's so much conflict because we don't teach the way they are learning. You're better off to let them go to their own devices or have a tutor. Aimee

Extra tutoring is making a difference in my child's learning, especially in subjects my child is struggling

> My child is not being challenged in some subjects. It feels like the teacher is too busy to accommodate her need for new opportunities to learn.

No surprises but in my case I think my daughter is actually cruising and I think she ... I'm waiting for the results because I want her to be challenged more and give her more work.

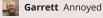
**Garrett** 

\* For the full journey map, please refer to page 75

Feelings

What were parents feeling in this phase?





## Journey map breakdown / Parent

## 4. MEASURE

Assessing and monitoring students' learning happens in this phase. Teachers utilise assessment tools and resources to identify student progress according to the success criteria as well as collect observations of learning through various other methods.

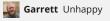
#### · Support my child emotionally during assessment period Actions · Provide available practice tests to help my child perform better What are *parents* doing to move to the next phase? on exams Act on advice from teachers · Contact my child's teacher or tutor Student learning data Needs Parent resources What do *parents* need to complete their tasks? Where could I find resources to help my child Size of block indicates prepare for their assessments? amount of users who have Assessments · Are there any examples of assessments that my this particular need child can review What are the assessments that my child needs to · What does success look like in this assessment? Why is there limited time to complete certain assessments? Student well being Differentiation Feedback How regularly is my child receiving feedback about their · Talking to my child Sources of information What resources do Tutors parents use to currently • Feedback from teachers access these information needs? • Parent communication platform Learning materials • Third-party resources · Results from assessments

Pain points / highlights What was the experience of parents throughout the phases? Negative There are practice tests available that can help my child prepare for upcoming exams. Feedback given to my child in subjects he is doing well is timely, positive and transparent. My child has too many assessments for each subject and all are crammed into a week or two. I have been guilty of actually doing work for my son when there is a lot on his plate but that's mainly to get the stress off him because I know he's capable. Aimee My daughter was expected to complete the same test as everyone else even when the subject was new for her as she did not have this subject in her last school. Feedback from teachers is not useful. They usually just mark it right or wrong, rather than telling why. I think when it's not constructive, I think when it's just wrong, that's it, or they do that, rather than this is why it's wrong, you need to do it this way, or try again. 🌉 Garrett Exams help prepare my child for real life. The real world requires you to perform on the day or if you don't, see you later. Sarrett

 $\ensuremath{^*}$  For the full journey map, please refer to page 75

Feelings
What were *parents* feeling in this phase?

Aimee Anxious



## FEEDBACK AND NEXT STEPS

Assessing and monitoring students' learning happens in this phase. Teachers utilise assessment tools and resources to identify student progress according to the success criteria as well as collect observations of learning through various other methods.

#### Actions

What are *parents* doing to move to the next phase?

#### Needs

What do *parents* need to complete their tasks?

Size of block indicates amount of users who have this particular need

#### Sources of information

What resources do parents use to currently access these information needs?

- · Receive feedback from teachers · Read reports provided by teachers
- · Attend interviews with my child and their teacher(s)
- · Celebrate attainment and progress with my child
- · Encourage my child in their learning

#### Student learning data Student well being

#### Feedback

- · What has the teacher used to make judgements about my

learning challenging?
• Why did my child find the

- Feedback from teachers
- · Meetings with teachers, parent-teacher interviews
- Three-way conferences (student, parent and child)
- · Talking to my child
- · Progress reports
- Parent communication platform
- Results from assessments

- · What are their next steps in

#### Differentiation

Pain points / highlights What was the experience of

parents throughout the

#### Feelings

What were parents feeling in this phase?



Positive

Negative

from teachers directly.

can catch up on her learning.

Aimee Worried and unsatisfied

how my son is doing. Aimee

**⊘**---••

I receive a full report about my child's outcomes through the

communication platform prior to parent-teacher interview.

My child is included in parent-teacher interviews to hear feedback

The teacher gives feedback and next steps in how to ensure my child

It's good for me to have a chat with the teacher with my daughter

there as well, so she can know exactly, she can hear that she is doing well, but she can also hear what she needs to work on. Garrett

Some of the teachers rush to finish the interview, not allowing for

Teachers don't give new and insightful information in our interviews,

time to fully discuss feedback on my child's learning.

I don't understand the language and format of the reports as well as the language of formative assessment.

The feedback in the report for the subject that my child needed

If they get lots of things wrong let me know, so that I can work on exactly

what he is struggling with. To me that's just a clearer way of telling me

they repeat the same information in the reports.

more support in is the same for all students.

Garrett Glad but questioning

\* For the full journey map, please refer to page 75

## OUTPUTS

## **SERVICE MAP**



## Service maps in user-centred design

A service map is an illustration of all the users and channels involved in an end-to-end journey in providing a service. It is a collective summary of the stories showing the different touch points and user interactions with various sources of information.

## Service maps in the initiative

Based on the research for the initiative, we found that a large part of the work of classroom teachers is providing a service to students and parents in supporting student learning and identifying progress. They are supported by school leaders as well as systems/sectors, assessment and resource vendors.

When providing this service to students and parents, teachers followed the following phases when accessing different sources of information: 1. Identify goals; 2. Plan; 3. Teach and learn; 4. Measure and 5. Feedback and next steps.

## **USING THE SERVICE MAP**

Service maps visually tell the many stories and variable journeys users take when using a service. It allows those designing a service to understand the overall service and connected channels.

It uses the same phases as the journey maps, allowing the project team to see how different user types interact throughout the same journey through the service.

Services maps support the project team in identifying information leaks, areas of pain and where possible solutions and features that may benefit the user.

