



# LEADING LIGHTS

Transforming learning for all.



CATHOLIC EDUCATION  
WESTERN AUSTRALIA

“Policy makers and practitioners now agree that teaching and learning, and therefore the organisation of schooling, needs to be redesigned to address the needs of learners and societies for the 21st century.”

**St Thomas' Claremont,  
Justin Toohey, Principal**





# LEADing Lights

Transforming learning for all.

Our aspiration is to provide a world-class Catholic education system where all our students, staff and parents flourish. In our schools and early years centres we are working together as a community that is entirely focused on meeting the contemporary needs of our students, parents, staff and school communities in these rapidly changing times.

Central to this is our exciting transformation agenda, which is already well underway right across Catholic Education Western Australia (CEWA). We will continue to use 'LEAD' – Learning, Engagement, Accountability and Discipleship<sup>1</sup> – as the strategic intent of our evolution. And we will support and empower every staff member and student on their journey through our digital transformation initiative, LEADing Lights.

I am therefore hugely excited to introduce the project and outline some of the vast array of benefits and opportunities it will bring to over 80,000 students, as well as teachers, childcare workers and staff right across Western Australia.

Based on a proven foundation of Australian and global best practice, this digital transformation will empower all of us to reimagine the way we teach, learn and serve in order to deliver world-class learning experiences.

Dr Tim McDonald,  
Executive Director, Catholic Education Western Australia

1. <http://internet.ceo.wa.edu.au/AboutUs/Strategic-Direction/Pages/default.aspx>

# Reimagine Learning

LEADing Lights is the creation of a single digital ecosystem for all CEWA schools and early years centres, as well as central and regional offices.

This landmark digital transformation initiative is designed to help every student achieve their full potential, every teacher deliver inspiring learning and every school become a flourishing happy school<sup>1</sup> where students love to learn. It will also equip every principal with personal insights that enable informed decisions about the running of their school.

Based on world-class, large-scale transformation frameworks, case studies and research detailed on the following pages, LEADing Lights adopts evidence-based, best practice methodologies, technologies and planning, as well as sharing learning resources, people and professional development programs.

LEADing Lights introduces contemporary ways of using technology, while continually evolving to keep pace with the changing expectations of our staff, students and teachers.

## Supporting and empowering every student and staff member

Every student will be equipped with the same powerful tools to push boundaries, explore, create and collaborate across distance and device.

Teachers will be able to educate in more flexible and contemporary ways, while taking advantage of exciting pathways for tailored personal learning and professional development.

School leaders will have the real-time information they need to accelerate continuous improvement in student and teacher performance, graduation rates, health, wellbeing and achievement – across a class, a school or the entire system.

Parents will be brought closer to their child's school journey through real-time information on how they are tracking and how to support their learning with direct access to information, people and services.

Across our schools, offices and early years centres, LEADing Lights also connects every CEWA staff member to the tools they need to work more effectively and empowers them with real-time information that is relevant to their role, so they can make the right decisions to better serve today's students, schools and communities.

## Resourced to support a smooth transition and fast-track success

A two-phase deployment will see the entire LEADing Lights ecosystem implemented in an accelerated time period.

It will also incorporate a full change management program and materials to help employees across the entire CEWA system to plan, transition smoothly, and develop the curriculum, pedagogical and technology skills they need to introduce and support contemporary, deep learning experiences.

## Community

Equipping:

- Learning environments
- Collaboration and communication
- Equitable tools and access

## Personal Learning and Development

Enabling:

- Personalised career paths supported by online development programs and technical training
- Digital schools and virtual learning

1. Founded on UNESCO research that recognises the crucial relationship between happiness at school and the quality of education.

# LEADing Lights digital ecosystem

Connecting students, teachers, principals, resources, support networks and parents, LEADing Lights is designed to foster a powerful social learning community and equip students with the 21st century technologies and deep learning skills they need to reach their full potential.

## Leadership

Co-ordinating:

- Schools
- Central and Regional offices
- Early Years Centres
- Religious Education

## Pedagogy

Supporting:

- 21st century learning
  - Deep learning
- Whole child, whole school, whole community
- Personalised learning

## School Administration

Enabling:

- Identity, security
- Unified systems
- Insights for improvement
  - Efficiency and effectiveness

# CONNECTING THE ENTIRE COMMUNITY



LEADing Lights connects your education community to the latest communication, collaboration and productivity tools, learning resources, management systems and personal learning and development opportunities. It also streamlines and centralises student and management information, providing real-time analytics to inform everything from student progress to school planning. With LEADing Lights, learning can be more engaging, teaching more flexible, parents more informed and schools more vibrant and innovative.



## Principal

- Benchmark student, class and school performance across the system.
- Gauge achievement trends.
- Amplify your school's social presence in the community.
- Monitor health and wellbeing.



## Parents

- Monitor your child's progress in real time.
- Pay for excursions, fees and charges online.
- Connect to the school to organise teacher interviews, and stay on top of news and events.
- Stay in close contact if your child is boarding.





### Admin Staff

- Streamline student management with a single, centralised system.
- Improve people management with a single centralised HR system.
- Simplify school marketing and communications with shared resources and templates.



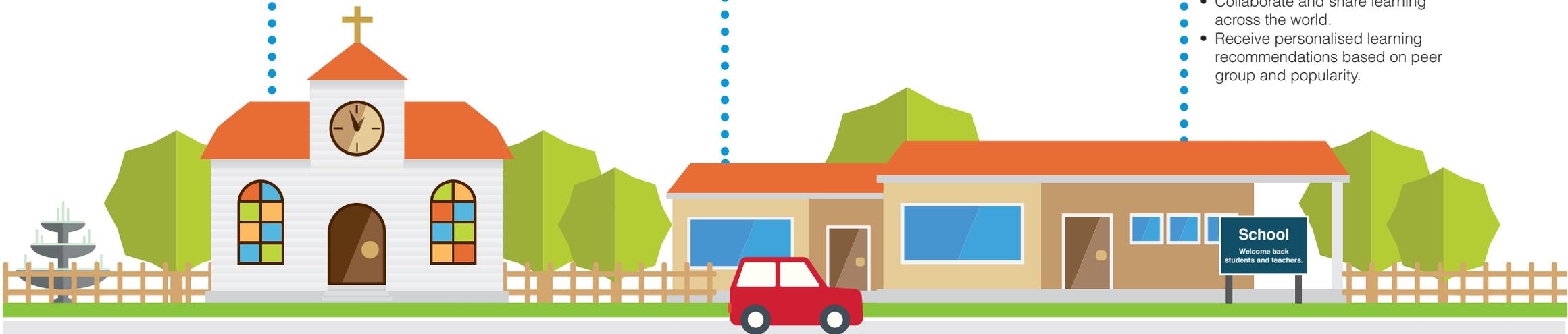
### Teachers

- Enjoy single sign-on to student management systems and learning resources.
- Extend scarce teaching resources across a community or the State.
- Practise flipped learning.
- Immediately see health, pastoral and academic records from transfer students.
- Obtain professional or welfare advice from qualified experts.
- Enjoy flexible, personalised career development through our professional learning platform.



