



Creative School Leadership

Bill Lucas

The Creative Schools Program was initiated and is managed by FORM, provided by the Department of Education and is financially supported by the Western Australian Government.

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About the author

Bill Lucas is Professor of Learning and Director of the Centre for Real-World Learning (CRL) at the University of Winchester in the UK. Bill is an acknowledged expert in teaching and assessing creativity in schools. The five dimensional model of creativity he developed with colleagues at CRL is used in more than 30 countries across the world and in many states across Australia. Since 2014 Bill has advised the Victorian Curriculum and Assessment Authority on the development of their critical and creative thinking capability, on its associated pedagogies and on online assessment tasks for critical and creative thinking. He has been working with FORM for a number of years.

In 2015 Bill was appointed to the scientific advisory Board of the OECD's research into fostering students' creativity and critical thinking, the report of which is now published. In 2017 Bill was appointed by the OECD as co-chair of the strategic advisory group for the 2021 PISA Creative Thinking Test. In 2018 he was invited to join the Durham Commission on Creativity in Education as an academic adviser and was subsequently co-author of its first report in 2019. In 2020 Bill was commissioned to undertake a review of national and state-wide frameworks for embedding creativity in schools for the European Joint Research Council.

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1. Learning from the experiences of Creative Schools



1.1 A shared model of creativity

Since 2018 the Creative Schools programme, co-designed and co-implemented by FORM and Creativity, Culture and Education (CCE) has used as its model of creativity the five creative learning habits developed by the Centre for Real-World Learning (CRL) at the University of Winchester, *Figure 1*.

In 2020, Bill Lucas was invited to work with school leaders from the Creative Schools programme, see Appendix 1, to draw out some key messages for leaders looking to embed creativity in their schools.

Drawing on recent and ongoing research (Durham, Commission, 2019; Vincent-Lancrin et al., 2019; Lucas, Spencer and Stoll, in press) the report combines learning from attempts to embed creativity in schools across the world with insights from the experiences of schools in Western Australia.

Across the world the importance of creativity is increasingly being acknowledged in education systems (OECD, 2018; Lucas and Venckutė 2020). But although leadership in schools is well-researched in general terms, leadership for creativity is not.

Beyond school a growing number of global employer organisations such as the World Economic Forum (2015) has begun to argue that, beyond foundational literacies such as literacy, numeracy and science, creativity is one of a number of desirable competencies, which, along with certain character qualities describe the range of skills employees will need to thrive today, *Figure 2*.

These shifts are clearly acknowledged in Australia (Council of Australian Governments Education Council, 2019) :

As a foundation for further learning and adult life, the curriculum includes practical skills development in areas such as [information and communications technology], critical and creative thinking, intercultural understanding and problem solving. These skills support imagination, discovery, innovation, empathy and developing creative solutions to complex problems. They are central to contributing to Australia's knowledge-based economy. p.15

Such sentiments are strongly voiced, too, in Western Australia by the Department of Education (2020a):

Of course, preparing students for a successful future involves more than literacy and numeracy competence. The identified 'new work capabilities' of being able to work well in teams, think critically and creatively, innovate and be entrepreneurial, are becoming increasingly important in modern workplaces. p.4

Figure 1.

CRL's five creative learning habits, (Lucas, Claxton and Spencer 2013)

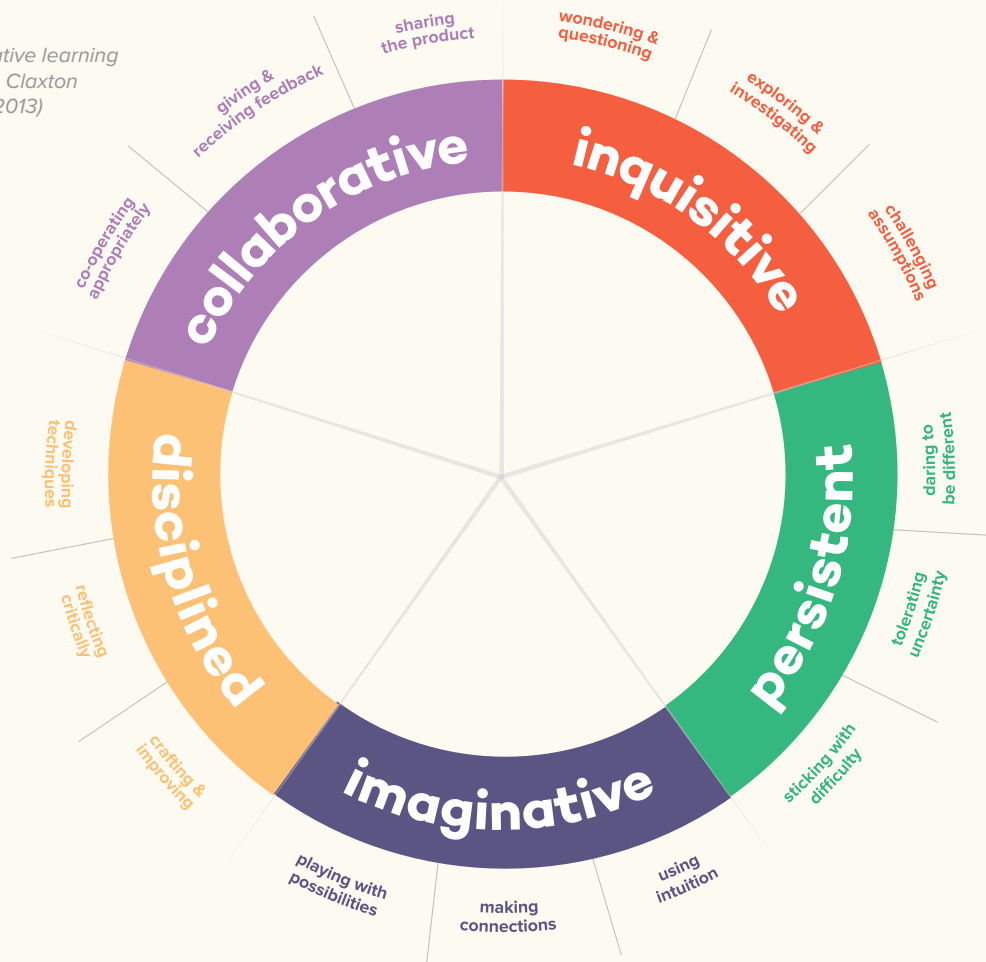
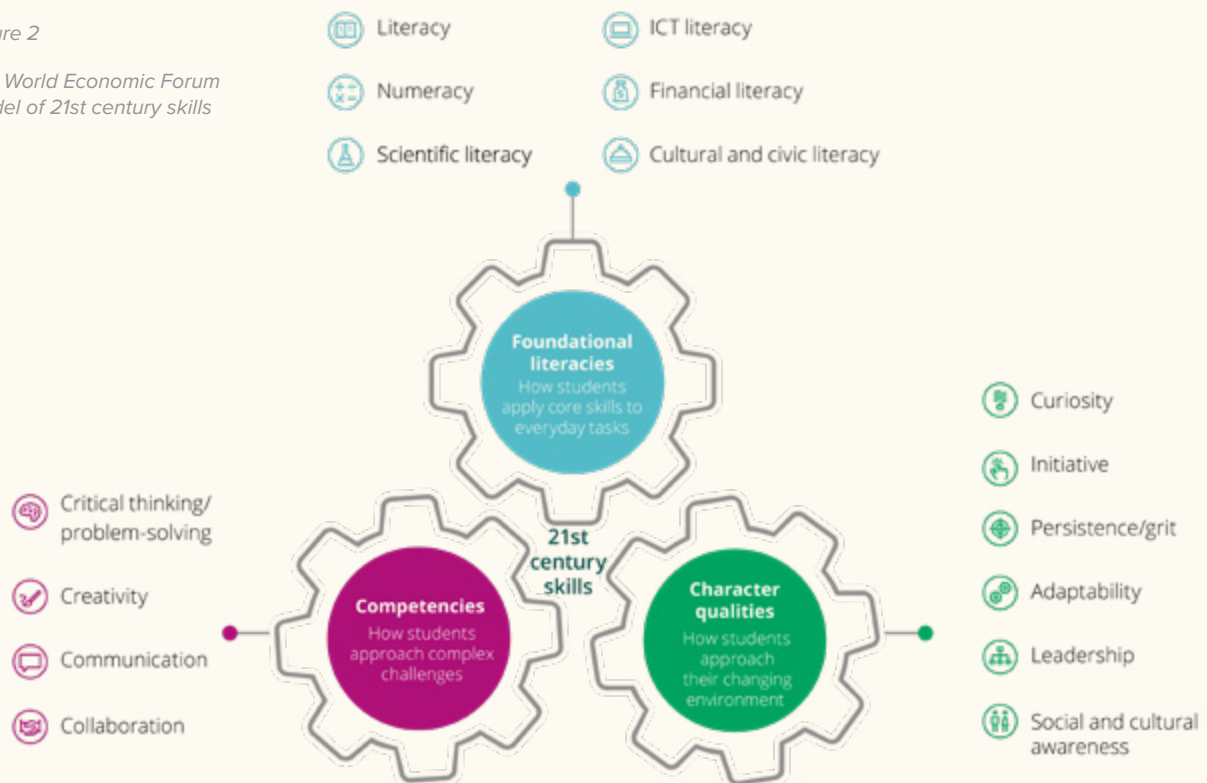


