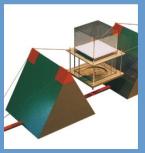
Overview of AusVELS October 2013







Dr Craig Smith VCAA











What do you already know?



What is your most "burning" question in regard to AusVELS and curriculum provision in Victoria?

Curriculum is.... working definitions

- from the Latin, meaning literally 'a path run in smalls steps'
- what ought to be taught and what needs to be learnt
- curriculum is a democratic entitlement of what is required for effective, participatory citizenship.

Who's who?

Victorian F-10 curriculum provider





to three sectors:







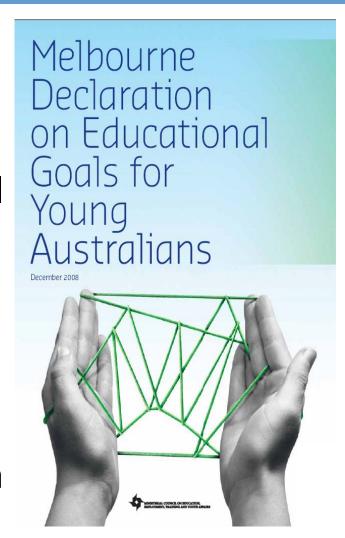
National level curriculum provider





Basis of national curriculum

- 2008 Ministerial council Australian ministers of education
- Culmination of 20 year national conversation on education reform
- Basis for Australia to be a productive, confident and equitable nation
- Called for a national curriculum



Developing the Australian curriculum

Lead by acaira

(Australian Curriculum Assessment and Reporting Authority)

Shape, consult, write, rewrite,



States and territories

Engage, argue, suggest, modify, sign-off and Implement



Australian curriculum + VELS

2013, only four out of 16 Australian curriculum subjects been completed, accepted and implemented by Victoria.









The AusVELS curriculum



- is the Foundation (F) -10 curriculum all Victorian government and Catholic schools use
- consists of Content descriptions and Achievement Standards
- provides a continuum of learning



AusVELS = Australian Curriculum + VELS



- ➤ The four Australian Curriculum subjects Maths, English, History and Science
- Plus the remaining 12 VELS domains
- Plus three embedded cross curriculum priorities



AusVELS = Australian Curriculum + VELS

Domains

Physical, Personal and Social Learning	Discipline-based Learning	Interdisciplinary Learning		
Civics and Citizenship	The Arts	Communication		
Health and Physical Education	English AC	Design, Creativity and Technology Information and Communication Technology Thinking Processes		
Interpersonal Development	The Humanities			
Personal Learning	The Humanities - Economics			
	The Humanities - Geography			
	The Humanities - History 🚾			
	Languages			
	Mathematics 🚾			
	Science AC			



Cross curriculum priorities

Three Cross Curriculum Priorities:

- Aboriginal and Torres Strait Islander histories and cultures
- Asia and Australia's engagement with Asia
- Sustainability



State-based variations - NSW



NSW SYLLABUSES for the Australian curriculum



Home

About

Stages

English

Mathematics

Science

TAS

HSIE

Creative Arts

PDHPE

Languages

Support materials

Search :

Welcome to the NSW syllabuses for the Australian curriculum.

Download, filter or search the NSW K–10 English, Mathematics, Science (incorporating Science and Technology K–6) and History syllabuses. View by stage or subject, use the hyperlinked glossaries, and filter by learning across the curriculum content.

A range of programming and assessment support materials are also now available including Program Builder, allowing teachers to create scope and sequences and units dynamically from the syllabuses.

In 2013 schools will continue to use the existing NSW K–12 syllabuses. See the <u>implementation timetable</u> for detail of the phased implementation of the new syllabuses from 2014.



SYLLABUS



How AusVELS is organised: 11 levels

Nominal school level	VELS Level	AusVELS Level
Prep/Foundation	1	<u>Foundation</u>
1	2	<u>1</u>
2	2	<u>2</u>
3	2	<u>3</u>
4	3	<u>4</u>
5	4	<u>5</u>
6	4	<u>6</u>
7	5	<u>7</u>
8	5	<u>8</u>
9	6	<u>9</u>
10	O	<u>10</u>

http://ausvels.vcaa.vic.edu.au/

Conversion of VELS to AusVELS

VELS levels and progression points	AusVELS levels and progression points	AusVELS levels when nominally 2 years of learning
0.5 1	0.5 Foundation	Working towards Foundation
1.25 1.5 1.75 2	F.5 1	Working towards Level 2
1.73	1.5 2	
2.25 2.5	2.5 3	Working towards Lovel 4
2.75 3	3.5 4	Working towards Level 4
3.25 3.5	4.5 5	We also a torreade level C
3.75 4	5.5 6	Working towards Level 6
4.25 4.5	6.5 7	We white a torrespond a local O
4.75 5	7.5 8	Working towards Level 8
5.25 5.5	8.5 9	Manhing towards Lovel 10
5.75 6	9.5 10	Working towards Level 10