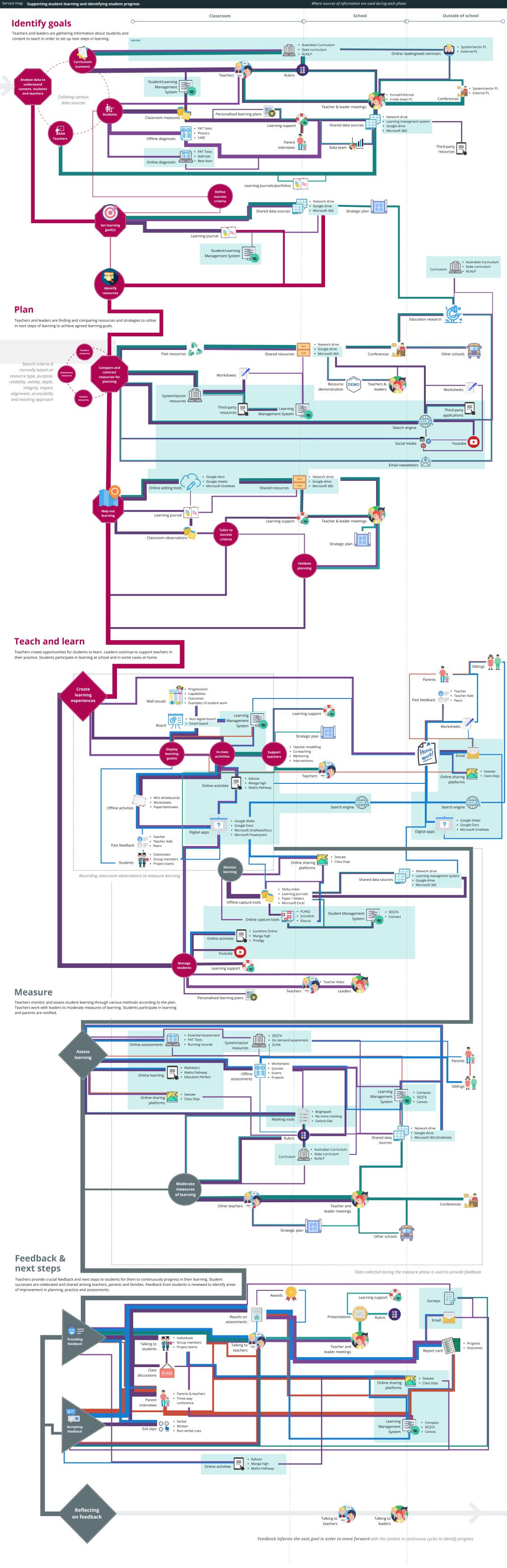
## **LEGEND**

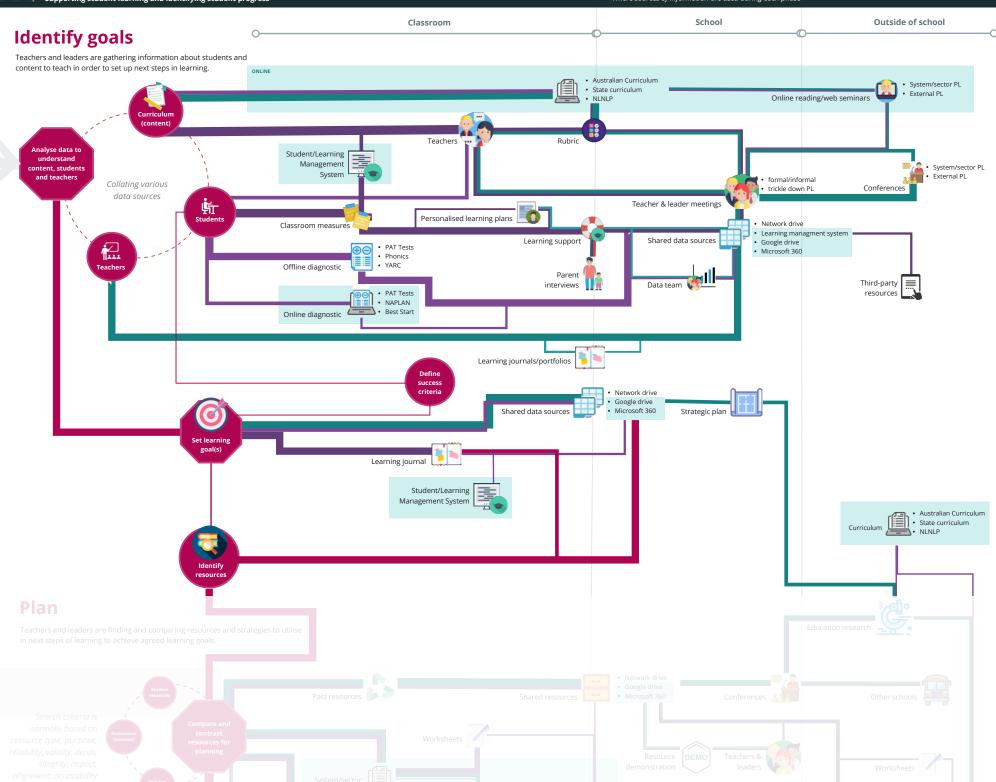
Actors are represented by lines moving between one touch point to another. Thicker lines indicate higher levels of use by actors.

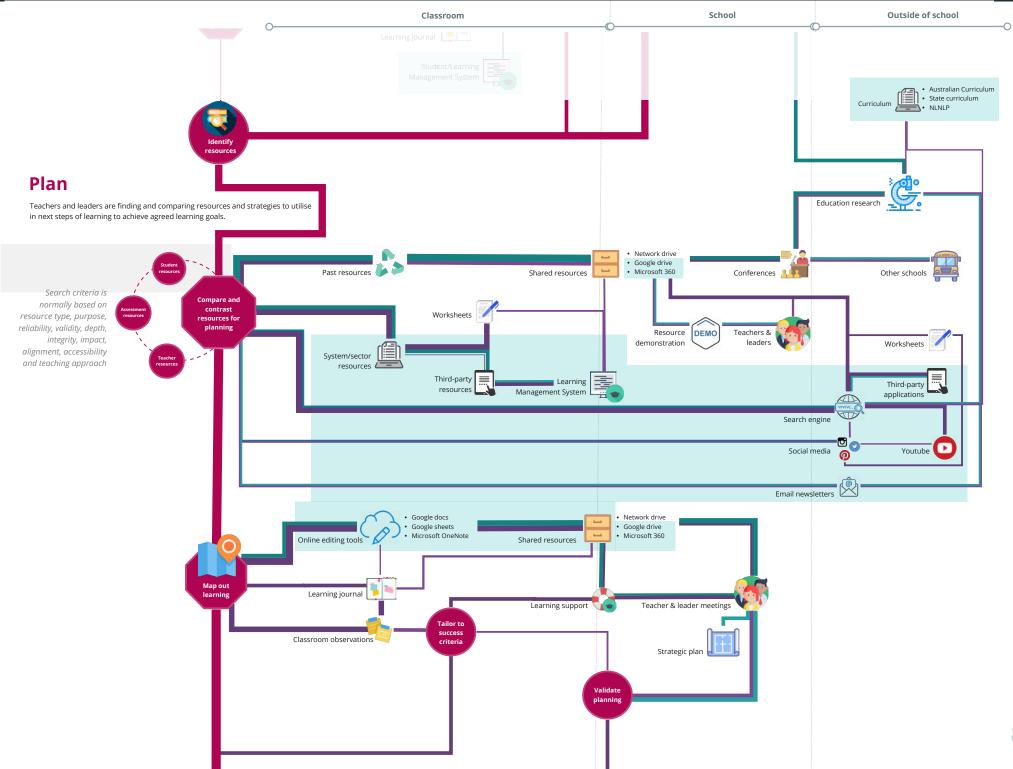
- Classroom Teacher
- School Leader
- Student
- Parent
- Journey (highlighting common actions)



When printing the full service map, it is recommended to print it on A1 paper or higher for best legibility.





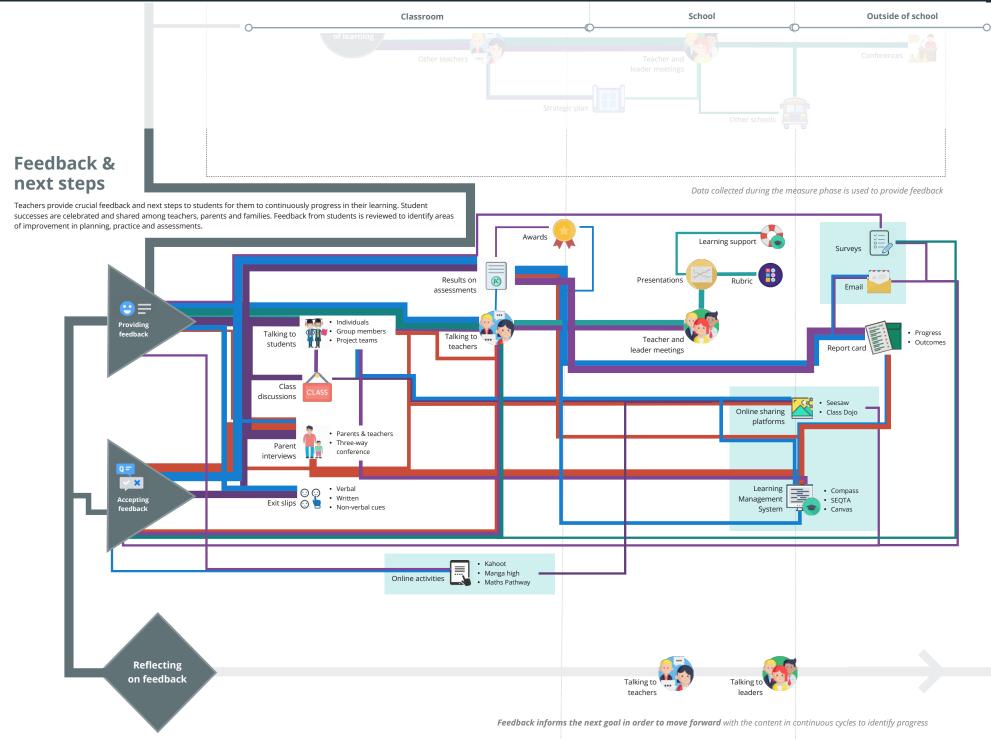


Personalised learning plans

Teacher Aides

leader meetings

Strategic plan



## OUTPUTS

## **HIGH-LEVEL USER NEEDS**

Refined from the findings are eight common themes of pain points that teachers, school leaders, students and parents are currently experiencing in the process of supporting students in learning and identifying progress.