Figure 2

The World Economic Forum model of 21st century skills



1.2 Creativity in schools

While there are a growing number of researchers promoting creativity in education, there are few definitions which are universally adopted in schools today.

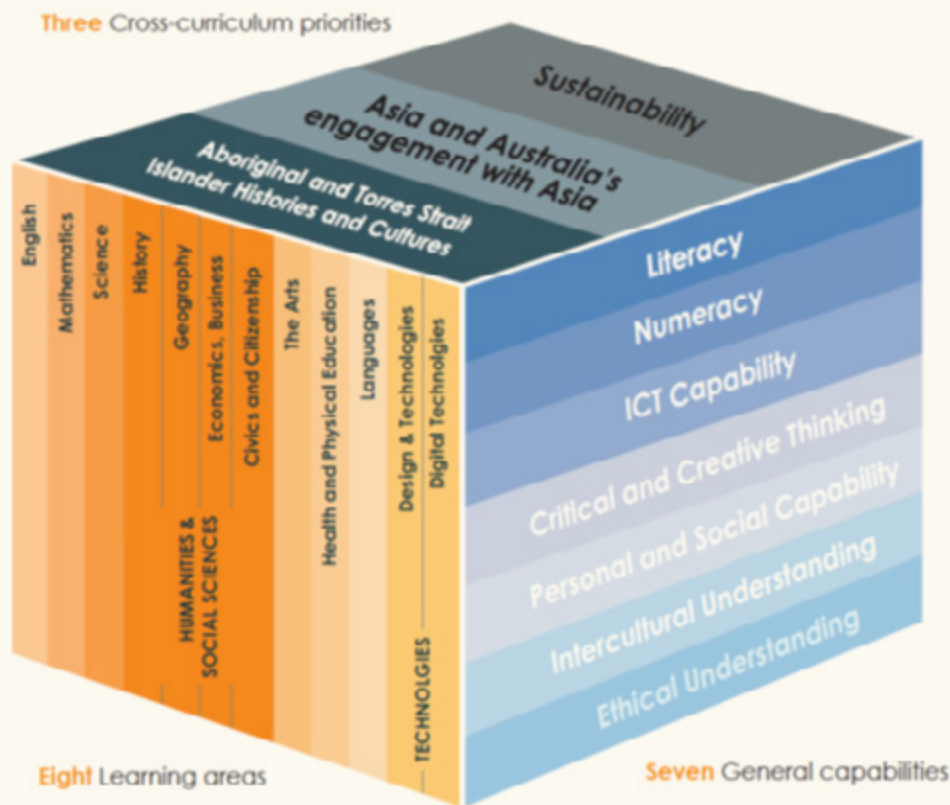
An important milestone occurred some twenty years ago in the UK with the publication of a report by the National Advisory Committee on Creative and Cultural Education (1999). The definition of creativity adopted was a significant moment in English education:

...imaginative activity fashioned so as to produce outcomes that are both original and of value (National Advisory Committee on Creative and Cultural Education 1999; p. 29)

The model adopted by Australia (Australian Government, 2018) frames creativity as a general capability called 'critical and creative thinking' intersecting with the conventional subjects or learning areas of a school curriculum, see *Figure 3*.

Figure 3

*Creativity in the Australian Curriculum
(Australian Government, 2018)*



Across the world Australia is just one of a number of countries and jurisdictions focusing on creativity; a number of States in Canada, Finland and Singapore are three others with well-developed approaches. Along with communication, critical thinking and problem-solving, creativity is the most frequently identified broad set of skills within national curricula. From 102 countries reviewed (Care et al. 2016) the kinds of skills associated with creativity are mentioned by 76 countries (36 in

vision or mission statements, 51 countries in curriculum documents). 11 countries, of which Australia is one, map progression of the skills associated with creativity across age groups.

CRL's five creative learning habits model has been adopted in a number of schools across Australia including, most extensively, by Rooty Hill High School in Sydney, *Figure 4*:



ROOTY HILL HIGH SCHOOL

A Community School Committed to Excellence in Learning, Leadership and Achievement

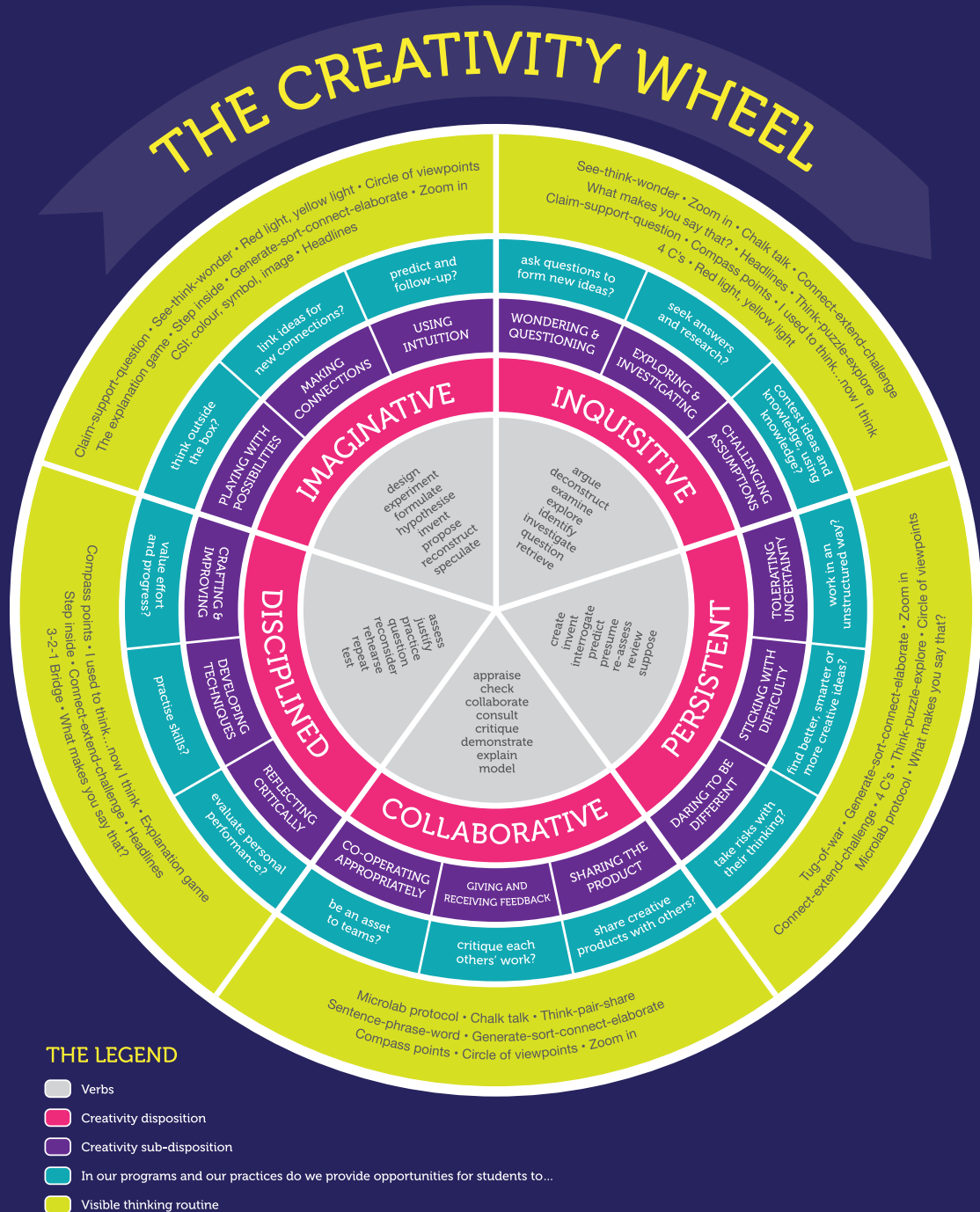


Figure 4

Rooty Hill High School and the CRL creativity model (Lucas, Claxton and Spencer, 2013)

That the creativity of fifteen year olds is to be tested by PISA (OECD, 2019) and that a state like Victoria in Australia (Victorian Curriculum and Assessment Authority, 2020) is already embarked on assessing its secondary school students' critical and creative thinking is an indication of the growing value attached to creativity in schools.