AusVELS curriculum components

Overview

- Rationale/structure and aims
- Additional material eg Students with disability, EAL,
 Glossaries

Curriculum

- Content descriptions
 - Elaborations
- Achievement standards
 - Work samples

^{*}mandated curriculum

Understanding English

English

Overview

Curriculum

Download the Curriculum ▼

Overview

- · Rationale and Aims
- · Content structure
- English across Foundation to
- · Achievement standards
- · Diversity of learners
- · Cross-curriculum priorities
- · Scope and Sequence

English across Foundation to Level 10

Print this page

Although the curriculum is described by level, this document provides advice by level and age, on the nature of learners and the relevant curriculum:

- · Foundation to Level 2: typically students from 5 to 8 years of age
- · Levels 3 to 6: typically students from 8 to 12 years of age
- Levels 7 to 10: typically students from 12 to 16 years of age.

Foundation to Level 2

Students bring with them to school a wide range of experiences with language and texts. These experiences are included in the curriculum as valid ways of communicating and as rich resources for further learning about language, literature and literacy. From Foundation to Level 2, students engage with purposeful listening, reading, viewing, speaking and writing activities for different purposes and contexts.

The curriculum in these levels aims to extend the abilities of students prior to school learning and to provide the foundation needed for continued learning. The study of English from Foundation to Level 2 develops students' skills and disposition to expand their knowledge of language as well as strategies to assist that growth. It aims to do this through pleasurable and varied experiences of literature and through the beginnings of a repertoire of activities involving listening, viewing, reading, speaking and writing.

Levels 3 to 6

Students practise, consolidate and extend what they have learned. They develop an increasingly sophisticated understanding of grammar and language, and are increasingly able to articulate this knowledge. Gradually, more complex punctuation, clause and sentence structures, and textual purposes and patterns are introduced. This deeper understanding includes more explicit metalanguage, as students learn to classify words, sentence structures and texts. To consolidate both 'learning to read and write' and 'reading and writing to learn', students explore the language of different types of texts, including visual texts, advertising, digital/online and media texts.

Levels 7 to 10

Students continue to practise, consolidate and extend what they have learned from previous levels. They also extend their understanding of how language works, and learn to transfer this knowledge to different contexts. To achieve this, students develop an understanding of the requirements of different types of texts; they are introduced to increasingly sophisticated analyses of various kinds of literary, popular culture, and everyday texts, and they are given opportunities to engage with the technical aspects of texts, including those of their own choosing – and to explain why they made that choice.

Understanding the structure - English

Three strands

- Language: knowing about the English language
- Literature: understanding, appreciating, responding to, analysing and creating literature
- Literacy: expanding the repertoire of English usage.

Language	Literature	Literacy
Language variation and change	Literature and context	Texts in context
Language for interaction	Responding to literature	Interacting with others
Text structure and organisation	Examining literature	Interpreting, analysing and evaluating
Expressing and developing ideas	Creating literature	Creating texts
Sound and letter knowledge		

Understanding the structure - English

Reporting modes:

- Reading and viewing
- Writing
- Speaking and listening



Resources and support: Two key websites

AusVELS - for the curriculum



Welcome to AusVELS

AusVELS is the Foundation to Year 10 curriculum that provides a single, coherent and comprehensive set of prescribed content and common achievement standards, which schools use to plan student learning programs, assess student progress and report to parents.

AusVELS incorporates the Australian Curriculum F-10 for English, Mathematics, History and Science within the curriculum framework first developed for the Victorian Essential Learning Standards (VELS). AusVELS uses an eleven level structure to reflect the design of the new Australian Curriculum whilst retaining Victorian priorities and approaches to teaching and learning.

Curriculum updates

Details of changes made to the AusVELS curriculum can be viewed on the curriculum version page.