These common themes were gathered, synthesised and analysed from the qualitative research data, then were further validated by quantitative research across a representative sample. The TPRG members subsequently corroborated them through an affinity mapping activity undertaken in a workshop.

The universal themes that emerged make up the high-level needs of the target users identified for the initiative.



## Assessment and evidence

Pain points around difficulty in collecting, collating and analysing assessment data including observations.



#### Resources

Pain points around discoverability, availability and quality of assessment and digital content resources for teachers, schools, students and parents.



## Curriculum

Pain points around consistent interpretation and understanding of the curriculum and its application in the classroom.



## **Learning progressions**

Pain points around support and use of the National Literacy and Numeracy Learning Progressions.



## Feedback and next steps

Pain points around efficiency in providing feedback and effective student and parent understanding of that feedback.



## **Technology**

Pain points around restrictions, access, usability and limitations of technology and systems.



## **Professional learning**

levels and capabilities.

Pain points around discoverability, availability and quality of professional learning.

Personalisation and differentiation

Pain points around catering for

students with various attainment

## **Assessment and evidence**

Across the various research activities undertaken for the LPOFA initiative, consolidating assessment data and evidence has surfaced as a very pressing and consistent need for all users in supporting student learning and identifying progress.

Teachers need data to know and understand their students. It is vital in defining student learning goals, in planning for their learning, and in teaching to their point of need. Here is some of the information that teachers seek to know about their students: Who are my students and what may affect their learning? What are their current attainment levels and their learning gaps?

School leaders are seeking the same information with a focus on utilising the data to inform a whole-school approach. Data helps them plan for learning programs or interventions for students' areas of need as well as professional learning for teachers, among other use cases.

The underlying problem is not the lack of data, but that data is everywhere. It was very evident in the LPOFA initiative research that teachers and school leaders utilised a varied and fragmented suite of data sources. This practice makes collection, collation, and analysis of different types of data a tedious and time-consuming process. It often leads to reduced time for classroom teaching and student engagement.

We've got data from different places that we don't have time to kind of consolidate it.

**Classroom Teacher** 

Data on standardised assessments are more readily available and often the primary source for diagnostics and post-tests to determine students' attainment levels. Some schools have access to data tools that help collate and present data from these sources. Other teachers have to painstakingly extract and put together the data on their own using spreadsheets like Excel or Google sheets. However, data from these sources reflect only one part of any student's story. It does not accurately reflect what students have learned, the depth of their understanding, the progress they gained, and what they might be capable of doing next.

The majority, if not all, of the teachers, will **rely upon developmental approaches to obtain an overall understanding** of their students' learning and progress. These approaches would often entail the use of miniwhiteboards for a quick progress check, short quizzes using online tools, investigation tasks and many others. However, **to formally record their classroom observations is a significant challenge** to most teachers, due to the lack of time and efficiency. As a result, some types of formative assessment data were either not collected or not collected with rigour. Thus, **there is insufficient recorded evidence that can support teacher judgement** around student learning gaps and next steps.

There is also the constant repeating conversation among teachers around who is responsible for collecting which data. It takes time to build their practice and confidence to know which data to record and ensure that it is kept upto-date with no duplication. Data collection is deemed less valuable when teachers lack data literacy skills and have minimal knowledge about how to use data effectively.

It's tricky with the observational data, because one of the main issues we have is: how do we record it on the fly?

**School Leader** 

There's no point collecting a whole lot of data if staff do not have the data literacy skills or the knowledge to be able to use it effectively.

**School Leader** 

## Personalisation and differentiation

From the findings, teachers recognise and readily talk to the ideal of providing personalised learning for all students. There is broad acknowledgement that differentiation is necessary to ensure that every student learns, despite various starting points and characteristics. However, the **effort to differentiate** for every student, every lesson, and across the curriculum is almost insurmountable. This challenge is remarkably real in a class where there is a wide disparity in student attainment levels and capabilities.

He's two years behind the others because we just moved so the results are not good. I go to the teacher, Well, that's not right. He's had two months, not two years. She acknowledged that, but it doesn't really make it right.

Parent

There are even some students that lack the fundamental skills and knowledge to progress to the expected standard. Some students are from different nationalities with English as their third or fourth language. Some students have disabilities; on the other hand, some students are way above the expected standard with some gifted and twice-exceptional. Some students have different starting points compared to their peers, not because of their capabilities but because of other circumstances such as being a new transfer student with limited prior knowledge on a subject, being an Aboriginal or Torres Strait Islander person, or having experienced difficulties in life. Some students are perfectly capable until stress or anxiety takes over when they have to sit for an exam in class.

I would get forties or fifties during tests which I would normally get seventies for.

Student

All of these factors can affect the way students learn, gain a deep understanding of concepts, and demonstrate what they know successfully. **Teachers have to continually tailor the curriculum, identify appropriate resources, scaffold assessments, provide extension or remedial tasks, and shift their teaching approaches**. These tasks require intensive planning that takes up a significant amount of time, which would often lead to teachers **sacrificing their personal time**.

Despite careful and thoughtful planning, unforeseen contextual circumstances still occur that teachers must cater for in class; for example, teachers often find themselves having to change from a planned lesson or student's individual learning goal based on related learning issues that may have occurred (e.g. lack of recent progress). Less-experienced teachers often find these circumstances overwhelming as they have not developed or learnt about strategies that will assist in such situations.

Often enough, it's moments when you weren't planning on having to differentiate something that you need it, and I don't want those students to get penalised because I didn't pre-think it.

Classroom Teacher

In class, **teachers' time and focus are always divided**. It could be that immediate issues are needing to be addressed or providing in-the-moment feedback is required. Often, teachers feel that they have not done enough. They are questioning if they have let some **students fall behind or not challenged enough**.

I feel bad about those kids that just do a good job in the middle. They can just end up coasting because I don't have time to stop and think about how to push them.

**School Leader** 



## Resources

Teachers have become adept at drawing from a myriad of online and offline resources as well as tools to help in planning, designing, and implementing lessons and activities in the classroom. However, to find, evaluate and align these to the respective curriculum they teach, and tailor to the various learning needs of their students is still a considerable burden on teachers' time. Teachers, in general, suggest that the hardest part is in confidently choosing the right resources and, most often, there is much guesswork involved.

So I think what we do is just know what curriculum has been taught the previous year and that's where we start. But in doing that, we are making an assumption that students have retained the curriculum.

**School Leader** 

For schools that adopt collaborative planning, the experience is a little better since **teachers would co-design lessons**. The load is shared and, under collaboration, it brings comfort and confidence in their practice. For some teachers, they would leverage their **previous successful lesson plans**, activities or **strategies**. Others would rely heavily on the **system or sector provided resources**, and the rest would venture to **third-party** resources or applications, **search engines** and even **social media**.

The same story is true for assessment resources. Teachers know and recognise the wide variety or selection of assessment tools available. The real challenge is finding the tools that are appropriate for formative use, check depth of understanding or student learning, aligned to curriculum and achievement standards. For those that have opted to utilise international assessments, additional effort is required to align with the Australian curriculum, local Curriculum or school rubrics.