In Western Australia the importance of capabilities such as critical and creative thinking is a key aspiration; students need to be 'equipped with contemporary and emerging work capabilities' (Department of Education, Government of Western Australia, 2020b). Interestingly the Department of Education also suggests that schools 'develop the personal and social attributes that form the basis for future wellbeing', (ibid.).

Interestingly the connections between personal fulfilment, wellbeing and creativity have been known for a long while. Maslow (1943) argued that creativity is a facet of self-actualisation which itself sits at the top of his well-known hierarchy of needs. Human beings, he argues, have certain basic needs such as food, water, shelter and sleep. But to be truly fulfilled they need to realise their true potential, their full creative selves. Csikszentmihalyi (1996) coined the term 'flow' to describe a state of total absorption in an engaging task. He found flow to be an ingredient of many creative activities and went on to show that flow is highly correlated with subjective well-being or happiness.

1.3 *Specificity and intentionality*

Two challenges for schools seeking to embed creativity have historically been, firstly, that it is too abstract a concept, (a 'general' capability) to be specific enough to develop and, secondly, that it is not clear how to integrate creativity into the formal and informal curriculum intentionally.

With regard to the first of these challenges the model of creativity developed by the Centre for Real-World Learning at the University of Winchester (Lucas et al. 2013; Lucas 2016), Figure 1, provides clarity. Indeed it is used in secondary and primary schools in more than thirty countries globally and by the Creative Schools programme. The model has five core creative habits with each of them being composed of three sub-habits. It was explicitly developed for and trialled in English schools (Spencer et al. 2012; Lucas et al. 2013), as part of the work of Creative Partnerships. Creative students are:

1. **Inquisitive** - good at uncovering and pursuing interesting and worthwhile questions in their creative domain. They wonder, question, explore, investigate and challenging assumptions.
2. **Imaginative** - able to come up with imaginative ideas and solutions. They play with possibilities, make new connections, synthesise ideas and use their intuition as well as their analytical skills.
3. **Persistent** - not giving up easily. They stick with difficulty, dare to be different and are able to tolerate uncertainty, recognising that certainty is not always possible or helpful.
4. **Collaborative** - seeing the value of teamwork. They recognise the social dimension of the creative process, value the sharing of products and processes, are able to give and receive feedback and to cooperating appropriately as needed (though not necessarily all the time.)
5. **Disciplined** - recognising the need for developing knowledge and skill in shaping the creative product and in developing expertise. They know how to develop techniques, to reflect critically and constantly seek to craft and improve what they are creating, taking pride in work, attending to details and correcting errors.

Together with the curriculum continuum developed by the Australian Curriculum, Assessment and Reporting Authority, Appendix 2, schools in the Creative Schools programme have enough specific detail for creativity to be meaningful. As part of the Creative Schools programme CRL's model was mapped against two of the ACARA general capabilities, Figure 5.

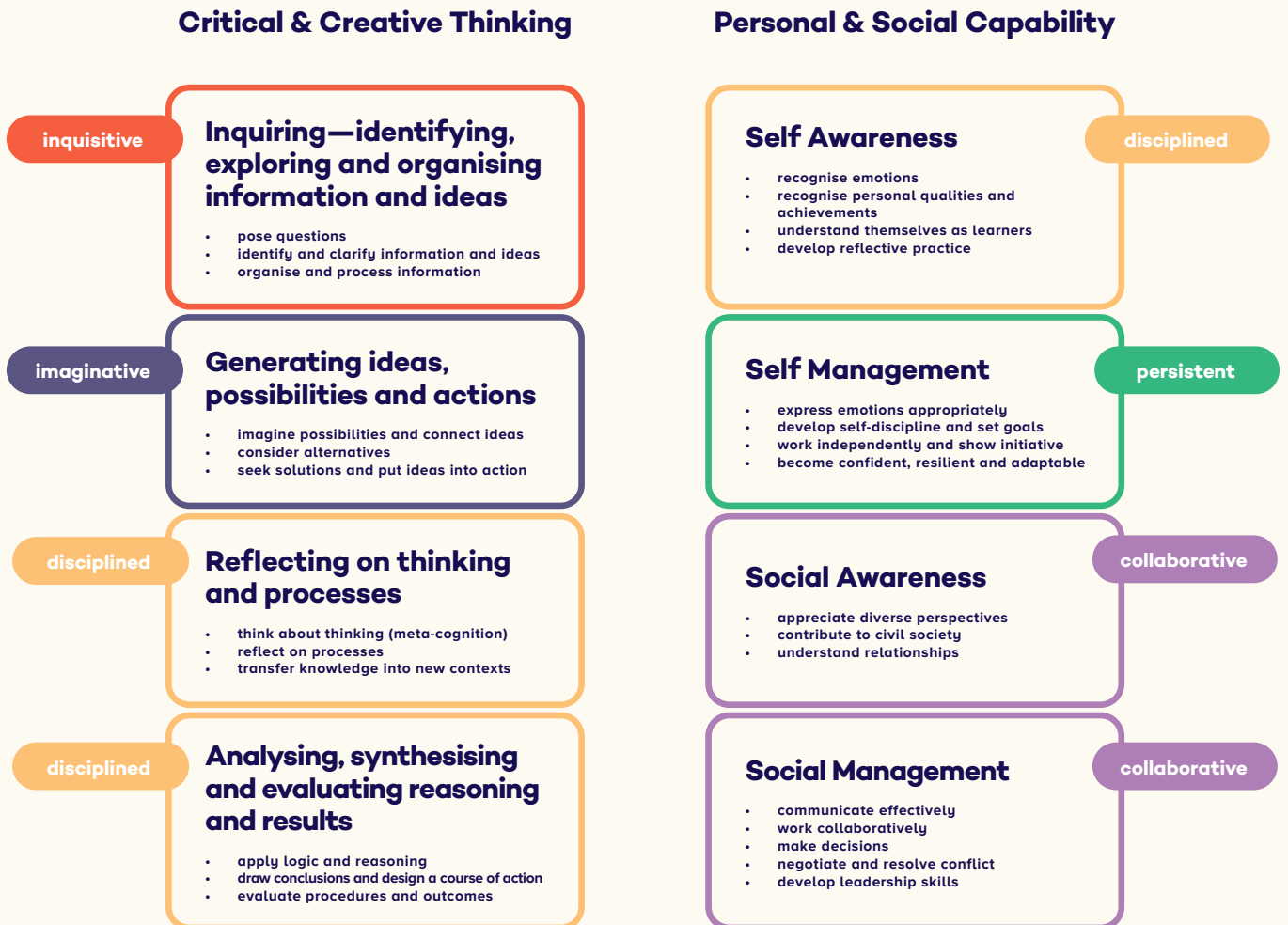


Figure 5

CRL's five creative learning habits
mapped to the general capabilities

For some there remains the challenge that creativity and creative thinking can be used almost interchangeably. In England the Durham Commission on Creativity in Education (2019) sought to clarify the distinction between the concept and the process:

Creativity: The capacity to imagine, conceive, express, or make something that was not there before.