Resources and Support

The VCAA F-10 website

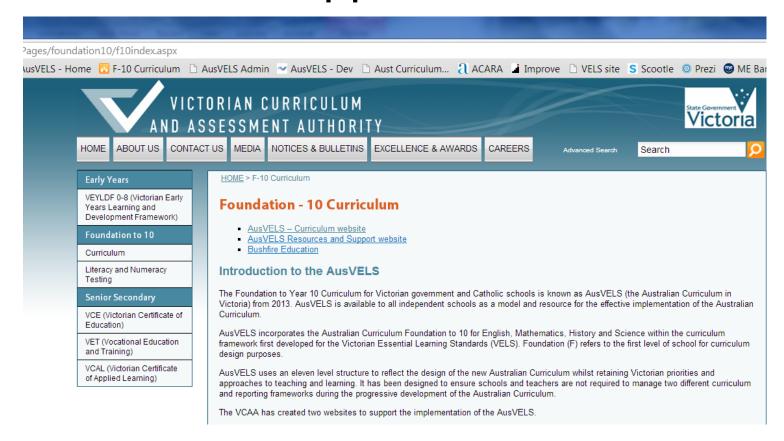
provides curriculum planning, teaching and assessment resources to support the transition to the Australian Curriculum in Victoria (AusVELS).

http://ausvels.vcaa.vic.edu.au/



Resources and support: Two key websites

VCAA - for support and resources



http://www.vcaa.vic.edu.au/Pages/foundation10/curriculum/index.aspx

Resources and support

On the VCAA Support webpages

- ✓ Mapping new AC subjects against VELS
- ✓ Progression point examples
- ✓ Scope and Sequence
- ✓ Audit / Planning templates
- ✓ Additional links
- ✓ PD

http://www.vcaa.vic.edu.au/Pages/foundation10/curriculum/index.aspx



Progression point examples



Standards and progression point examples

Mathematics - Progressing towards Level 8

Mathematics – Level 7 Achievement Standard	Progression Point 7.5	Mathematics – Level 8 Achievement Standard
	At 7.5, a student progressing towards the standard at Level 8 may, for example:	
Number and Algebra Students solve problems involving the order, addition and subtraction of integers. They make the connections between whole numbers and index notation and the relationship between perfect squares and square roots. They solve problems involving all four operations with fractions, decimals, percentages and their equivalences, and express fractions in their simplest form. Students compare the cost of items to make financial decisions, with and without the use of digital technology. They make simple estimates to judge the reasonableness of results. Students use variables to represent arbitrary numbers, connect the laws and properties of number to algebra and substitute numbers into algebraic expressions. They assign ordered pairs to given points on the Cartesian plane and interpret and analyse graphs of relations from real data. Students develop simple linear models for situations, make predictions based on these models, solve related equations and check their solutions.	Number and Algebra solve problems involving multiplication of integers by single-digit whole numbers and use the sequence of square numbers to form estimates for square roots use equivalent decimals and percentages to order rational expressions classify rational numbers as having either terminating or infinite recurring decimals. calculate sale price when a percentage discount is applied. represent linear relationships as a table of ordered pairs, classify relationships as linear or non-linear determine gradient and axis intercepts of linear graphs. interpret gradient both as a ratio and as a constant rate of change.	Number and Algebra Students use efficient mental and written strategies to make estimates and carry out the four operations with integers, and apply the index laws to whole numbers. They identify and describe rational and irrational numbers in context. Students estimate answers and solve everyday problems involving profit and loss rates, ratios and percentages, with and without the use of digital technology. They simplify a variety of algebraic expressions and connect expansion and factorisation of linear expressions. Students solve linear equations and graph linear relationships on the Cartesian plane.
Measurement and Geometry Students use formulas for the area and perimeter of rectangles. They classify triangles and quadrilaterals and represent transformations of these shapes on the Cartesian plane, with and without the use of digital technology. Students name the types of angles formed by a transversal crossing parallel line and solve simple numerical problems involving these lines and angles. They describe different views of three-dimensional objects, and use models, sketches and digital technology to represent these views. Students calculate volumes of rectangular prisms.	Measurement and Geometry choose appropriate units of measurement for area and volume explore the use of parallelograms, rhombuses and kites in a variety of contexts investigate time zones and the approximate relation between distances between countries, and differences in time demonstrate facility in using digital technology to experiment with, create and re-create patterns involving combinations of flips, slides, turns and enlargements or reductions explain congruence of plane shapes in terms of transformations.	Measurement and Geometry Students convert between units of measurement for area and for volume. They find the perimeter and area of parallelograms, rhombuses and kites. Students name the features of circles, calculate circumference and area, and solve problems relating to the volume of prisms. They make sense of time duration in real applications, including the use of 24-hour time. Students identify conditions for the congruence of triangles and deduce the properties of quadrilaterals. They use tools, including digital technology, to construct congruent shapes.
Statistics and Probability Students identify issues involving the collection of discrete and continuous data from primary and secondary sources. They construct stem-and-leaf plots and dot-plots. Students identify or calculate mean, mode, median and range for data sets, using digital technology for larger data sets. They describe the relationship between the median and mean in data displays. Students determine the sample space for simple experiments with equally likely outcomes, and assign	Statistics and Probability calculate the mean for grouped data and for data summarised in a display interpret mean and median as central measures in a given context determine when a piece of data should be considered an outlier model situations with Venn diagrams and two-way tables,	Statistics and Probability Students explain issues related to the collection of sample data and discuss the effect of outliers on means and medians of the data. They use various approaches, including the use of digital technology, to generate simple random samples from a population. Students model situations with Venn diagrams and two-way tables and explain the use of 'not', 'and' and 'or'. Students choose appropriate language to describe events and experiments. They determine complementary events and