### Students

- Enjoy single sign-on to rich learning resources, tools and communications.
- Benefit from protected, safe, school community social media.
- Learn across distance and device.
- Learn from experts, wherever they reside, and stay in the community thanks to virtual learning.
- Track your own performance and maintain a portfolio of work.
- Collaborate and share learning across the world.
- Receive personalised learning recommendations based on peer group and popularity.



# A Single, unified digital Learning Ecosystem

The entire CEWA school system will have access to an integrated suite of best-in-class learning tools, educational software, storage, communications, collaboration, student management systems and a professional learning and development environment. They will also have secure storage for students, teachers and administration staff with enterprise-grade back up and recovery.

Instead of schools and early years centres owning, designing, managing and updating a disparate range of software and systems, LEADing Lights is founded on a unified cloud ecosystem that serves every Catholic school, office and early years centre across the state. Moving to a single cloud ecosystem has important benefits:

## Learning equity

It brings the same world-class technology, tools and resources to every student, school and early years centre.

## Technology manageability

It eliminates the risk of investing in bespoke, and often incompatible, systems and removes the burden of security, updates and ongoing management from constrained technical resources in our schools.

## Technology budgets

It makes IT budgets and licensing more manageable and predictable through a single 'per staff member per year' cost negotiated with current education partners including Catholic Network Australia (CNA).

## Simple scaling

It's quick and easy to add or remove users from the system as numbers fluctuate, and you only pay for what you use.

## Data portability

It makes it simple for students to take a portfolio of work with them if they transfer between schools and to maintain it afterwards for work placements.

## Skills and knowledge transfer

It enables students, parents, teachers, administrators and principals to share knowledge, skills and experiences without the need to learn new systems if they transfer schools.

## Innovation

It equips schools, students and teachers with an ecosystem for innovation that enables them to reimagine and reinvent learning without being held back by current technology.

## Leading edge

It enables students and teachers to always have the latest technology and quickly obtain the benefit of innovative capabilities as they are introduced.

## Inclusive

It brings early years centres and OSHC into the same, single system, providing consistent tools and experiences to all staff.

## Insightful

It's driven by intelligent analytics, enabling future planning from an informed perspective.



### CEWA Cloud

Secure storage for schools, teachers and students.

### Personal Learning and Development

Intelligent Professional Learning tool that learns who teachers, students and parents are, then links them to the appropriate people, learning materials and courses.

### CEWA 365

Tools for learning, communication and collaboration.

### Student Information and Finance System

Personalised 360-degree teacher, student, parent access to services with supporting marketing, enrolment, alumni, asset management, Internet of Things and student academic services with reporting.

Connected care workflows for improved student wellness.

### Learning and Administration Analytics

Analytics that benchmark student, class, year and school performance against KPIs.

### Badging and Incentives

Learning support, networks, student and staff discounts and more.

### Students

Student-based access to personalised learning centre with CEWA 365 tools, storage space, school news and safe social media.

Student view of personal learning insights monitors and benchmarks real-time and historical performance.

### Teachers, Principals and Admin Staff

Role-based access to personalised portal with Office 365 tools, storage space, school news and safe social media.

Role-relevant view of learning insights monitors and benchmarks student/class/grade/school real-time and historical performance.

Role-relevant access to financial and student administration systems with personalised 360-degree student interactions and connected care workflows for co-ordinated student support.

### Parents

Child view of personal learning with insights, notifications and services to review family information and reports.



### Secure, single sign-on

For everyone, everywhere every day using Windows or Apple devices.