Creative thinking: A process through which knowledge, intuition and skills are applied to imagine, express or make something novel or individual in its contexts. Creative thinking is present in all areas of life. It may appear spontaneous, but it can be underpinned by perseverance, experimentation, critical thinking and collaboration. (p. 3)

The Durham Commission added one more definition which indicates the necessary intentionality of a focus on creativity in schools:

Teaching for creativity: Explicitly using pedagogies and practices that cultivate creativity in young people. (p. 3)

In the Creative Schools programme leaders are explicitly seeking to lead and teach for creativity.

The second challenge, of integrating creativity into the formal and informal curriculum of schools intentionally is the one that schools are now actively exploring. In our own research (Lucas and Spencer, 2017) we have found two approaches to be helpful - Split Screen Teaching and Visible Thinking. Both of these play an important role in making explicit connections between critical and creative thinking and the world of disciplinary knowledge by which most schools are organised and which appear on student timetables, and the need to make these kinds of linkages visible and routinely made.

Split Screen Teaching invites teachers to describe two worlds, the learning area and the capability on which they are also focusing. Teachers find it helpful explicitly to think about their teaching as having two 'screens'. One is the knowledge and skills they are seeking to impart and the other is the capability on which they are focusing. Let's say you were introducing a science activity to understand the properties of acids and bases and then students had to prepare a short demonstration for other students, who would in turn offer feedback to their peers on the effectiveness of their explanations. In the imaginary split screen of the lesson a teacher would take care to explain to the class that both the chemistry (acids and bases) and the critical and creative thinking (giving and receiving feedback) objectives were equally important.

The Visible Thinking approach initiated by Harvard University's Project Zero has identified a number of important thinking routines which help pupils to develop capabilities such as critical and creative thinking:

Visible Thinking is a flexible and systematic research-based conceptual framework, which aims to integrate the development of students' thinking with content learning across subject matters.¹

There are some core routines which work well, of which these are three examples which fit well with both the CRL model of creative learning habits and the ACARA definition of critical and creative thinking:

What Makes You Say That? – which asks students to describe something, such as an object or concept, and then support their interpretation with evidence; an interpretation with justification routine

Think-Puzzle-Explore – which invites students to think then puzzle then explore ideas when they are beginning a topic to help develop their own questions to investigate; a routine that sets the stage for deeper inquiry.

Think-Pair-Share – which encourages students to think about something, such as a problem, question or topic, and then articulate their thoughts; a routine for active reasoning and explanation.

¹

<http://www.pz.harvard.edu/projects/visible-thinking>

1.4 *Some questions to frame reflections in schools*

In working with schools in three extended professional development sessions and using a mix of interviews and email exchanges, these questions have underpinned discussions:

1. What are the future work opportunities predicted in Western Australia? Why do capabilities matter; what arguments will you choose to make a case to all stakeholders?
2. What's already going well and how can you share this within the school?
3. What are the challenges and how can you rise to these?
4. What are the implications for school culture?
5. What are the implications for timetabling and pedagogy?
6. What are the implications for the school's reward systems?
7. What professional development is needed?
8. Which other individuals and organisations can help schools?
9. What kinds of assessment will be most effective in tracking the progress of students and how will you report on progress to parents?
10. How will you evaluate the wider impact of capabilities on your school and its community?

The beginnings of some answers to these questions appear in section 2.



2.

Lessons for creative leaders in schools

While global, national and State contexts are increasingly sympathetic towards the development of creativity in education at the school level, many practical challenges remain. In this section learning from other research into the topic is combined with insights from Creative Schools' participants in the form of a number of actionable lessons for school leaders.

2.1 *School as a creative organisation*

In framing all of these observations the OECD idea of the school as a learning organisation is a helpful way of thinking about schools as creative organisations, (OECD, 2016; Stoll and Kools, 2017). The OECD definition of a learning organisation is:

a place where the beliefs, values and norms of employees are brought to bear in support of sustained learning; where a “learning atmosphere”, “learning culture” or “learning climate” is nurtured; and where “learning to learn” is essential for everyone involved. (OECD, 2016; p. i)

This definition is visualised for schools as an integrated model, *Figure 6*.

The OECD model focuses on:

- developing and sharing a vision centred on the learning of all students
- creating and supporting continuous learning opportunities for all staff
- promoting team learning and collaboration among all staff
- establishing a culture of inquiry, innovation and exploration
- embedding systems for collecting and exchanging knowledge and learning
- learning with and from the external environment and larger learning system, and
- modelling and growing learning leadership.

Substitute the word ‘learning’ in several of these sentences with the word ‘creativity’ or ‘creative’ and the connections between learning and creativity suddenly become much clearer; the model becomes a useful visualisation of the school as creative organisation.

2.2 *Some key leadership lessons*

Drawing on recent research into leadership for creativity in schools (Lucas, Spencer and Stoll, in press) and on insights from leaders in the Creative Schools programme, some key suggestions are listed here.

2.2.1 *Get the ecology right*

Ecology matters. Get it right and creativity blooms; misjudge it and creative intentions can easily be lost in the noise of busy schools. Culture, as has often been said, trumps strategy. The features of a conducive ecology for creativity in schools have been summarised by Craft (2010) and include:

- Focusing on pupils’ motivation to be creative
- Encouraging of purposeful outcomes across the curriculum
- Fostering an in-depth knowledge of disciplines
- Using language both to stimulate and assess imaginativeness
- Offering a clear curriculum structure but also involving pupils in creating new routines where appropriate
- Encouraging pupils to go beyond what is expected
- Helping pupils to find personal relevance in their learning
- Modelling the existence of alternatives in the way information is imparted while also helping them to learn about and understand existing conventions
- Encouraging pupils to explore alternative ways of being and doing, celebrating their where appropriate, their courage to be different
- Giving pupils enough time to incubate their ideas
- Encouraging the adoption of different perspectives
- Modelling the variety of ways in which information is discovered, explored and imparted.

Many others have contributed to thinking about the culture necessary for creativity to flourish (Torrance 1970; Cropley 1997; QCA 2005; Beghetto and Kaufman 2014) but their thinking can broadly be subsumed within Craft's list.

Kampylis and Berki (2014) lay out eight key principles relating to the practices that teachers can engage in. Corresponding leadership implications could be drawn from each of these principles:

8 key principles:

1. Creativity can be promoted through all school subjects
2. Influence creative thinking through well-designed learning spaces
3. Increase the use of open-ended questions
4. Engage learners in meaningful and authentic activities
5. Collaboration enhances creativity
6. Make efficient use of educational technologies
7. Allow for mistakes and sensible risk-taking
8. Learn how to assess and reward creativity.

Creative Schools leaders talked variously about the kinds of ecological elements contained in the two lists above. An overwhelming impression was of a gap between the expectations of many teachers trained to teach knowledge and skills within learning areas and the wishes of school leaders that such teachers shift their practices to create a learning culture more conducive to creativity. This was most marked with regard to attitudes towards making mistakes, still seen as a sign of failure by some rather than an opportunity for learning.

High School leaders saw the dissonance between desirable eco-systems for creativity and the reality of many classrooms more starkly than their Primary School colleagues.

A number of schools commented on recent statements from the Western Australian Department of Education which were now explicitly encouraging the development of capabilities such as critical and creative thinking at the State level.