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Progression point examples

Progression point examples are designed to:

- illustrate how a student might show evidence of progression
- be used in conjunction with other tools such as annotated student work samples
- be modified by schools so that the examples reflect the curriculum structure and timing of when knowledge and skills are taught and assessed

Progression point examples are **NOT** designed to:

- replace standards
- be used as a definitive or mandated set of progression measures for student assessment
- be the only resource used by teachers to assign progression points on student reports



Scope and sequence

The Australian Curriculum

Mathematics Scope and Sequence: Level 6 to Level 10



ACATA ASSESSMENT AND REPORTING AUTHORITY

	Level 6	Level 7	Level 8	Level 9	Level 10	Level 10A
Number and place value	Identify and describe properties of prime, composite, square and triangular numbers. Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers. Investigate everyday situations that use positive and negative whole numbers and zero. Locate and represent these numbers on a number line.	Investigate index notation and represent whole numbers as products of powers of prime numbers Investigate and use square roots of perfect square numbers Apply the associative, commutative and distributive laws to aid mental and written computation Compare, order, add and subtract integers	Use index notation with numbers to establish the index laws with positive integral indices and the zero index. Carry out the four operations with rational numbers and integers, using efficient mental and written strategies and appropriate digital technologies.	This sequence ends at this level		
Fractions and decimals decimals	Compare fractions with related denominators and locate and represent them on a number line Solve problems involving addition and subtraction of fractions with the same or related denominators. Find a simple fraction of a quantity where the result is a whole number, with and without digital technologies. Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers. Multiply decimals by whole numbers and perform divisions that result in terminating decimals, with and without digital technologies. Multiply and divide decimals by powers of 10 Make connections between equivalent fractions, decimals and percentages.	This sequence ends at Level 8				
Real numbers	This sequence starts at Level 7	Compare fractions using equivalence. Locate and represent positive and negative fractions and mixed numbers on a number line. Solve problems involving addition and subtraction of fractions, including those with unrelated denominators. Multiply and divide fractions and decimals using efficient written strategies and digital technologies. Express one quantity as a fraction of another, with and without the use of digital technologies. Round decimals to a specified number of decimal places. Connect fractions, decimals and percentages and carry out simple conversions. Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies. Recognise and solve problems involving simple ratios.	Investigate terminating and recurring decimals Investigate the concept of irrational numbers, including σ Solve problems involving the use of percentages, including percentage increases and decreases, with and without digital technologies Solve a range of problems involving rates and ratios, with and without digital technologies	Solve problems involving direct proportion. Explore the relationship between graphs and equations corresponding to simple rate problems Apply index laws to numerical expressions with integer indices Express numbers in scientific notation		Define rational and irrational numbers and perform operations with surds and fractional indices. Use the definition of a logarithm to establish and apply the laws of logarithms.

Audit against content - activity

TEMPLATE 2: SUBJECT YEAR LEVEL OVERVIEW

UBJECT:	Mathematics	
EAR:	LP	

Measurement and Geometry

STRAND:

Use this template to map a unit against the content descriptions and a chievement domain. This process needs to be repeated if the unit covers more than one strand extent of coverage of a unit and clearly links teaching, learning and assessment.