Active collaboration among colleagues happens regularly in some schools to moderate student work samples and validate teacher judgements. This exercise is to ensure student progress and attainment are identified justly, accurately and consistent with the achievement standards. Some schools regard this as necessary due to the lack of 'fit-for-purpose' tools to assess and identify progress consistently across a wide range of student attainment levels and capabilities.

Overall, direct access to quality-assured, evidence-based, research-based, and curriculum-aligned learning and assessment resources is identified as a substantial need for teachers and school leaders. Resources that will help close learning gaps and support the next steps in teaching to ensure continuous student progress are most sought after. Parents and students echo the same sentiment, with parents expressing the need for resources that can help them support their child's learning at home. Students, on the other hand, are wanting resources that will help them complete projects and investigation tasks as well as guide their self-directed learning.

I feel like more often than not we're cobbling together our own assessment because there's not stuff that meets everyone's needs out there.

**Classroom Teacher** 

There's so much conflict because we don't teach the way they are learning. You're better off to let them go to their own devices or have a tutor.

**Parent** 

They would try and give you tips and like how to work more. Like for French, she was like you should maybe watch more news or read articles.

Student

## Curriculum

Based on the findings, teachers are lacking confidence in selecting resources and assessing students. One of the contributing factors is the widespread inconsistency with how individual teachers, schools, and states are interpreting the curriculum and the achievement standards that go with it. Some teachers view them as ambiguous and open to interpretations. They have reported that it takes a considerable amount of planning time to translate the curriculum into plain English to establish what was required.

Similarly, teachers and school leaders are having to interpret achievement standards. Most of them have to work out the skills that students need to demonstrate and devised their processes or rubrics to achieve some form of uniformity. The Australian Curriculum and its localised versions have been around and adopted for years. Still, some teachers have not fleshed out what the achievement standards mean, what it would look like, and what the required evidence would be.

Some teachers also think that there are **too many topics to teach**. There seems to be an expectation that concepts will be covered in a couple of days and teachers will be able to assess their students' competency and skill acquisition after that. Teachers are **feeling frustrated** due to the broadness of the curriculum. In their view, **the curriculum doesn't allow for time to reteach some concepts or stay at a particular topic where students are weak**.

## **Learning progressions**

Most school leaders and teachers intuitively use the language of learning progression when discussing how they monitor student learning and identify progress. From the findings, most regard the concept of observing progress over time as a more accurate reflection of student learning and attainment than point-in-time assessments.

In terms of the National Literacy and Numeracy Learning Progressions (NLNLP), there has been increasing and significant awareness among school leaders and teachers. Teachers who believe they have good knowledge and understanding of the progressions and their applications, tend to view them as a useful tool in developing a common language around student learning and progress, and in creating high expectations among teachers, students, parents and carers. These teachers also see the NLNLP as a resource for diagnosing where students are at in their learning and where they should get to next.

However, the slow overall adoption of NLNLP in schools is due to some common barriers. Teachers and some school leaders find them unwieldy, overwhelming and believe the amount of time it would take to become familiar with them would be excessive. Time is also required to understand the connections between learning progressions and curriculum content. School leaders also reported that they are worried that it will add to the teachers' burden if it is not supported by robust professional learning that will allow them to apply NLNLP effectively in their classroom. Other teachers see little benefit and don't want to change their way of teaching. Some believe that it is not relevant to their school or state.

We sit down together and look at the exemplars to try, work out what the curriculum is asking for, and to check if we all interpret it the same way. It takes a lot of time and when you discuss it with the team you realise how ambiguous it can be.

**Classroom Teacher** 

I think that it's great that there's crosscurricula potential there. But there's just too much there for teachers to access and it needs to be quick, simple and very easy to use. Our teachers are overwhelmed – they are busy, busy people.

School Leader

## Feedback and next steps

From the findings, teachers and school leaders acknowledged that students need regular feedback on their performance to maintain engagement and effort. **Teachers view that feedback is most beneficial when it is given verbally, inthe-moment, before submission of the work or task.** Most deemed that this type of feedback is critical, meaningful and relevant, and has the potential to impact attainment as students usually will apply them.

That's the reason I'm passing my History is because she gives me one-on-one feedback. The grade just slowly got up with every piece of feedback. I was like, 'Thank you. You're my saviour right now'.

Student

However, providing timely personalised feedback and differentiated next steps for every student is another recurring challenge due to lack of time and efficiency. Thus, teachers tend to fall back to providing written feedback. However, most sensed that this type of after-the-fact feedback is less effective as students would rarely put it into practice. Students are feeling the trickle-down effect. Most reported that feedback they often received is lacking clear directions to help them improve. Usually, there is insufficient information to help them understand where their gaps are. These attitudes were particularly prevalent in English, where students perceived more considerable ambiguity in understanding where they progressed their learning and what gaps in knowledge still exist.

This perceived lack of feedback was also **more evident with students who are in the mid-tier or performing at standard**. These students feel that their peers who either excel or struggle tend to receive most of the teachers' attention and focus.

Parents expressed the same need for timely feedback, especially around subjects in which their children were struggling, or where an extension was needed to maximise their children's capacity. Though parents value progress reports or report cards and parent – teacher interviews, some felt that information provided to them at these times is 'a little too late' for them to take any action to support their children. Some parents also reported their difficulty in understanding the language in their children's reports. Some even stated that the information provided in these reports is not personalised and lacks insights about their children. Parents tended to attribute these as some of the factors that limit their involvement in their children's learning.

You often get stuck with the same students all the time, checking on the students that actually do their work and seeing where they're at is probably the trickiest formative assessment because you're time poor to get to those students.

Classroom Teacher



## **Professional learning**

It was evident in the findings that **teachers highly value time towards professional learning**. It provides them with an opportunity to come together with peers to **explore new ideas**, **share knowledge and reflect on their teaching approaches**.

Most teachers may not describe independent research as professional learning. However, it is an activity that they regularly engage in – especially researching quality resources and tools to use in their classes. Some teachers would also discuss with colleagues their experience with resources and seek help with classroom strategies. Some schools adopt collaborative planning and also have internal moderation to support and validate teacher judgements, and ultimately build capacity and ensure consistency in practice. However, some teachers felt that their schools still need improvement on being an encouraging, safe, and transparent environment. Most stated that an environment that is built on trust is vital to foster genuine collaboration among colleagues.

The best PD I did was definitely the one that was directly relevant with what I was doing in my classes, and was run by our colleagues who were experts in their fields, and gave me some really good ideas.

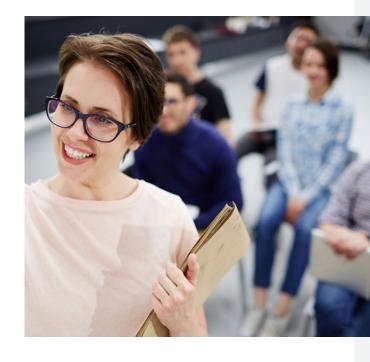
**Classroom Teacher** 

If it's going to be skill development for teachers, it has to be focused, finite and have action attached to it.

## **Classroom Teacher**

Staff and teachers whose schools offer regular professional learning time expressed a great appreciation for this. However, some school leaders have stated **missing out on professional learning or networking opportunities that are not accessible in their region**, specifically, in rural and remote areas. Most often it would incur a travel cost that their school would not be able to afford. Another issue is the **high staff turnover**. School leaders would find themselves having to continually induct teachers, only for them to leave within a short period to go back to teaching in the metropolitan areas.

Among the professional learning sessions that are currently on offer, teachers and school leaders reported that they find courses and workshops that provide practical information, hands-on strategies, and modelled techniques that can be easily applied or tailored in the classroom to be the most valuable. They emphasised the need for professional learning support that would show how new online tools or procedures should be used and implemented in their daily practice. There is also a strong preference for examples of implemented learning interventions that have clear evidence of the impact on student learning and outcomes.