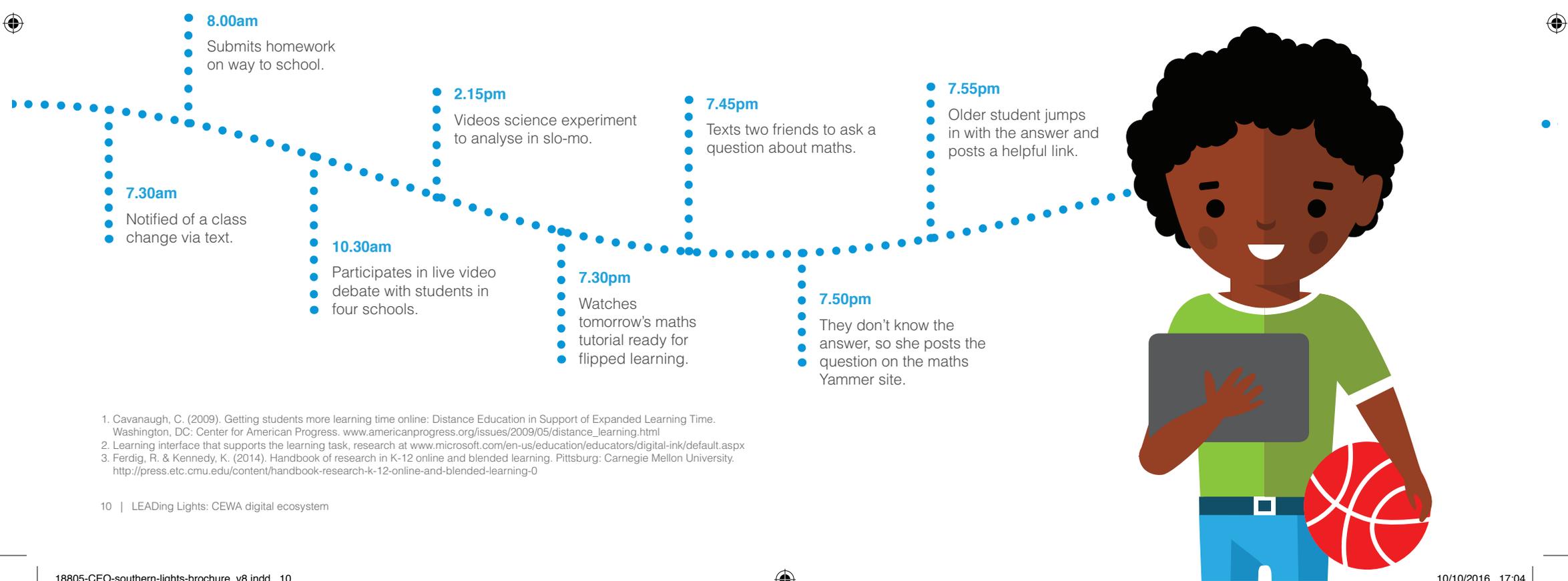
# Inspiring

every child to excel

LEADing Lights provides students with the same powerful tools and learning environment, regardless of where they attend school or where they are located<sup>1</sup> – at home, in the library or on the bus. A single sign-on takes them straight to learning resources and brilliant tools to help them research, experiment, brainstorm, make notes, create, collaborate, evaluate and present their learning in ways that suit the student and the subject.

They're free to learn with their choice of device – Windows or Mac<sup>2</sup> – and they can enjoy contemporary experiences like safe social media, blogs and Student Edge to quickly get the answers they need from a support network of peers and mentors. Plus, video conferencing opens up new ways to learn elective subjects that may not have been available. For example, an Italian teacher or a STEM coding expert can teach students at several schools simultaneously, without the need for travel<sup>3</sup>.

With LEADing Lights, students are more connected to learning than ever before because their portfolio of schoolwork travels with them. If they move schools, it's easy to pick up where they left off. And for the first time, they can track their learning to understand their progress and benchmark it against CEWA averages if they wish, putting them in charge. Artificial intelligence within the software solutions makes recommendations and predictions on student progress with incentives and awards to support their personal goals.



1. Cavanaugh, C. (2009). Getting students more learning time online: Distance Education in Support of Expanded Learning Time. Washington, DC: Center for American Progress. [www.americanprogress.org/issues/2009/05/distance\\_learning.html](http://www.americanprogress.org/issues/2009/05/distance_learning.html)  
2. Learning interface that supports the learning task, research at [www.microsoft.com/en-us/education/educators/digital-ink/default.aspx](http://www.microsoft.com/en-us/education/educators/digital-ink/default.aspx)  
3. Ferdig, R. & Kennedy, K. (2014). Handbook of research in K-12 online and blended learning. Pittsburgh: Carnegie Mellon University. <http://press.etc.cmu.edu/content/handbook-research-k-12-online-and-blended-learning-0>

# Equipping

every teacher to innovate

LEADing Lights frees teachers up to reimagine learning. They can use flexible, contemporary technology and tools to introduce flipped classrooms and more personalised learning. They can extend teaching beyond the four walls of the classroom through video conferencing, and they can support multiple learning styles with tools that let them create movies, podcasts, presentations, websites and interactive learning experiences.

From the earliest years LEADing Lights enables carers and teachers to track, analyse and develop play-based learning.

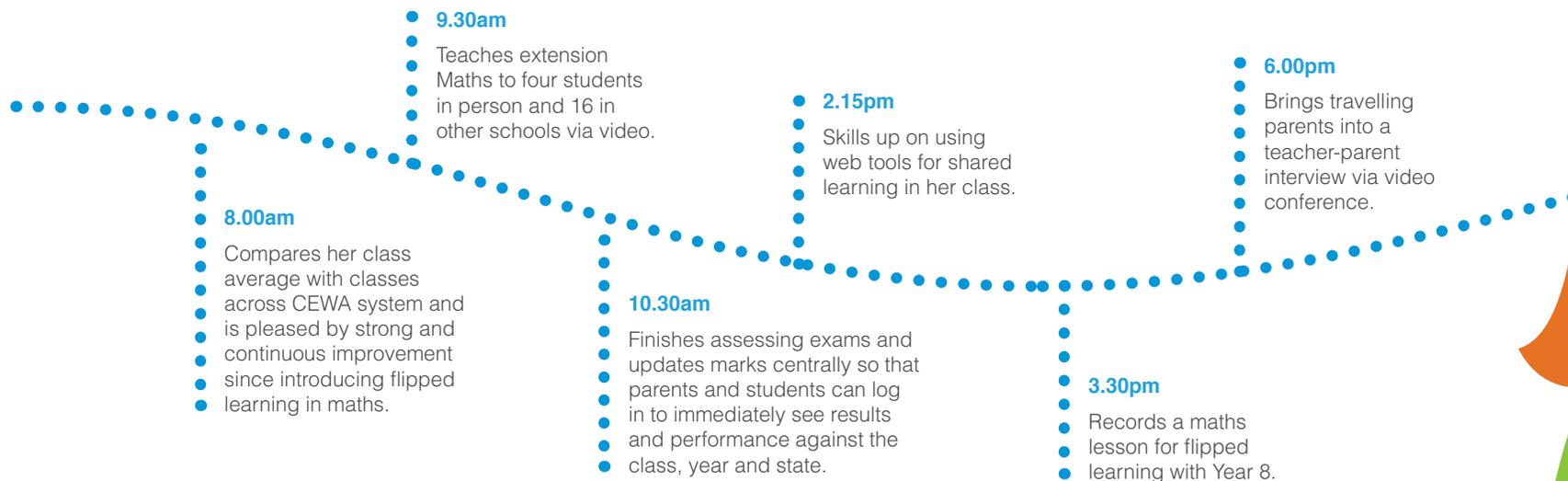
It also supports diagnostic and virtual portfolios for every child and easier connections with parents to support involvement.

All teachers will be incorporated into the same single system bringing them powerful tools, as well as consistency in HR and governance.

With single sign-on to a centralised student management and welfare system, all staff can move quickly between tasks with everything at their fingertips. Integrated systems work together, streamlining routine administration through standardised reporting and attendance, and eliminating double entry.

LEADing Lights also opens exciting pathways for personalised, professional development by allowing teachers to achieve new competencies. The Personal Learning and Development system uses machine learning to profile their progress and ambitions, and suggests appropriate courses and certifications.