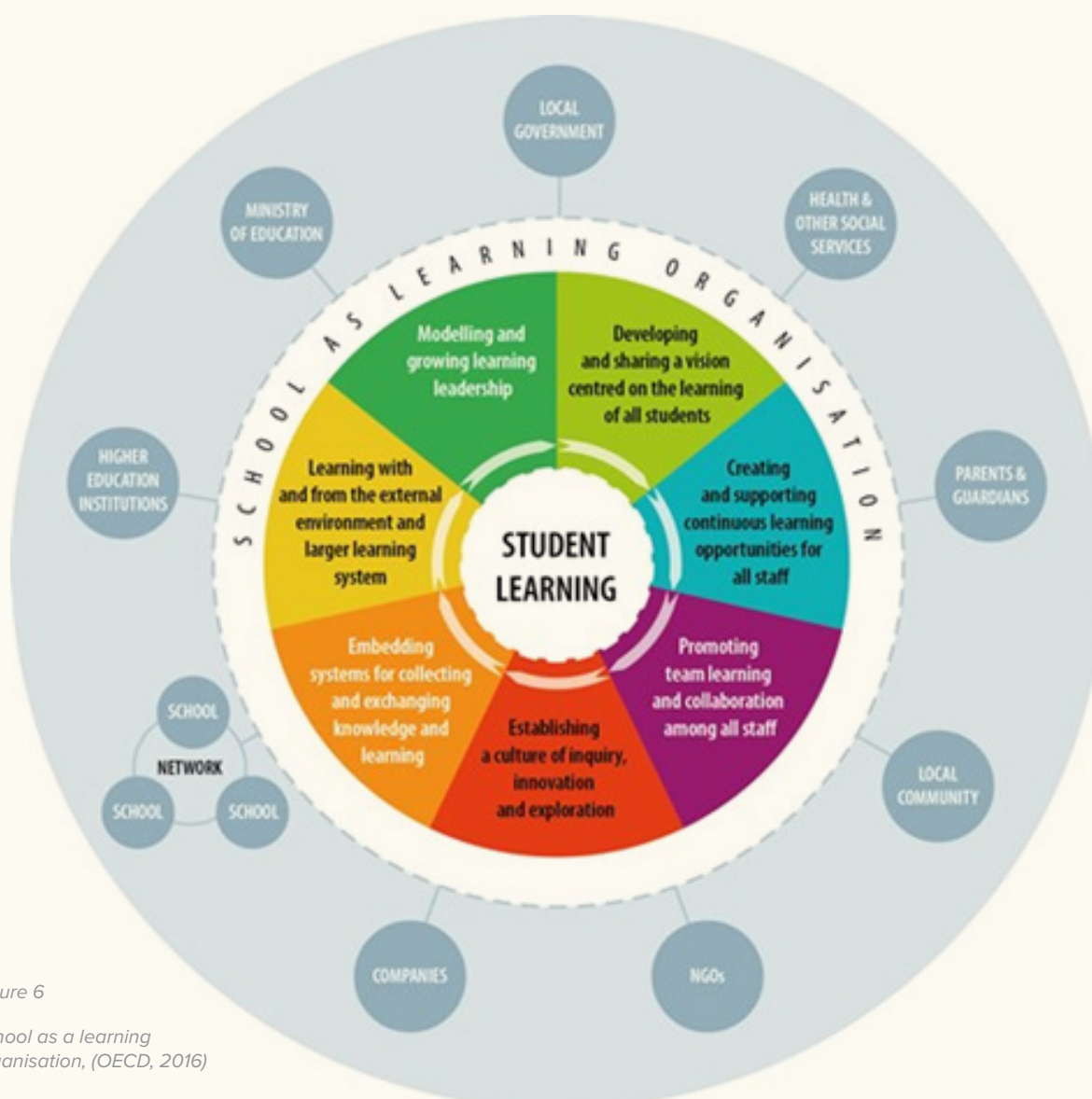


Figure 6

School as a learning organisation, (OECD, 2016)

2.2.2 Develop a common language

How we talk about creativity is really important. For many teachers creativity can seem daunting because of its association with the leaps of imagination associated with the heights of scientific, mathematical or artistic imagination or innovation.

But in schools it is important to remember that we are referring to what Craft (2001) helpfully called ‘little c’ or everyday creativity, the capacity to have ideas when needed. This distinction is important as teachers can all too easily assume that creativity is for geniuses.

Craft’s idea has been further developed by Kaufmann and Beghetto in their 4C model (2009), *Figure 7*.

Mini C describes the many small novel acts or new insights we may make in any day, especially those which occur to children because they are the first time they have experienced them (but not because they are original). Little C or everyday creativity encompasses the daily acts of imagination and innovation, of idea generation of which we are all capable. Pro C implies a degree of mastery, expertise and experience and Big C is what breakthrough thinkers do.

Leaders in Creative Schools all use the language of CRL’s five creative learning habits, appropriately mediated through the ACARA capabilities (see *Figure 4*) and moderated according to the age of children.

The benefits of developing a common language for creativity were acknowledged and specifically seen as an intervention by the majority of Creative Schools leaders. A number mentioned the helpful overlap between creative thinking processes and STEM design processes.

A small number of schools are beginning to develop age-appropriate student versions of the language of the five creative habits and also experimenting with best ways of communicating with parents and employers.

2.3.3 Be explicit about the process of change

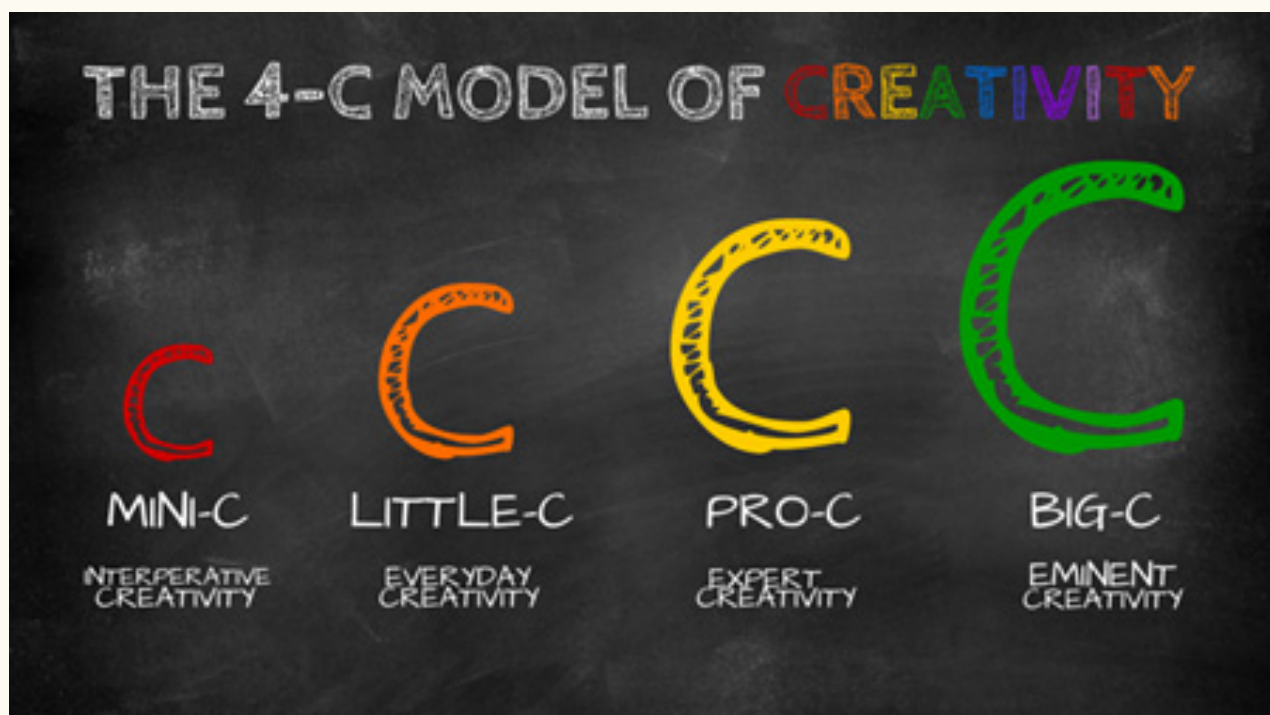
Changing teachers’ habits is hard; leaders need to think through the process of change in some detail. As part of this collaboration school leaders were introduced to the idea of a Theory of Change (Rogers, 2014):

A ‘theory of change’ explains how activities are understood to produce a series of results that contribute to achieving the final intended impacts. It can be developed for any level of intervention – an event, a project, a programme, a policy, a strategy or an organization. p.1

Four templates were generated to help school leaders become more specific about the various stages of the process of change they were planning and to help them think through potential indicators of success. See *Figure 8* for examples of two of these.