We just want it to be useful and we also want programs that align. If you want to tell us all the things we need to meet, then give us the program to teach it, give us the assessment to assess it.

**Classroom Teacher** 

## **Technology**

Very prominent in the findings was the extensive and frequent use of technology, online resources and tools by teachers and school leaders in supporting student learning and progress. Most schools utilised online **collaboration tools** to share lesson plans and activities. Some have recently trialled tools that employ a pair-wise comparison of work samples to help teachers assess student work. It also allows for moderation with colleagues to validate teacher judgement. Most schools took to online and subscription-based applications to help deliver differentiated tasks or activities or assessments in the **classroom** to cater for a wide range of student capabilities and attainment levels. Schools also used online systems or applications as an additional method to communicate with parents. Some even extended the use to allow students to upload their work and gather feedback from their peers, teachers and parents.

Findings suggest that although technology has its advantages, teachers and school leaders view it as a double-edged sword. Teachers reported that students would get distracted with the programs or applications in their own devices, which entailed policing effort from them. Some teachers also expressed dismay that some online applications were not accessible for their students with disabilities. Parents and students found some online tools are troublesome to use, not intuitive, and the information they need is hard to find. In low socioeconomic schools, where students do not have one-to-one access to devices, the use of technology is minimal. Teachers will frequently have to compensate with offline activities.

We don't have the devices available in the classrooms that kids can access and we have internet that comes and goes when it pleases.

Classroom Teacher

Systems and sectors have often provided support to ensure equity among schools in various ways, such as but not limited to access to shared resource repositories; centralised learning management systems or student information systems; and even funding trials of assessment products. System owners and vendors readily stated that when it comes to delivering technology to schools, the lack of seamless account integration is the challenge they have continuously encountered. In some schools, there are staff that are skilled in creating accounts for teachers and students using data upload mechanisms. However, the majority will manually create accounts, which often leads to slow uptake.

Overall, limited access to technology or online tools is generally due to **restrictions set by the school or sector, lack of funding, poor network connectivity, lack of skilled staff**, and other factors. It is a source of frustration for teachers and school leaders who were experiencing this, primarily when it **disrupts student engagement and interferes with the learning experience**.

I would like some information. I shouldn't have to hunt around and wonder did she get it?

Parent

We have used really expensive subscriptions in the past and our school couldn't keep paying the subscription. We're a very low socio-economic school. We can't ask our parents to contribute to subscriptions for things like that.

**Classroom Teacher** 

# **HYPOTHESES**

Six hypotheses were developed based on the assumption that they will address the high-level user needs that have emerged from the findings. Described in each hypothesis are the details of specific recommended features that will aid the validation process. They are prioritised according to potential value to solve the user needs they address.

These hypotheses provide a starting point for the team to develop and explore all the possibilities in terms of features that can potentially address the needs of the target users around identifying student progress. These are intended to be tested and refined in the next phase - alpha.

## Hypothesis

Learning integration and visualisation Alignment to learning progressions Assessment as a frequent practice Recommendation and personalisation Discoverability and accessibility Evidence-based learning pathways





## **Learning integration and visualisation**

**Priority** 



Learning integration and visualisation will relieve users of the burden of collating and analysing data from varied sources, searching for resources linked to the curriculum and learning progressions, and tailoring or creating quality assessments. Learning integration and visualisation will enable users to better understand their students' current learning, provide personalised feedback, and plan differentiated next steps.

## Recommended features to be tested



**Central source of learning data and resources** that allows users to access information and tools related to curriculum, learning progressions, and online assessments, enabling the connection of data to resources and teaching practice confidently, effectively and efficiently.



**Automated import and export of data** from all the different curated tools and assessments that teachers use to practise formative assessment, to remove teachers' dataprocessing workload and give them more time to teach. The types of data involved should include learning data and student wellbeing data for the best understanding of where to go next with every student.



Dynamic, easily digestible and customisable representations of data from multiple assessment sources, which will simplify users' ability to view and interpret data on classes, groups and individual students, view progress over time, and strengthen their own understanding of how to support student progress. Users should be able to organise information according to:

- learning progression
- data source
- class/group/student
- year level
- date
- · custom tags
- session/lesson/unit.



## Summary of current learning and differentiated next steps

informed by the data collected from all the tools and resources now being used, to reduce users' time spent on analysing big data and free them to focus on their own practice of differentiation. This summary can be used as a starting point for any further data analysis. Information shown in the summary will dynamically change according to how users choose to organise their information.



Summary of milestones achieved in learning progressions in micro**credential format**, to highlight how each student best progresses, so that such learnings can be followed consistently through a student's years at school. This representation has the potential to highlight future differentiated pathways for every student and of supporting student decision-making.



New data that automatically syncs once an internet connection is **available**, to ensure that there is no data loss for users with intermittent access to the internet. This will also decrease double-handling of data.



Secure movement of data to enable safe and efficient transfer of data across year levels and classes. This enables data transparency within the school to help users support the need of every student and moderate assessments to validate each other's judgements.



**Seamless account management** to ease the provisioning of teachers and students and allow them to access the system using their school logins and get them started sooner.

## User needs to be addressed



Assessment and evidence



Personalisation and differentiation



Resources



Curriculum



Learning progressions



Feedback and next steps



Technology

## Alignment to learning progressions





Alignment to learning progressions of teaching, assessment, student and parent resources, including resources from third-party providers, and data on student learning that is available and recorded will help users to assess students' current levels of attainment. It will also help them to identify progress, plan the next steps with confidence, and improve the applicability of the learning progressions to everyday teaching practice.

## User needs to be addressed



Assessment and evidence



Personalisation and differentiation





Resources



Curriculum



Learning progressions



Feedback and next steps

## Recommended features to be tested



Visible framework for aligning resources to the learning **progressions**, to show external systems how to scale to the learning progressions and open up their resources for all users, improve sharing between sectors and consistency between different schools.



Teaching, assessment and student resources aligned to the **learning progressions**, to effectively guide teachers in applying the learning progressions to their teaching and classroom practice. This will also make it easier to locate and confidently share resources according to an agreed standard.



Learning progressions language that is easily translated into **learning goals and success criteria**, to encourage teachers, students and parents to share a common language when discussing progress.



Mapping available and recorded data to the National Literacy and **Numeracy Progressions**, to help users accurately and consistently understand their students' progress, and guide them in determining next steps and any adjustments that may be required. Having data mapped to the national learning progressions will also support teachers, students and parents with a shared language around progress.



Assessments tailored to data informed by learning progressions, to properly diagnose every student's level of attainment and their gaps in learning. Users can customise these assessments and assign them at the student, group, class or year level. Criteria to customise these assessments could include:

- learning progression
- class/group/student.

year level



Student exemplars connected to learning progression indicators informed by evidence collected from all the tools and resources being employed, to improve users' confidence in assessing according to the learning progressions and to help them moderate their judgements. Schools can share exemplars with their school networks to support cross-school moderation and illustrations of practice.



encourage uptake of the service, support removing the overwhelming factor of being exposed to the learning progressions in its entirety and improve the application of the learning progressions in teaching practice.



Notifications of updates to the national learning progression and every related change that may affect users, to keep users informed and to support a national learning progression that adapts as student populations and society's needs change and evolve.

## Assessment as a frequent practice

**Priority** 





Assessment as a frequent practice will make it easier for users to record their classroom observations as evidence of learning, make assessment data readily available and easily shared, make planning and moderation among colleagues more efficient and, as a result, improve consistency and confidence in their everyday judgements. Students will be able to upload evidence of their work, which will help them to understand their learning goals in the language of learning progressions, and also lessen the time spent on data entry.