Most importantly, linking with other educators enables teachers to share ideas, best practice and learning projects right across the system.



# Empowering

## every principal to drive school improvement

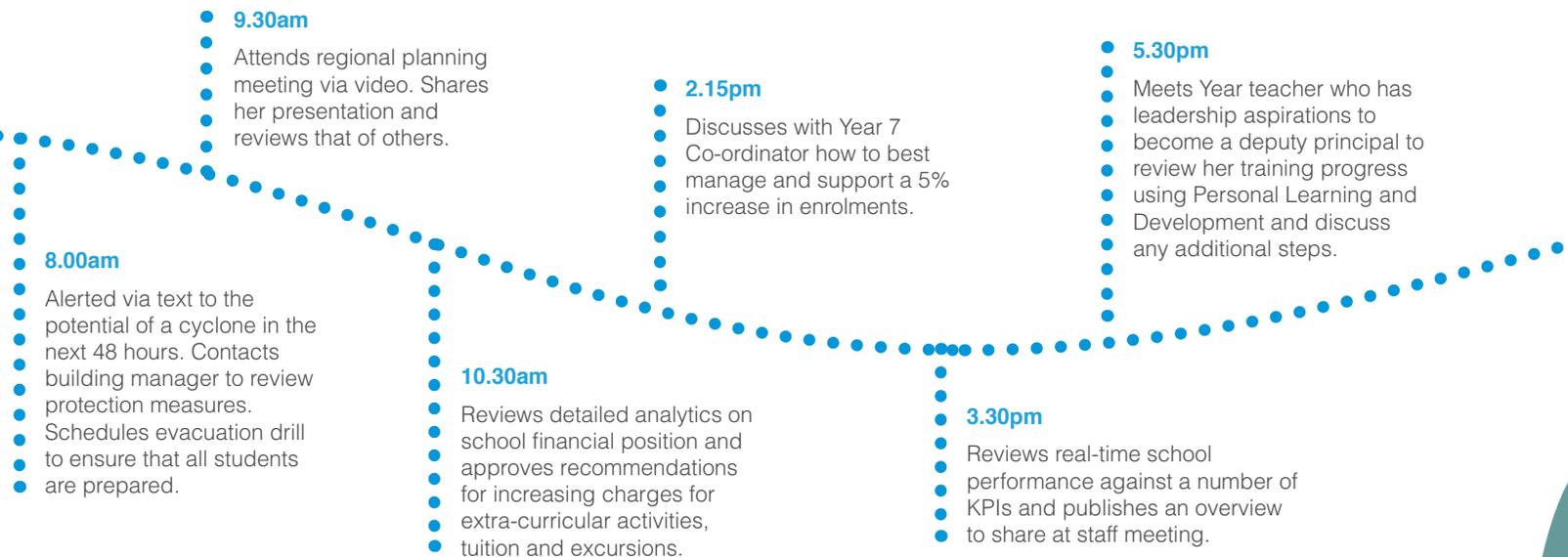
LEADing Lights lays the foundation for analytics<sup>1</sup> – one of the most important ways principals can inform their program of continuous improvement in the Catholic Education system. A single integrated platform enables them to gather real-time data on everything from student performance to attendance, graduation or wellbeing and benchmark it against other schools, past years, system averages or WACE and NAPLAN statistics. Not only can they see how they are tracking, but they can also investigate the impact of new initiatives to quickly gauge success.

LEADing Lights also enables principals to manage staff professional learning<sup>2</sup> and development through the Personal and Professional Development System. This platform automatically recommends pathways and courses based on a staff member's role, stated needs and preferences. It offers the flexibility of online training, along with a library of technical tutorials to help everyone make the most of the new capabilities of LEADing Lights.

LEADing Lights enables principals to offer more flexible staffing arrangements; for example, sharing teachers between

schools or sharing classes when resources are scarce. Teachers are empowered to work from any location and they do not always have to deliver classes in person.

IT management is also vastly simplified. Updates, security, access and maintenance are all managed centrally, removing the day-to-day concerns from the school. Schools can set up technology for students and staff quickly and easily and scale up or down to match enrolments, while only paying for what they use.



1. Siemens, G. (2013). Learning analytics: The emergence of a discipline. *American Behavioral Scientist*, 0002764213498851.  
2. Cavanaugh, C. (2014). ePLC: Potential and Design of Professional Learning Communities in the Cloud. In J. Viteli & M. Leikomaa (Eds.), *Proceedings of EdMedia: World Conference on Educational Media and Technology 2014* (pp. 1838-1843). Association for the Advancement of Computing in Education (AACE). <https://www.learnlib.org/p/147725>



# Enabling

## every staff member to collaborate and work efficiently

Specialist staff – from curriculum advisers to improvement officers, support consultants, special needs co-ordinators, psychologists or administration staff – will find their roles are simpler and easier with LEADing Lights.