Figure 7

*The 4C model of creativity
(Kaufmann and Beghetto, 2009)*



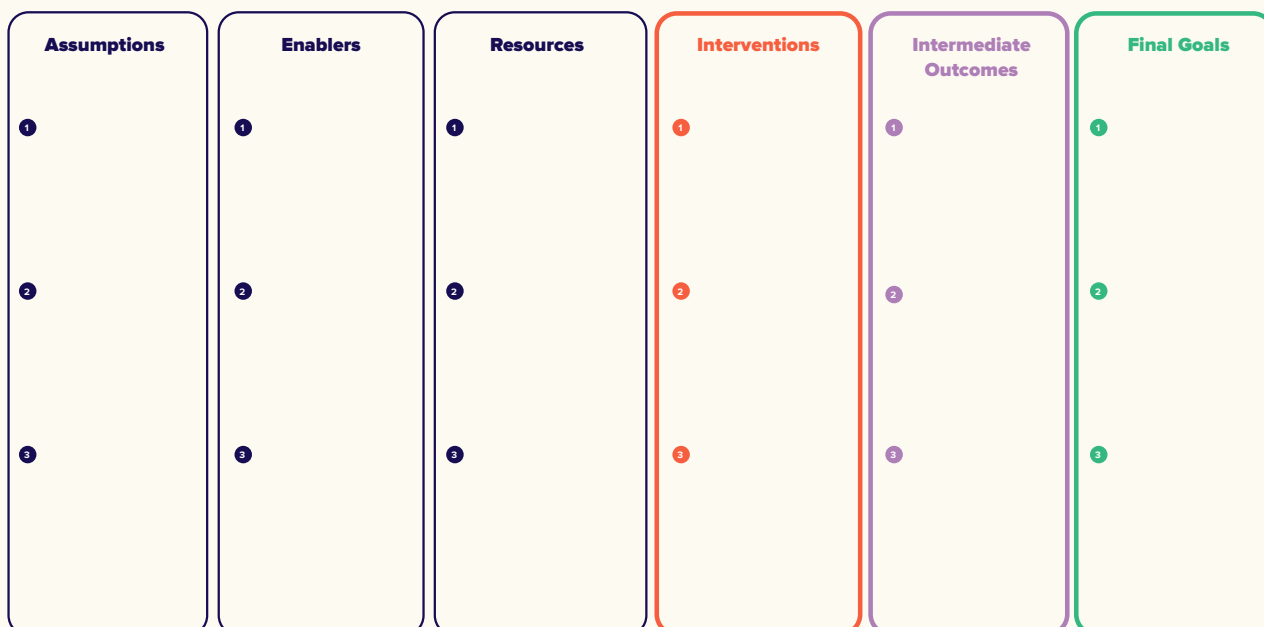


Figure 8

Templates for developing
a Theory of Change

The essence of the Theory of Change process is the invitation it brings with it for users to work back from their goal to picture in detail the steps along the way to achieving it, a kind of reverse engineering. The Planning Triangle pictures the two steps which lead to the final goals by breaking the bigger goals down into a small number of intermediate goals and clearly describing the interventions considered top be likely to lead to these. *Figure 9* shows how Bob Hawke College, a High School, envisioned these steps.

Four interventions are described two, CREW and peer observation focus on the development of staff capability, the third focuses on a shift in pedagogy, interdisciplinary learning and the fourth recognises the value of engaging parents. These lead to a set of short-term goals including the development of a common language and the ability to track student progress in creativity allied to a sense of the importance of courage and curiosity.

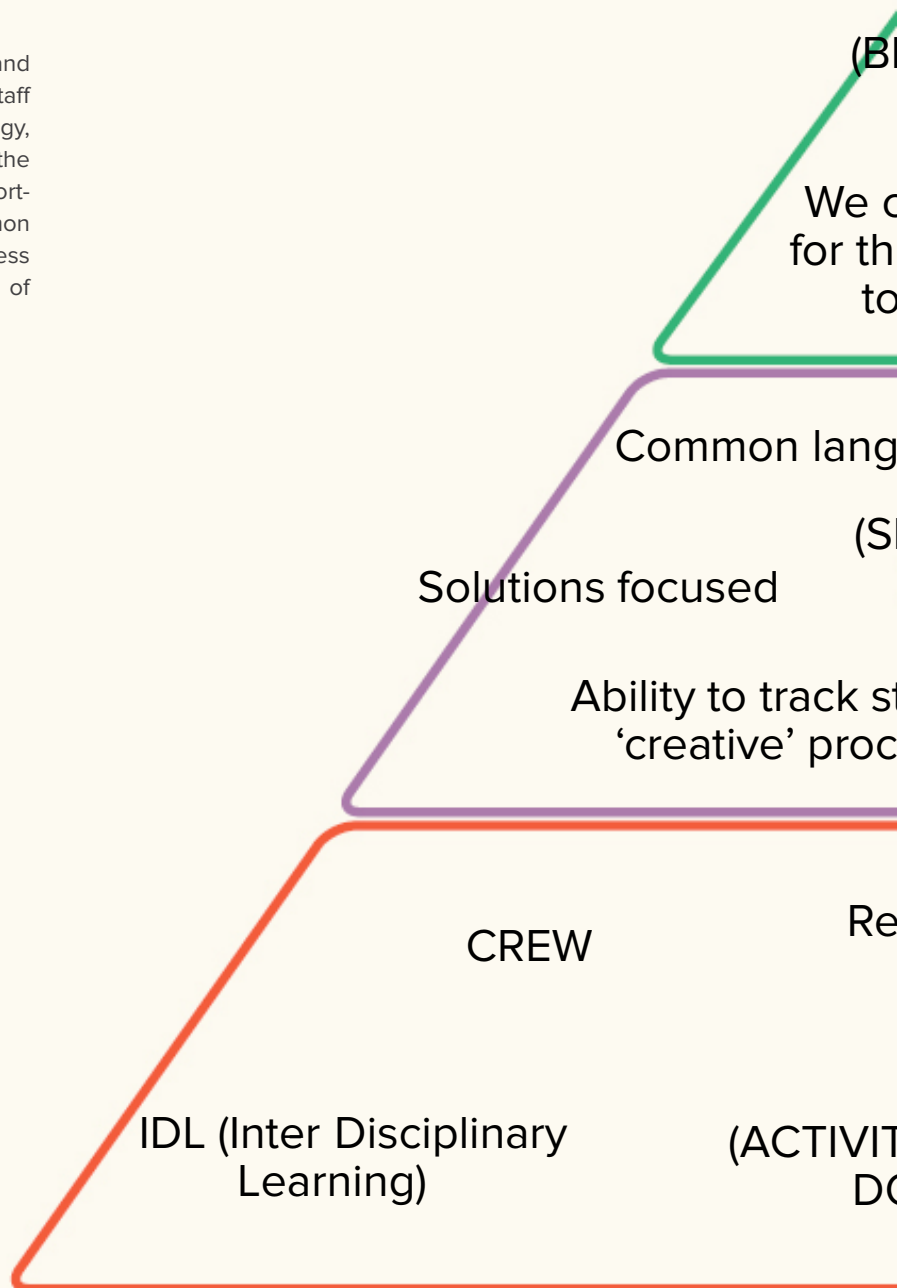
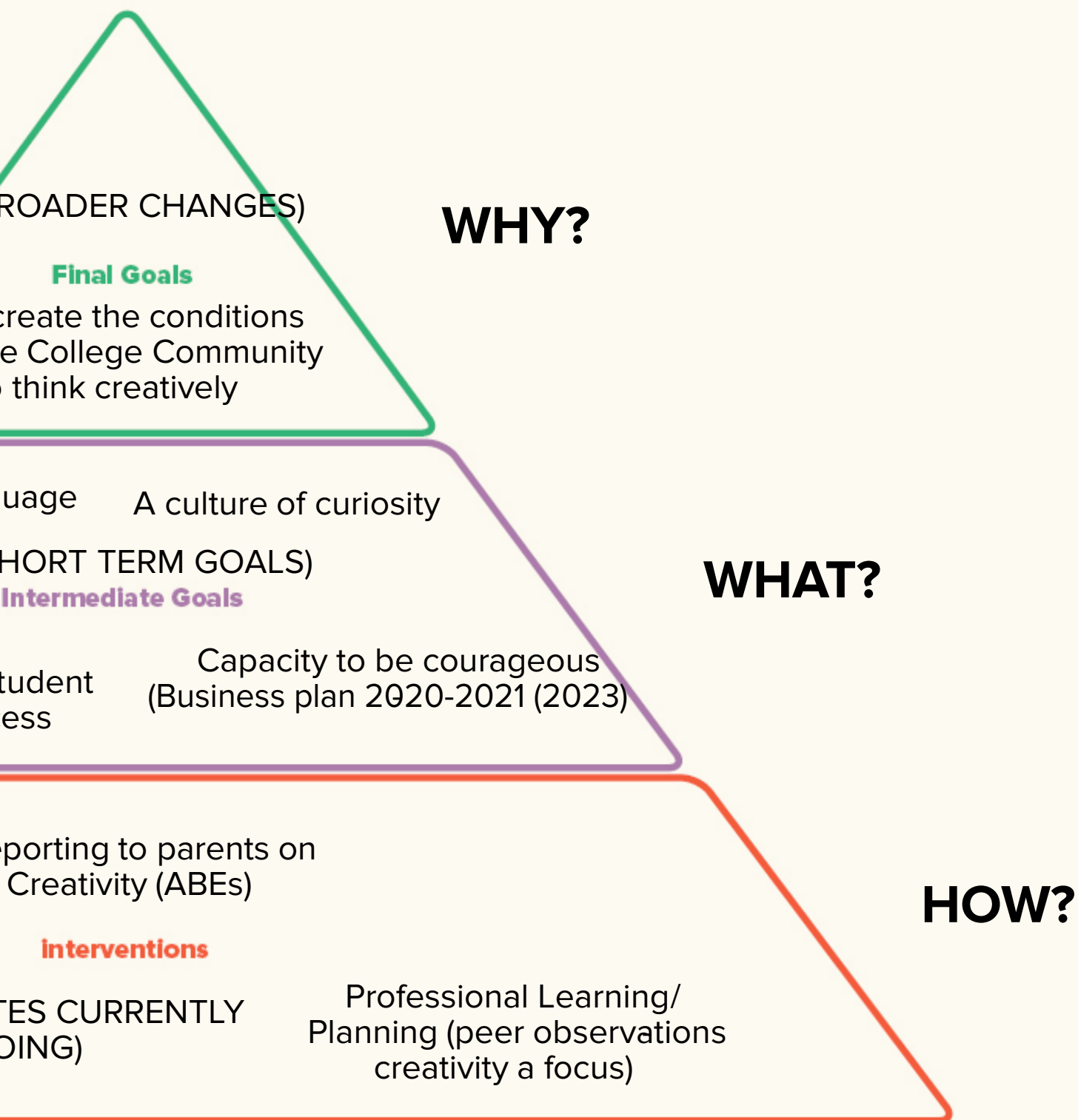