# User needs to be addressed



Assessment and evidence



Personalisation and differentiation



Professional learning



Learning progressions



Feedback and next steps

### Recommended features to be tested



Convenient digital collection of learning observations within the classroom to ease the burden of inputting data into different interfaces. The collection should adapt to the situation as needed, involving the different steps in the user's journey within the lesson cycle and removing the need for any double-handling of data.



**Multiple modes of analysis for use in the classroom**, to make the data more relevant and useful when needed, and to aid teachers in giving feedback and recording specific evidence against learning progressions. This will also support teachers' confidence in differentiating learning by narrowing data down to groups and individual students.



Connect learning progressions to classroom evidence captured via multiple formats, to simplify the saving of data for each student against the learning progressions, and to enable the building of a database of exemplars that will support consistency in judgement and assessment. Formats could include photos, audio and video recordings, comments, drawings and emoticons.



**Utilise a list of learning progression indicators as success criteria**, so users can better manage and collect data on a chosen list of learning progressions rather than monitoring against a whole progression element. These indicators can be from a mapped resource, recommended according to class/group/student data, selected by the user, or a combination of these things.



Details of the entire history of every class and student's progression such as time, feedback and other teacher's judgements so users can moderate against other teacher's decisions for the same student and progression indicator. Teachers can filter and decide which data can be shared for moderation. Shared information can also provide a starting point around the validation of the user's understanding of student progress.



**Enable students to upload evidence and feedback connected to the learning progressions**, so that users can focus on assessing evidence and adjusting their teaching practice rather than on data entry. Teachers can moderate the student's self-assessment or peer-to-peer assessments and mark certain work to provide student exemplars that can inform other teachers' judgements or become a starting point for students in understanding how to fulfill success criteria. Students can independently review their own and their peer's work according to an agreed standard.



Student and parent view of real-time progress and success criteria, first, to support students' feedback practices and increase their understanding of what is expected of them so that truly evidence-based feedback practices are produced; second, to increase parents' confidence that their children are progressing and are understood by their teachers. School leaders and teachers should be able to set permissions on progress data to show to parents.

## **Recommendation and personalisation**

Priority





Recommendations and personalisation will make it more efficient for teachers and school leaders to plan and implement data-informed differentiation for students according to current attainment levels and capabilities. Users will be able to easily spot groupings and outliers in class in terms of their progress. They will also have access to recommended next steps, digital resources and assessments that will enable them to effectively support their students' next learning steps and provide personalised, timely feedback. Users will have the ability to change their class groupings to support a variety of approaches for differentiation based on their judgements and decisions. They can also decide which data to share and who to share it with, and customise settings and reminders according to their personal needs.

# User needs to be addressed



Personalisation and differentiation



Professiona learning



Resources



Learning progressions

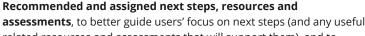


Feedback and

## Recommended features to be tested



**Highlighted patterns (grouping) and outliers in learning progressions**, to help users group their students by attainment levels and support a more accurate adjustment in teaching practice. Users should be able to save and manage their groupings.



related resources and assessments that will support them), and to increase confidence in strategies that will support their students' progress. Allowing students to view recommended and assigned resources will support independent engagement in learning. Similarly, allowing parents to view relevant resources will help them support their children at home and ensure consistency in the learning journey.



**Shared library of resources and assessments within a school for users**, to support users' inclusion and sharing of their preferred resources and assessments, and assist in lesson-planning.



**Sort resources and assessments according to a user's profile (relevancy)**, to save planning time by simplifying each user's search for resources that are appropriate for them and their classes.



**Regular updates on students, informed by data** that supports user understanding of who to help and how to help them progress, and also increases each teacher's confidence, providing them with a clear overall picture of their own practice.



**Modify notification status according to time of day**, to help set realistic daily expectations of teachers, parents and students around teaching, learning and feedback, helping teachers manage their time and focus.



**User-created tags for progression indicators, sessions, resources and assessments**, to enable users to more easily align their data and planning to their own needs, and to inform future efficient evidence-collection practices.



**Saved combinations of filtering options**, to support more specific and consistent targeting that accords with users' needs, even when new data sources, resources and assessments are introduced.



**Customisable settings and reminders**, to enable users to set up resources and tools that will suit their preferred classroom and school approach and ease transitions to new systems.

## Discoverability and accessibility







Discoverability and accessibility will significantly reduce the time users spend on searching for assessment and digital resources, which are qualityassured, evidence-informed, curriculum-aligned, and practical for use in the classroom context or their specific situation. Having access to a database of curated resources aligned to learning progressions will enable users to address with greater confidence their students' learning gaps and next steps.

## Recommended features to be tested



Curated and collated resource and assessment database designed for learning progression that is based on evidence, to give users more confidence in finding what they need for their specific situation. The database should be presented with relevant metadata, including:

audience

author and date

format

• illustrations of practice.



Highlight relationships between teaching resources, student resources, parent resources and assessments according to learning **progressions**, to increase user confidence in deciding the most effective resources for use within their classes and their practice.



Transparency in what defines a quality resource (including assessments), and capturing feedback on which resources users **found most helpful to them**, to support users' planning and resource selection. Feedback can guide future displays of relevant or highlighted resources (such as illustrations of practice), and inform decisions about which resources to keep.



**In-context relevant resources and examples,** to make resources truly valuable at the point of use – for instance, case studies or examples in professional learning modules, notes that introduce or follow videos, and other information or examples within assessment guides.



**Personalised filtering options**, to enable users to customise their resource searches in line with what is important for them. Criteria could include:

learning progression

year level

topic/tags

- type
- learning area
- format
- · series/tiers.



Resources and assessments available in alternative formats, from interactive online resources to offline activities, to ensure that every user has access to a variety of different activities and assessments that are applicable to different teaching approaches and to students with specific and changing needs, and to different classroom and school environments – from those with one-to-one devices to those with intermittent access to the internet. Each progression should also have alternative offline and online resources.



<ത്രക്ത്യം Ensuring accessibility of all content for everyone, to support every student's progress regardless of their situation or learning stage, and to help users employ the content effectively.



Content reminders, to notify users that new resources and assessments are available for use in their classroom. To ensure relevance, the reminders should be based on user and class profiles. This will enable users to focus on using these resources in the classroom rather than on constantly searching for useful resources.

## User needs to be addressed



Personalisation and differentiation





Resources



Curriculum



Learning progressions



Technology

## **Evidence-based learning pathways**

**Priority** 





Evidence-based learning pathways will provide users with a starting point for using learning progressions to inform their planning and teaching practice. Users can trust that their plans are data-driven and targeted to build on student strengths, address necessary student learning gaps and provide differentiated next steps. The capacity to share these plans with colleagues will encourage consistency in practice and improve whole-school approaches.

# User needs to be addressed



Assessment and evidence



Personalisation and differentiation



Professional learning



Resources



Curriculum



Learning progressions



Feedback and next steps

## Recommended features to be tested



**Organising progression sessions into lesson and unit plans**, to better embed progressions directly into planning and to streamline the everyday practice of using learning progressions.



**Assign teacher, student and parent resources, as well as assessments, to lessons and unit plans**, to streamline a user's process of deciding which progression indicators to record against during a lesson.



**Shared lesson and unit plans based on learning progressions**, to improve the consistency of each user's practice and to encourage improvements in a whole-school approach. Users should be able to set permissions on this data to facilitate differences in primary and secondary approaches.



**Student view of lesson and unit plans as a timetable**, to encourage differentiated learning and students' monitoring of their own progress. This timetable will guide them on how to ask for feedback, clarify what is required of them and improve conversations around progress with parents and teachers.



Student goals set according to learning progressions and capabilities, to encourage student personalisation of their own learning paths based on their strengths and areas for improvement, and to give teachers a more extensive set of guidelines for their practice.



Automated personalised feedback through machine learning (e.g. chatbot), to give students a first point of call when needing feedback outside of school and to help ease the burden of providing personalised feedback from teachers. To be truly relevant, the feedback system should learn from past teacher and student data.