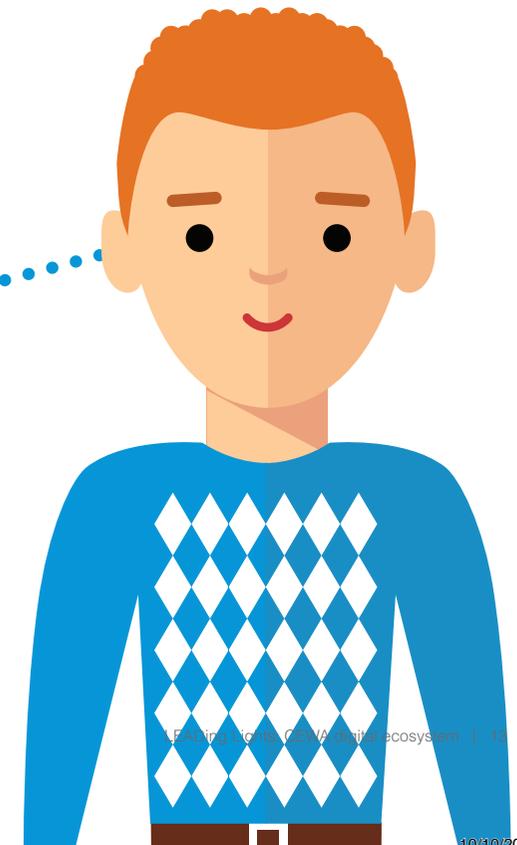
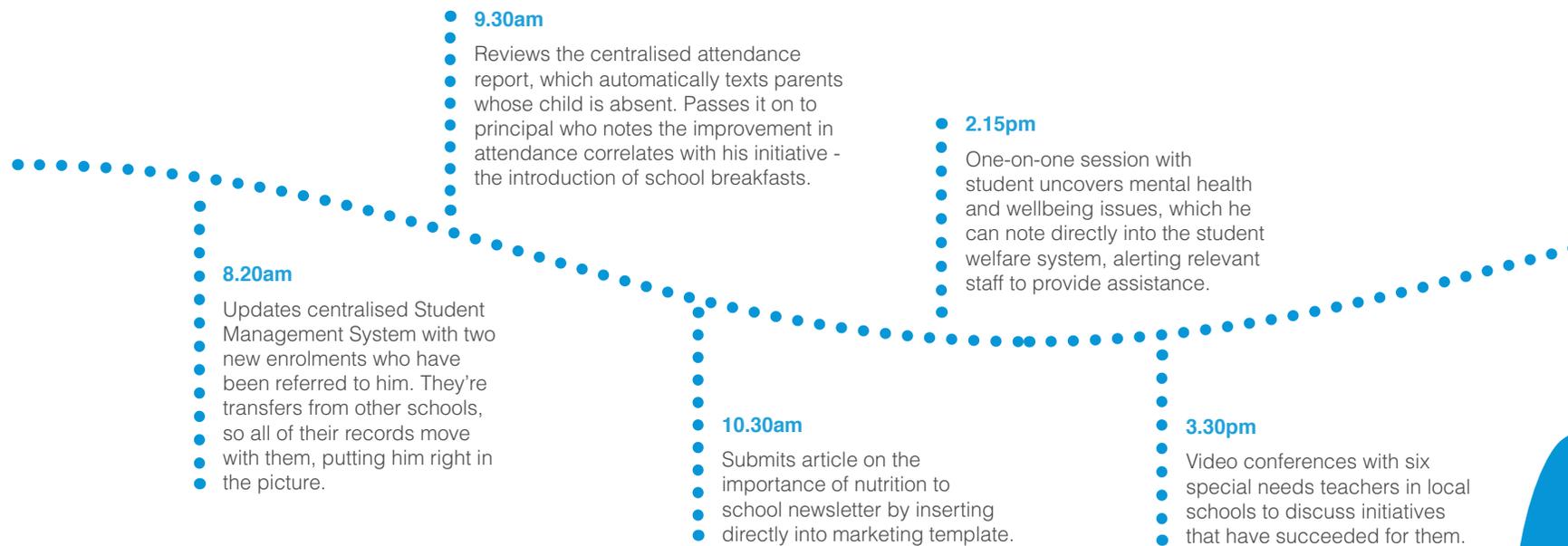
A single, digitally connected system makes it easy to find information and update it without duplicating effort or navigating multiple systems. This enables professionals to share notes and understand the situation they are encountering, keeping everyone up to date and co-ordinated.

Financial planning is included, enabling staff to enter data once to comply with reporting requirements, and obtain a continuous view of their school's performance, benchmarked against others. New school builds can also be costed and managed consistently, enabling comparisons across similar structures to assist in quoting evaluations and ensuring learning spaces are contemporary and digitally ready.

Human Resources staff will enjoy the simplicity of a single HR system connected to a professional learning platform that

enables staff to plan their personal pathway and support it with online tuition, courses and more.

There is also easy access to CEWA policies, school governance structures, administration processes, community engagement, marketing, social and communications templates, making it easier to manage marketing aspects of the school.



1. Hattie, J. (2009) Visible Learning: A synthesis of over 800 meta-analyses relating to achievement, Routledge. Tucker, M. S., & National Center on Education and the Economy (U.S.). (2011). Surpassing Shanghai: An agenda for American education built on the world's leading systems. Cambridge, MA: Harvard Education Press.

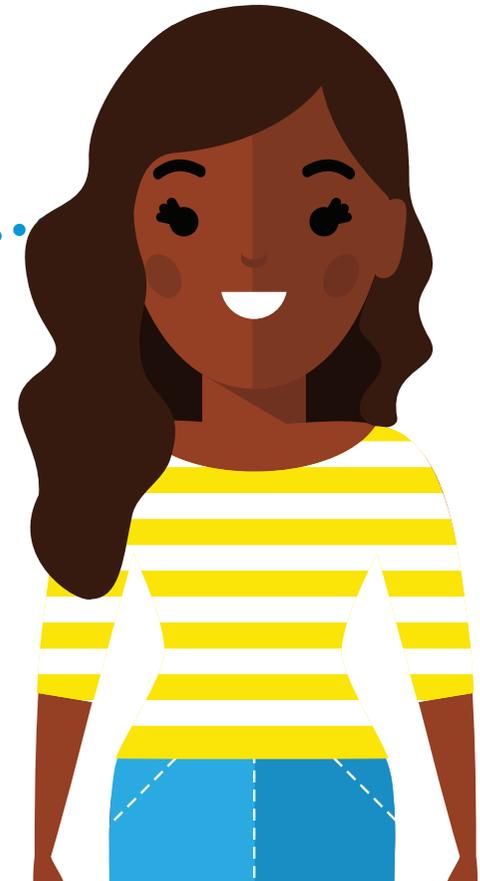
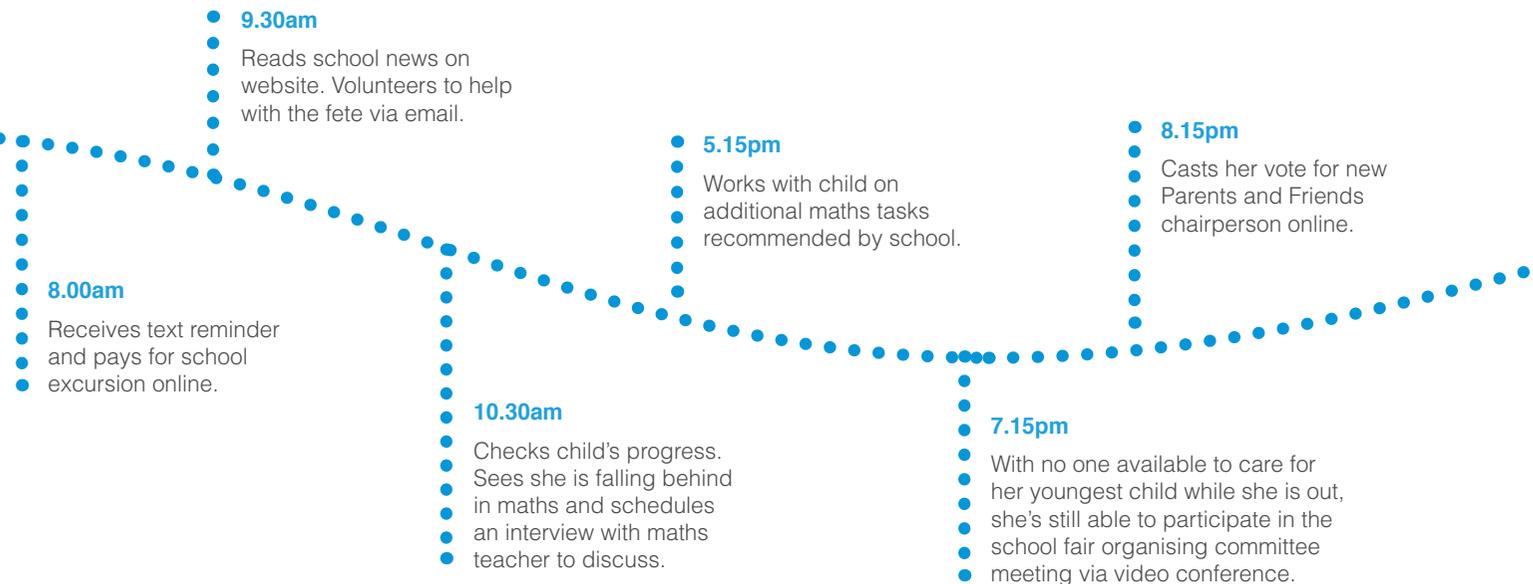
# Engaging