Figure 9

Bob Hawke College



Brookman Primary School frames its work on creativity as part of its wider goal of embedding all of the general capabilities and explicitly links this to their work on STEM. Of note in their interventions are the need to give staff time to develop and plan, as well as complementary activities to build staff capability, *Figure 10.*

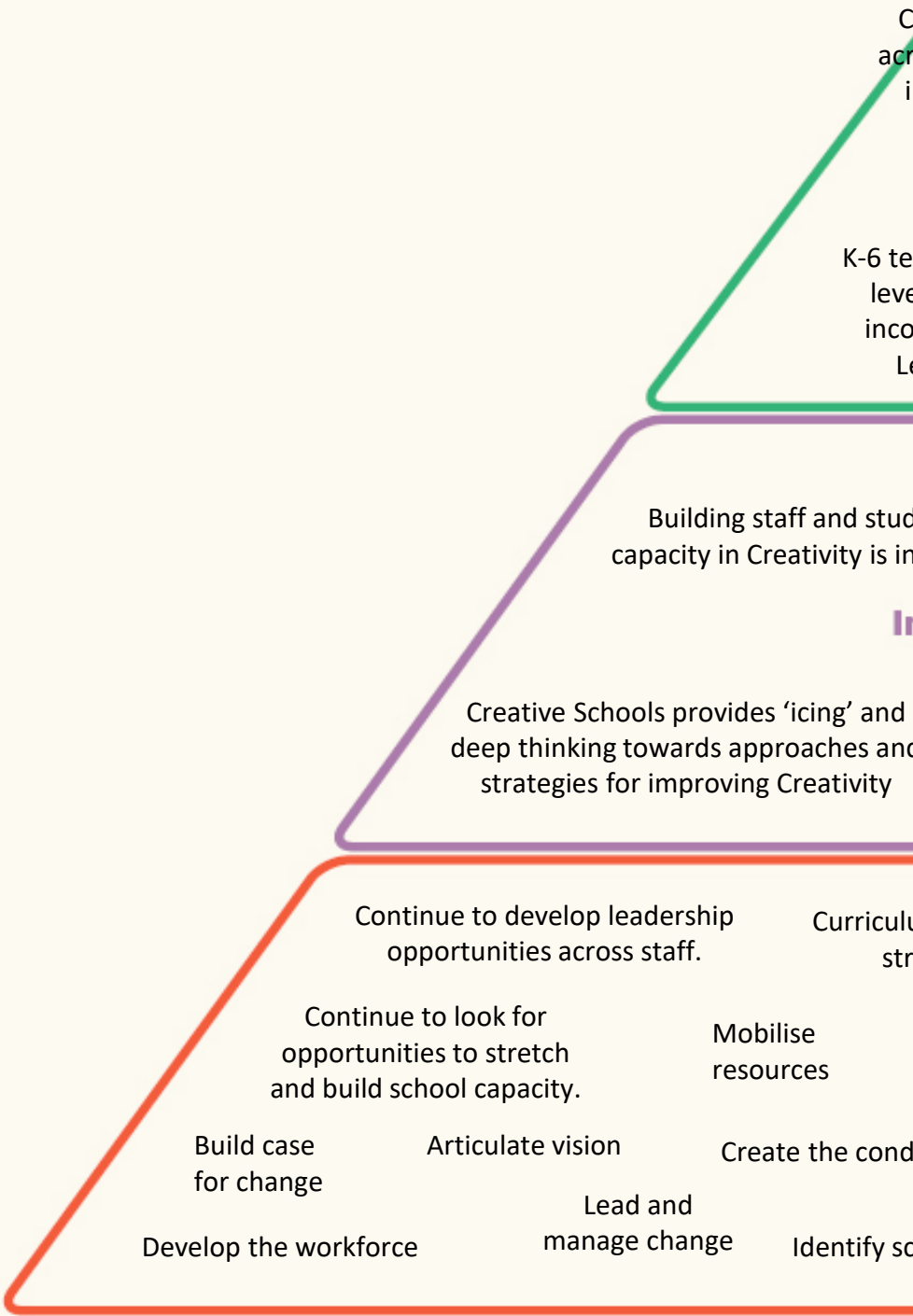
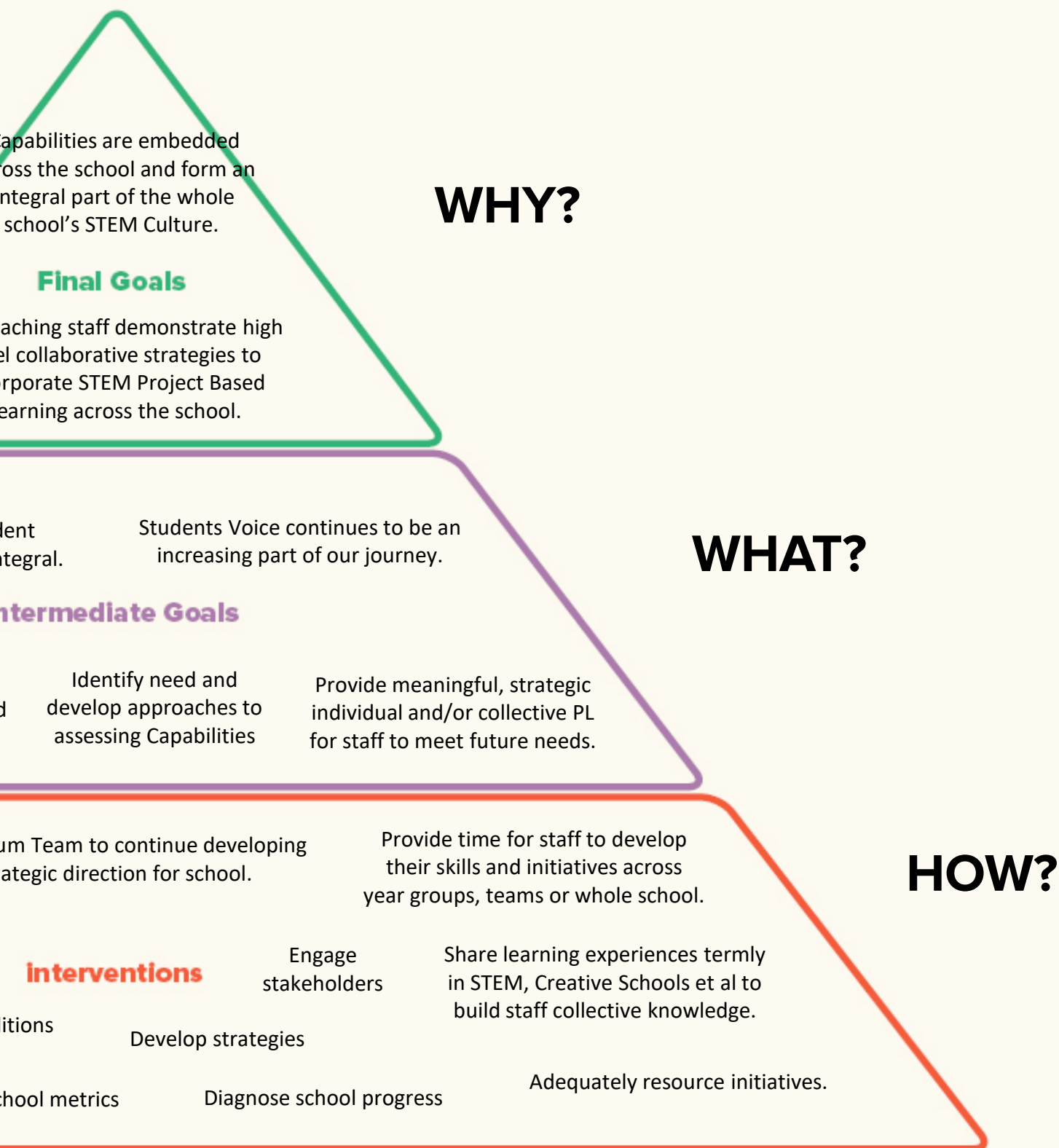