Take a unit of work and map its relationship to the content descriptions for a

Indicate within each marked cell, connections to the achievement standards, number refers to a numbered sentence in the achievement standards, for ex

Students make models of three-dimensional objects. (14)

Students conduct chance experiments and list possible outcomes They carry out simple data investigations for categorical variables

0110 III 21	reasurement una Geometri,	<u>'</u>							,
UNITS	Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units	Compare masses of objects using balance scales	Tell time to the quarter- hour, using the language of 'past' and 'to'	Name and order months and seasons	Use a calendar to identify the date and determine the number of days in each month	Describe and draw two dimensional shapes, with and without digital technologies	Describe the features of three dimensional objects	Interpret simple maps of familiar locations and identify the relative positions of key features	Investigate the e step slides and fl without digital te
TERM 1									
									7
TERM 2								A	
TERM 3								A TOTAL TOTA	
									1
TERM 4					A			A	
4		-	•			•	•		- ,

ACHIEVEMENT STANDARDS								
LEVEL 1			LEVEL 2			LEVEL 3		
Students describe number sequences resulting from skip counting by 2s, 5s and 10s. (1)			d decreasing number sequences inv				gnise the connection between ac	ddition and subtrac
They identify representations of one half. (2)	The	y represent multiplication and	d division by grouping into sets. (2))	1.0	strategies for	multiplication. (1)	, , , , , , , , , , , , , , , , , , ,
They recognise Australian coins according to their value. Students explain time durations. (3)	The	y associate collections of Aust	tralian coins with their value. (3)		1 -	They model ar	nd represent unit fractions. (2)	, , , , , , , , , , , , , , , , , , ,
They describe two-dimensional shapes and three-dimensional objects. Students describe data displ			ment in a number sequence. (4)			They represent money values in various ways. (3)		
Students count to and from 100 and locate numbers on a number line. (5)	Stud	Jents recognise the features σ	of three-dimensional objects. (5)	ree-dimensional objects. (5) Stu		Students identify symmetry in the environment. (4)		ıt. (4)
They carry out simple additions and subtractions using counting strategies. (6)	The	They interpret simple maps of familiar locations. (6)			1 -	They match pr	ositions on maps with given infor	rmation. (5)
They partition numbers using place value. (7)		They explain the effects of onestep transformations. (7)					gnise angles in real situations. (6)	
They continue simple patterns involving numbers and objects. (8)	Stud	dents make sense of collected	information. (8)		1 -	They interpret	t and compare data displays. (7)	,
Students order objects based on lengths and capacities using informal units. (9)		dents count to and from 1000.			1.7	Students cour	nt to and from 10 000. (8)	,
They tell time to the half hour. (10)	The	They perform simple addition and subtraction calculations using a range of strategies. (10)			1 -	They classify numbers as either odd or even. (9)		
They use the language of direction to move from place to place. (11)	The	y divide collections and shape	es into halves, quarters and eighths	s. (11)	1 -	They recall ad-	dition and multiplication facts fo	r single digit numb
Students classify outcomes of simple familiar events. (12)	Stuc	dents order shapes and objects	s using informal units. (12)			from financial	transactions. (10)	į.
They collect data by asking questions and draw simple data displays. (13)	The	They tell time to the quarter hour and use a calendar to identify the date and the months included in They continue number pattern:			number patterns involving addit	tion and subtractio		
	seas	isons. (13)			1.7	Students use r	metric units for length, mass and	capacity. (12)
	The	ey draw two-dimensional shape	es. (14)		-	They tell time	to the nearest minute. (13)	