## every parent/carer in their child's learning

LEADing Lights is instrumental in forging stronger connections between parents/carers and the school. They will be able to log into the system to see key data regarding their child's progress in real time and benchmark it against performance indicators for the grade or the State.

They can also access online support or extension materials to help their child and communicate more easily with teachers and administration staff via text, video or email. Shared calendars streamline the process of booking parent-teacher interviews without the need for a phone call.

Online payments will simplify the way that parents settle fees, extra-curricular or excursion costs. They will also have online access to news and events, encouraging wider awareness and participation in the school community.



# CONNECTING

## the entire Catholic Education community

LEADing Lights brings everyone working in the Catholic community together. From our schools to our offices in Perth, Broome, Geraldton and Bunbury and our after-school care facilities, a single, powerful technology platform will connect us all to improve collaboration, reduce isolation and make work simpler, more streamlined and efficient on a day-to-day basis.

Learning experts and training will be more accessible, as will the opportunity to connect to a co-worker in your own district or across the State to swap ideas and experiences. CEWA standardised systems will enable co-workers, consultants or care teams to collaborate on tasks, without having to enter information twice – and everyone will be on the same page and right up to date.

Role-based access to real-time analytics will inform planning and improvements across the system, and show the impact of school change to create a program of continuous improvement.

### 9.30am

- He uploads the results into the central School Transformation Best Practice online space and links to it on the Group Yammer page.

### 8.20am

- School change management consultant reviews the results of a student satisfaction survey regarding the impact of a 1-to-1 learning program.

### 10.30am

- Two district consultants and a principal download the report and make suggestions and observations regarding the trial deployment.

### 9.30am

- He compares the students' self-evaluation with their actual grades for the trial period and the previous two terms, and issues a report.

### 3.30pm

- Having been asked to lead a State-wide initiative for change, he researches a team management course on the CEWA professional development system to help him develop his skills.

### 2.15pm

- A video conference is scheduled on the Yammer page for all interested parties to go through the survey in detail.



# An evidence-based approach

## to system-wide renewal

LEADing Lights is the result of a comprehensive investigation and synthesis of global best practice based on well-researched and highly successful system-wide, transformation programs.

### Program Design

LEADing Lights builds on the innovation evidenced through CEWA schools, expertise, experiences and international case studies, such as Finland's globally acclaimed North Star program<sup>1</sup>, leveraging their shared learning resources, people and professional development programs to fast-track success.

It also adopts global best practice based on education models such as Association for Supervision and Curriculum Development (ASCD) Whole School, Whole Community, Whole Child (WSWC)<sup>2</sup>. These are supported with Carnegie Foundation's six core principles designed to obtain better outcomes with rapid, consistent improvement over time<sup>3</sup>.

It supports online and blended access to equitable learning opportunities like those developed by Carnegie Mellon University, and leading Australian Departments of Education and Dioceses.

### Pedagogy

LEADing Lights builds on change models, including the New Pedagogies for Deep Learning (NPDL)<sup>4</sup> competencies, to inform the skill sets students need to flourish and excel in today's dynamic world. This is supported by programs such as Microsoft's Imagine Academy and ISTE technology standards that enable certification to support the Engineering in STEM.

### Personal Insight

LEADing Lights' use of data and advanced insight is structured to consider models and frameworks such as the Whole School, Whole Child, Whole Community model which was used in Tacoma School District (USA)<sup>5</sup> to help students achieve academic excellence through closer school community engagement, early assessment and intervention.

### Technology Ecosystem

LEADing Lights brings together best-of-breed technology organisations, products and solutions. This powerful ecosystem empowers CEWA with a secure cloud, intelligent analytics for insight, as well as mobile and social technologies –all designed to help schools transform and accelerate learning.

### Transformation Framework

LEADing Lights reflects deep academic research and frameworks. An example of this is Microsoft's Education Transformation Framework and School Transformation Process<sup>5</sup> that LEADing Lights will acknowledge to fast-track success. These programs summarise decades of research and provide supporting materials and a process to deliver a clear structure that schools can follow on their transformation journey.

It also follows global best practice on change management and the role of gamification with incentives and badging.