Schools may utilise their curriculum-based programs, syllabus, rubrics or any adaptation of progress and benefit from a learning ecosystem so that they can continue to effectively address their students' different learning, access, and participation needs according to what works in their school context. Schools that have made a head start in formalising what progress looks like in other areas will not have to go somewhere else to be supported.



## **ALPHA**



The team recommends the information in this report be taken into the next phase, alpha. The hypotheses around the user needs shall be tested to produce a service prototype that encompasses the minimum viable product — a service that shall satisfy the users that have been represented.



## Sneak peek of the alpha phase

The start of the alpha phase requires the development of a series of user stories based on the personas that have been developed in the discovery phase.

**Seven user stories** are provided as examples of how a combination of hypotheses will benefit the user. Each user story is illustrated by a wireframe concept that will facilitate the user story and validate its accompanying hypotheses.

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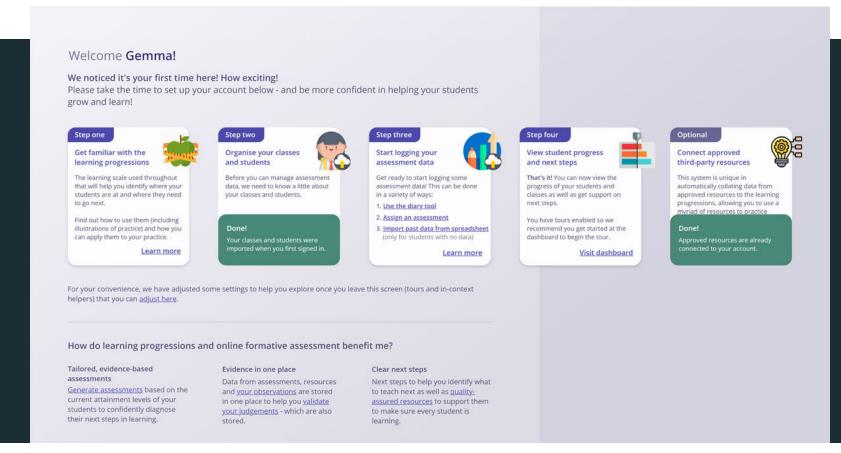


## As Jade

**I want to** encourage a shared and consistent language around progress and make applying learning progressions in the classroom intuitive, **so that** our teachers can see the value in adopting new teaching and assessment practices.

## Hypotheses that will be validated

- · Learning integration and visualisation
- Alignment to learning progressions
- · Assessment as a frequent practice
- Recommendation and personalisation



## Benefits to Jade

- Step-by-step guide for her teachers to understand the learning progressions and how to use them, particularly in relation to the service
- Remove the hindrance of needing to add data already available from other systems
- Obvious benefits will improve confidence and acceptance, as well as provide another pathway into features that her teachers may find most useful to them



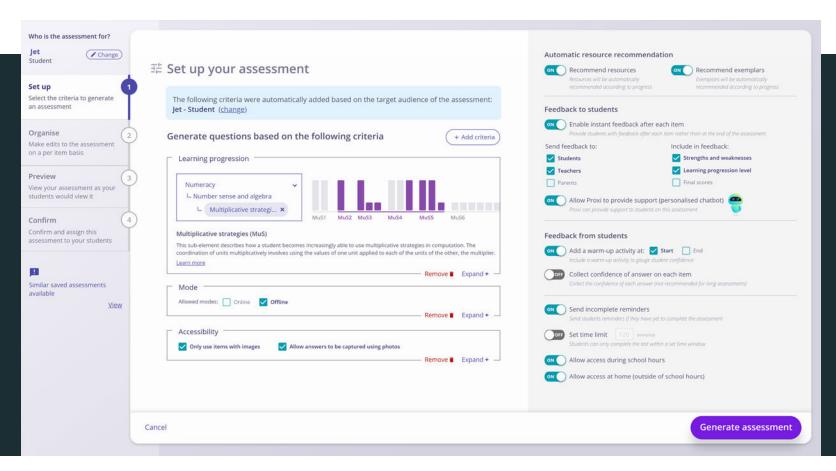


## **As Alex**

**I want** to be able to access assessment resources that are appropriate for my students considering their current attainment levels as well as their learning goals **so that** I can accurately, consistently and confidently identify their progress.

## Hypotheses that will be validated

- · Alignment to learning progressions
- · Assessment as a frequent practice
- Recommendation and personalisation
- Discoverability and accessibility



## Benefits to Alex

- Directly access and use assessments aligned to learning progressions
- Confidence in assessments, which are curated by experts and fit for purpose
- Flexibility to tailor assessments according to Alex and his students' needs

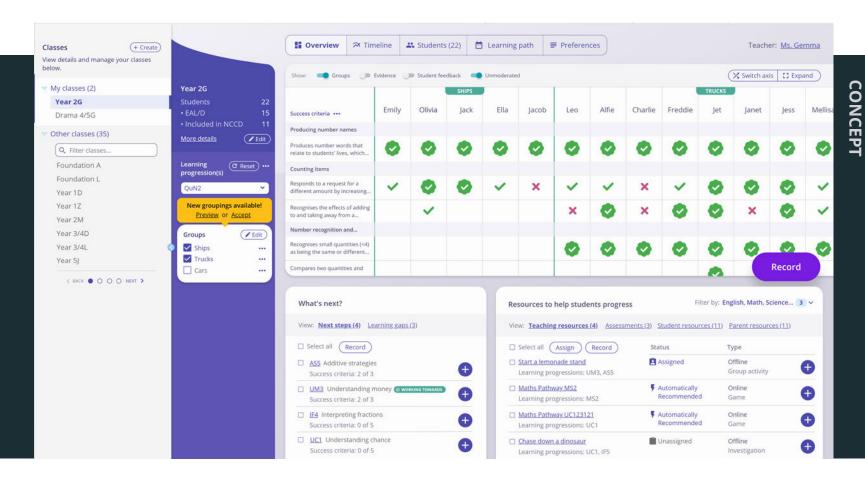


## **As Ruby**

**I want** to have a whole-class view that shows where my students are at, their gaps, and next steps **so that** I have sufficient information about my students to take to our fortnightly meetings. That will help my colleagues and me in our planning.

## Hypotheses that will be validated

- Learning integration and visualisation
- Alignment to learning progressions
- Recommendation and personalisation
- Evidence-based learning pathways



# **Benefits** to Ruby

- All-in-one place: Ruby no longer has to go to different places to understand how her class is progressing and how to support them
- Flexibility to tailor the data according to what she needs
- Support for tailoring her teaching to better differentiate in the classroom



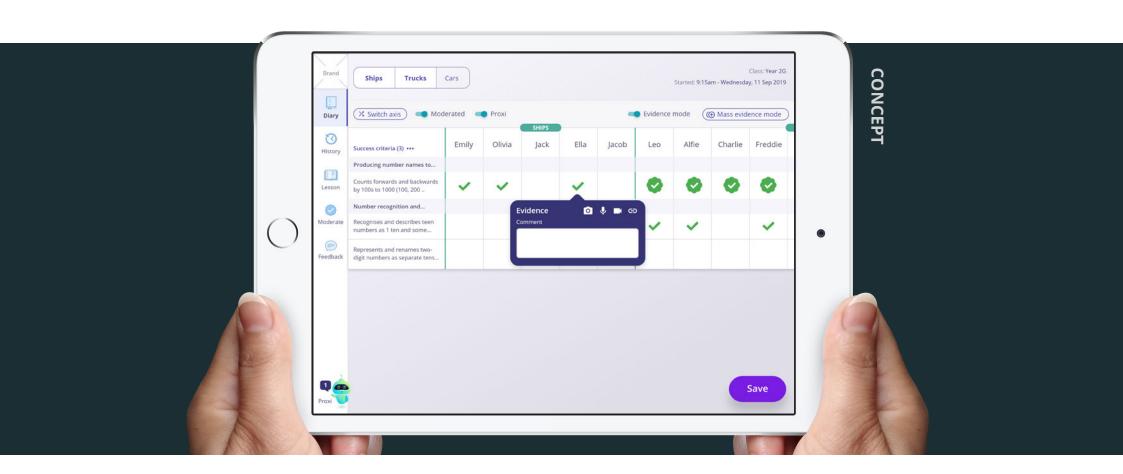


## **As Gemma**

**I want** to have a seamless and intuitive way of recording my observations of my students' skills as I am doing an activity with them in the classroom **so that** I can use my observations directly as evidence to support my judgement of their learning and progress. This will mean I won't need to spend extra time and rely on my memory if I have to perform data entry outside school hours.