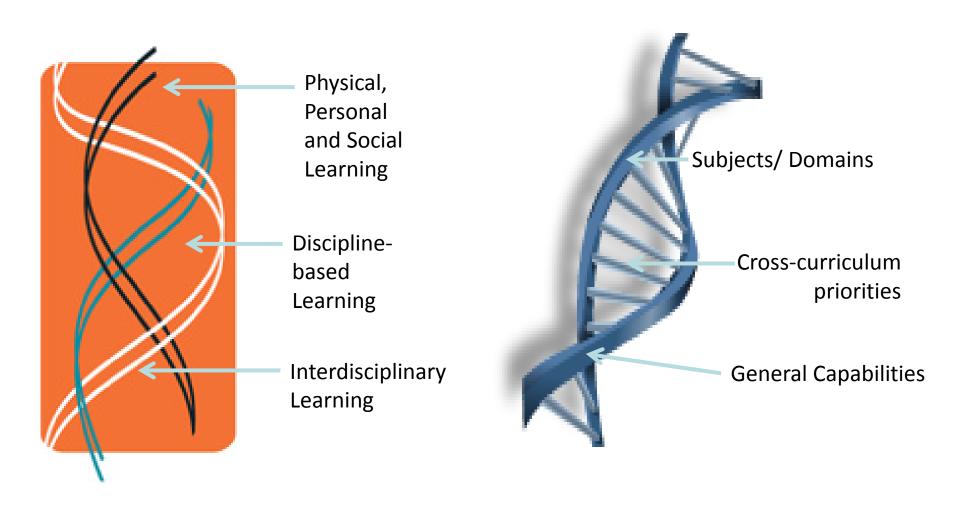
Students collect data from relevant questions to create lists, tables and picture graphs. (16)

They describe outcomes for everyday events. (15)

COMMON ASSESSMENT TASKS						
UNITS	TASKS	ACHIEVEMENT STANDARDS				
EACH TERM						
TERM 1						
TERM 2						
TERM 3						
TERM 4						



AusVELS post 2014



AusVELS post 2014

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- The Arts
- English
- Humanities Economics and Business
- Humanities –Geography
- Humanities History
- Humanities Civics and Citizenship
- Languages
- Health and Physical Education
- Mathematics
- Science
- Technology Design and Technologies
- Technology Digital technologies

General capabilities

- Critical and creative thinking
- Intercultural understanding
- Ethical understanding
- Personal and social capability

- No mandated teaching time allocations in Victoria except PE for Government schools
- ☐ Australian Curriculum subjects written on basis of an assumed time allocation **but** not mandated

Personalised learning within guaranteed curriculum provision

- 1. Access the learning defined in these areas as the entitlement of every young Australian
- 2. Progress towards the achievement standards that represent their next level of individual achievement

The organisation of F-10 school teaching and learning programs in Victorian schools remains the responsibility of individual schools

Curriculum is the what

Pedagogy is the how



Does curriculum matter?

Marzano's five "areas of action"

Hattie's assessment "effect size"

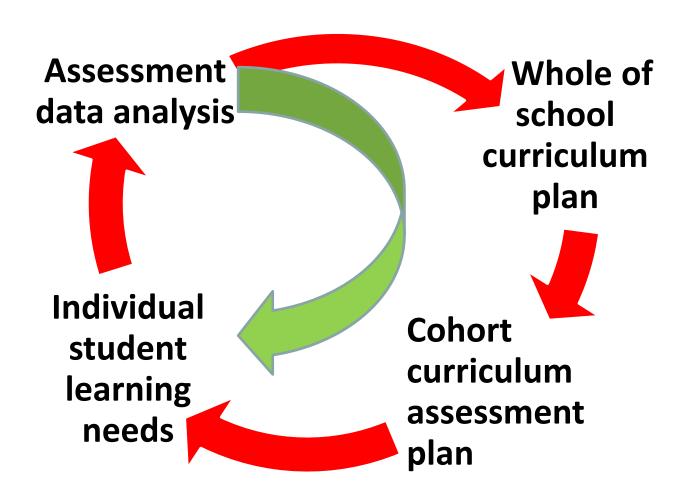
McTighe's model of "backwards design"

Considerations for curriculum

Three types of curriculum

- Intended formal
- Enacted what is taught
- Experienced what is learnt

Curriculum and Assessment Planning cycle



Curriculum Planning

Who are we planning for?

How are we planning?

What does this look like?



What are your challenges?

- How to managing the complexity of curriculum planning: 8 learning areas + general capabilities
- Lessons from VELS implementation: not enough support for whole school rather than subjectbased planning
- Need to build on contemporary research about effective schools and effective learning
- Support from sector and the VCAA

The Rewards

Effective curriculum planning and documentation ensures:

- a shared vision, understandings and a common language
- continuity of learning between domains and across year levels to enable pathways
- students learning needs are better met
- cohesiveness in teaching, learning and assessment practices
- parents too can develop a good understanding of their school's curriculum

Where to get curriculum advice?

- 1. VCAA websites
- 2. Subscribe to Australian Curriculum Update/online PD
- 3. Contact us AusVELS Unit