1. Mattila, P. & Silander, P. (2015). How to create the school of the future: Revolutionary thinking and design from Finland. Oulu: Center for Internet Excellence.  
1. Turning High-Poverty Schools into High-Performing Schools (2012) by William H. Parrett and Kathleen M. Budge. [www.ascd.org/Publications/Books/Overview/Turning-High-Poverty-Schools-into-High-Performing-Schools.aspx](http://www.ascd.org/Publications/Books/Overview/Turning-High-Poverty-Schools-into-High-Performing-Schools.aspx)  
1. A World-Class Education: Learning from International Models of Excellence and Innovation (2012) by Vivien Stewart.  
2. Challenging the Whole Child: Reflections on Best Practices in Learning, Teaching, and Leadership (2009) edited by Marge Scherer and the Educational Leadership Staff. [www.ascd.org/Publications/Books/Overview/Challenging-the-Whole-Child.aspx](http://www.ascd.org/Publications/Books/Overview/Challenging-the-Whole-Child.aspx)  
2. Engaging the Whole Child: Reflections on Best Practices in Learning, Teaching, and Leadership (2009) edited by Marge Scherer and the Educational Leadership Staff. [www.ascd.org/Publications/Books/Overview/Engaging-the-Whole-Child.aspx](http://www.ascd.org/Publications/Books/Overview/Engaging-the-Whole-Child.aspx)  
2. Keeping the Whole Child Healthy and Safe: Reflections on Best Practices in Learning, Teaching, and Leadership (2010) edited by Marge Scherer and the Educational Leadership Staff. [www.ascd.org/Publications/Books/Overview/Keeping-the-Whole-Child-Healthy-and-Safe.aspx](http://www.ascd.org/Publications/Books/Overview/Keeping-the-Whole-Child-Healthy-and-Safe.aspx)  
2. Supporting the Whole Child: Reflections on Best Practices in Learning, Teaching, and Leadership (2009) edited by Marge Scherer and the Educational Leadership Staff. [www.ascd.org/Publications/Books/Overview/Supporting-the-Whole-Child.aspx](http://www.ascd.org/Publications/Books/Overview/Supporting-the-Whole-Child.aspx)  
3. Ferdig, R. & Kennedy, K. (2014). Handbook of research in K-12 online and blended learning, Pittsburgh: Carnegie Mellon University  
4. [www.ascd.org/publications/newsletters/policy-priorities/vol20/num02/Tacoma-Public-Schools@-Measuring-the-Whole-Child.aspx](http://www.ascd.org/publications/newsletters/policy-priorities/vol20/num02/Tacoma-Public-Schools@-Measuring-the-Whole-Child.aspx)  
4. <https://customers.microsoft.com/Pages/CustomerStory.aspx?recid=20703>  
4. [www.youtube.com/watch?v=rfAoKs8XxZY](http://www.youtube.com/watch?v=rfAoKs8XxZY)  
5. [www.microsoft.com/en-au/education/school-leaders/school-systems-planning/components.aspx](http://www.microsoft.com/en-au/education/school-leaders/school-systems-planning/components.aspx)





# Success stories

## from landmark transformation models

“We’ve removed the remaining tethers that were holding our teachers back. They have the storage, reliability, and device support they need to do innovative things in the classroom.”

**John Schutte, Director of Information Technology, CCSD**

Calgary Catholic School District (CCSD) is the largest Catholic K-12 school district in Alberta, Canada, serving more than 53,000 students in 105 schools. Instead of maintaining a multi-million-dollar data centre and forcing top-down standards, the district made a strategic shift to flexible, teacher-driven IT services that support individualised learning, while saving US\$800,000 a year.

Widely recognised as world leaders in learning, the Finnish National Board of Education has developed a Learning and Competence 2025 strategy. This nationwide initiative sets a vision for broad-based education excellence to provide a sustainable future, wellbeing and economic competitiveness. To support this vision, they engineered a secure IT architecture empowering schools to support any time, anywhere access to classmates, support, resources, digital tools and innovative technologies that support future ways of learning.

“The combination of new visionary leadership with sophisticated data analytics is helping drive improvement in graduation rates.”

**Shaun Taylor, Tacoma School District, CIO**

The Tacoma Public School district has five high schools serving approximately 30,000 students. It is using predictive analytics tools to obtain comprehensive data snapshots of student success indicators. This has already helped to improve graduation rates from 55 to 82.6 percent.

# LEADing Lights projects - Wave 1



## CONCIERGE

LEADing Lights provides a single unified digital ecosystem for every single Catholic school across the state, ensuring everyone has the services and support needed for success.



## CEWA365

LEADing Lights connects our learning community to the latest communication, collaboration and productivity tools, learning resources, and management systems, so learning can be more engaging, teaching more flexible, parents more informed and schools more vibrant and innovative.



## INSIGHT

LEADing Lights streamlines and centralises student records and learning evidence, providing real-time insight to inform everything from student progress to school planning.



## PERSONAL LEARNING AND DEVELOPMENT

A unified portal offers access to digital curriculum and a virtual school for students, personalised learning and development for staff and students, using intelligent, predictive and adaptive learning technology to help everyone achieve more.