## Hypotheses that will be validated

- Assessment as a frequent practice
- Alignment to learning progressions
- Recommendation and personalisation
- Evidence-based learning pathways



## Benefits to Gemma

- Convenient and portable method of data collection, almost like writing on paper
- Remove double-handling of data
- Allow teachers to work together to moderate their observations
- Real-time analysis available in the classroom

## User story 5

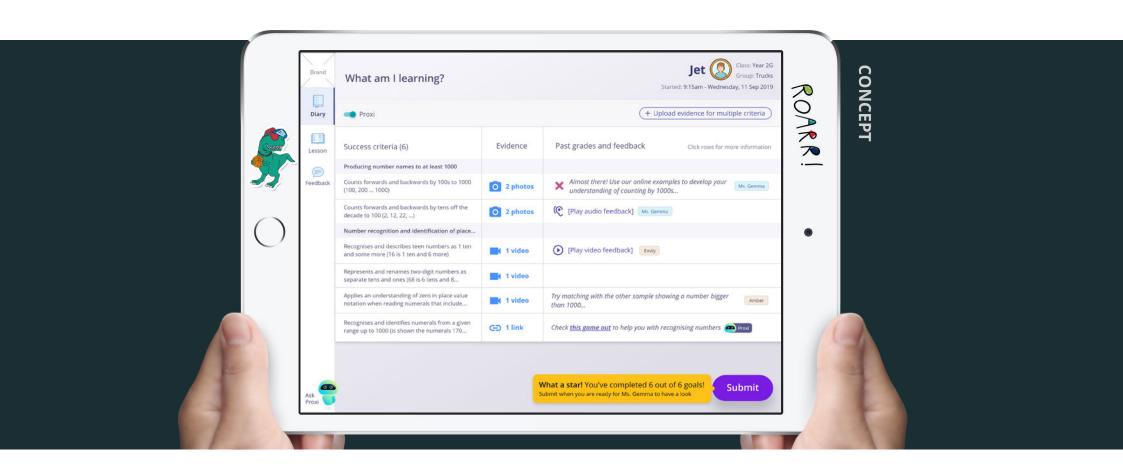


## **As Jasper**

I want my students to be able to understand their learning goals that we have established together; to be able to upload their work samples as evidence that they have completed their learning goals; and to receive feedback from myself, their peers, and/or their parents **so that** we all have a shared understanding of student progress and data (work samples uploaded) can become a by-product of student learning rather than a separate data entry task for me.

## Hypotheses that will be validated

- Assessment as a frequent practice
- Alignment to learning progressions
- Recommendation and personalisation
- Evidence-based learning pathways



# Benefits to Jasper

- Students and teachers will have a unified language when discussing learning
- Students are visibly involved in their learning and outcomes
- The task of uploading evidence is passed on to students as a by-product of their learning, allowing teachers to focus on teaching



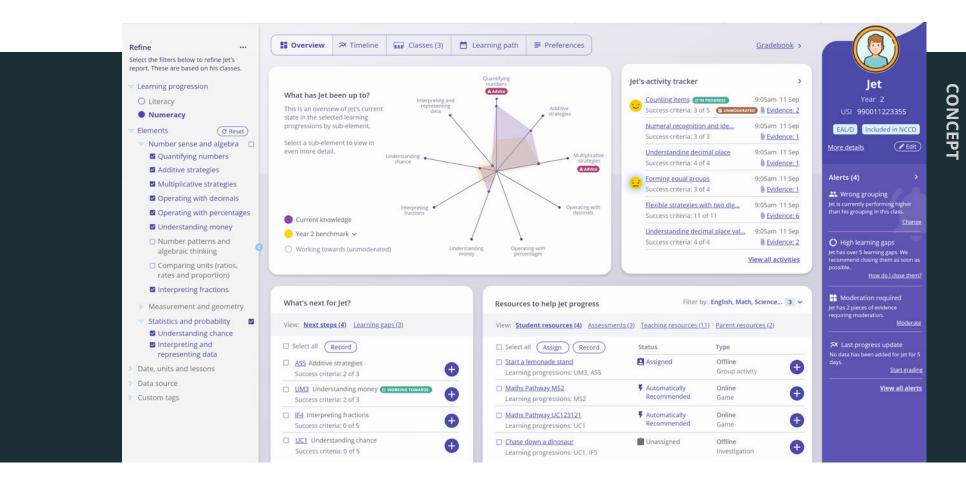


## **As Ruby**

I want to be able to view an overall picture of how a student in my class is progressing in their learning that incorporates assessment data and classroom observations made by other teachers and me so that I can be aware of, and be better informed of, my student's learning gaps and how to guide my student in their next steps.

## Hypotheses that will be validated

- Learning integration and visualisation
- Alignment to learning progressions
- Recommendation and personalisation
- Evidence-based learning pathways



Benefits to Ruby

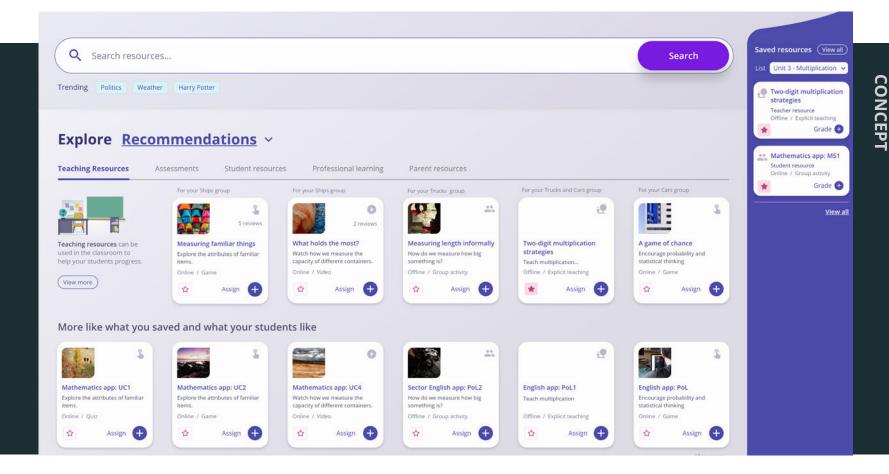
- All-in-one place: Ruby no longer has to go to different places to understand Jet's progress
- Personalised and processed according to Jet's progress so Ruby can differentiate when needed
- · Real-time information that can be used in the classroom

## **As Gemma**

I want easy access to evidence-informed strategies and quality-assured resources based on learning data gathered from observations and assessments of my students so that I can efficiently tailor lessons and activities. My students have a wide range of attainment levels and capabilities, and I want to be able to confidently address their learning gaps and next steps.

## Hypotheses that will be validated

- · Discoverability and accessibility
- Alignment to learning progressions
- Recommendation and personalisation
- Evidence-based learning pathways



Benefits to Gemma

- Open up a trusted database of resources that Gemma can select according to her needs all, in one place
- Guided pathways on what could be useful to Gemma based on evidence
- Ability to save useful resources efficiently so she can find them again