## ADMINISTRATION OF SCHOOLS

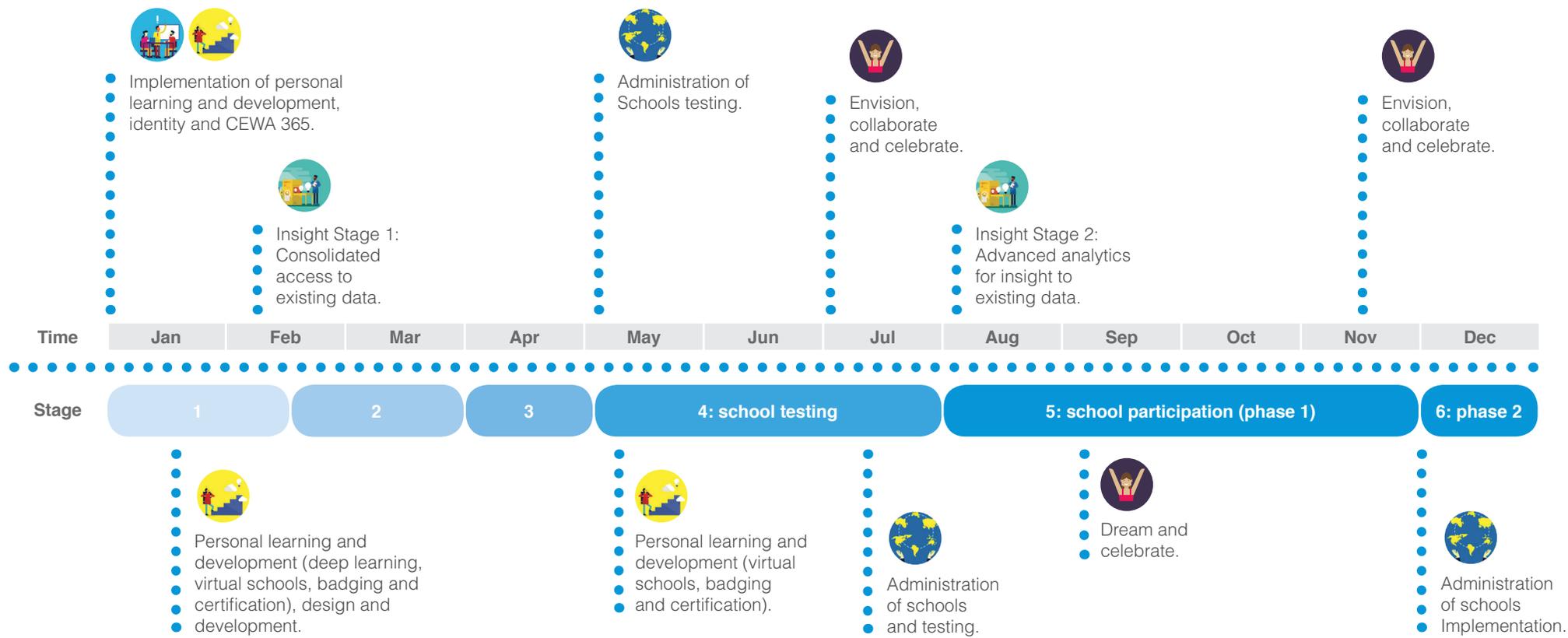
School leaders and business managers will have a supported connected system for student administration, academic achievement, attendance and reporting, marketing and recruitment, HR and finance, help desk, facility management, strategic planning and project management.



## CELEBRATE

Everyone's progress and success should be celebrated as CEWA accelerates schools as learning organizations including private and public partnerships, conferences, International and national recognition, global teacher communities and global programs including Apple distinguished school and Microsoft showcase school.

# The 12-month implementation journey

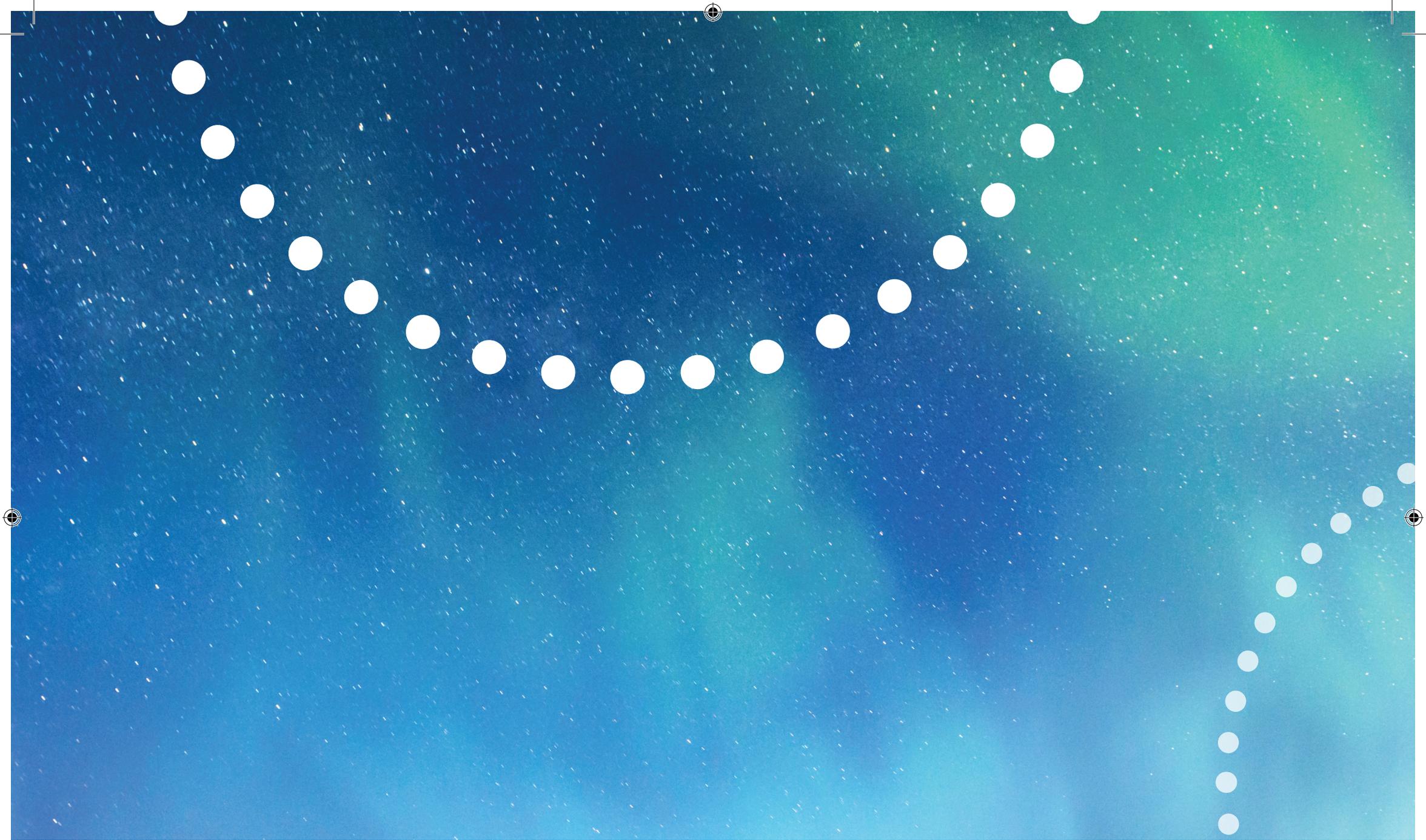






# Next Steps

The first wave of LEADing Lights' services will be introduced in preparation for the 2017 academic year. LEADing Lights starter packs will soon be available, and will contain planning and training materials for your school, as well as links to supporting technology, resources and providers who will help you on your journey.



[www.ceo.wa.edu.au/leadinglights](http://www.ceo.wa.edu.au/leadinglights)



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