Figure 10
Brookman Primary School Planning Triangle



In an expanded version of the triangle school leaders were invited to consider the assumptions underpinning their approach to change and identify those aspects of the school which would enable change.

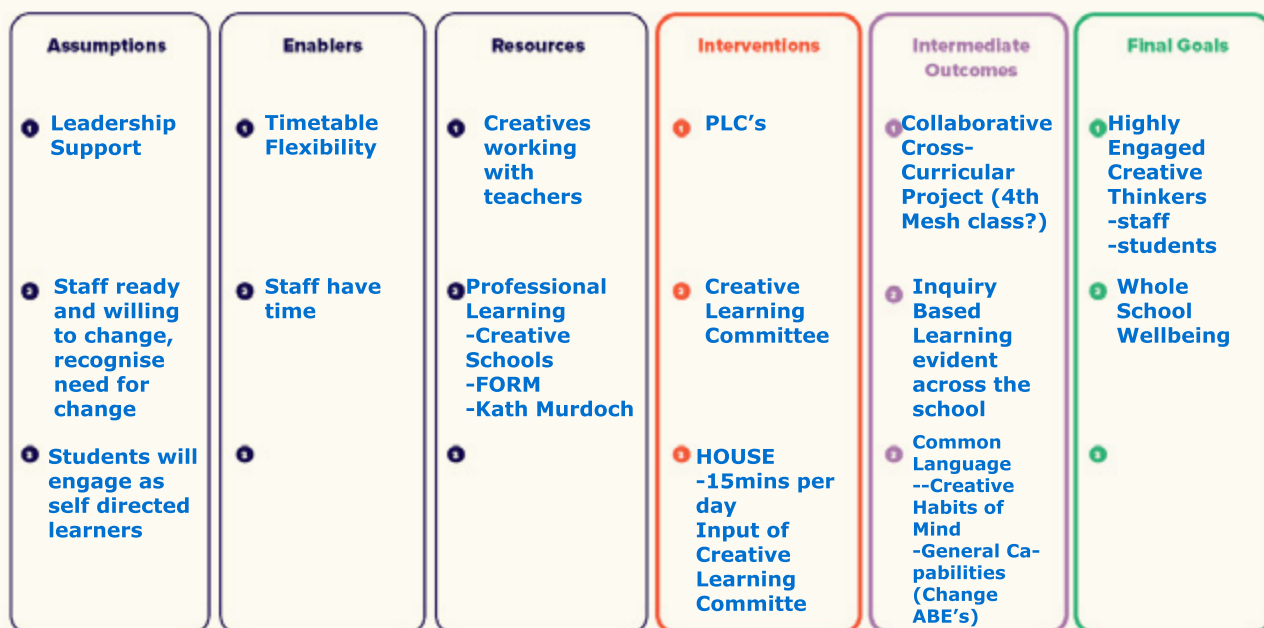
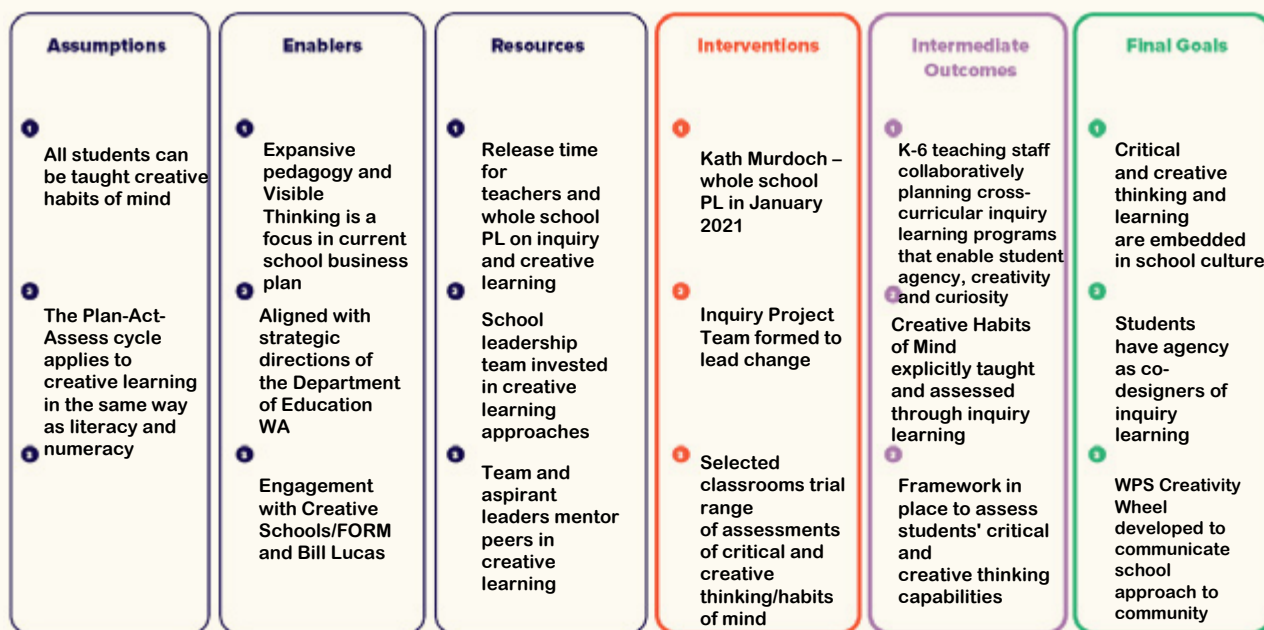
The two examples below, for example, *Figures 11* and *12*, both make explicit their belief that students and staff can learn and change. Whether included under the headings Enablers, Resources or Interventions, time for staff to work and plan together is a key element. In terms of their final goals these two schools make explicit connections with student agency and wellbeing.

Figure 11

Wembley Primary School Theory of Change

Figure 12

Governor High School Theory of Change



In Appendix 3 a selection of the many different approaches used by Creative Schools are included.

Interventions listed by participating schools, in order of the number of mentions, included:

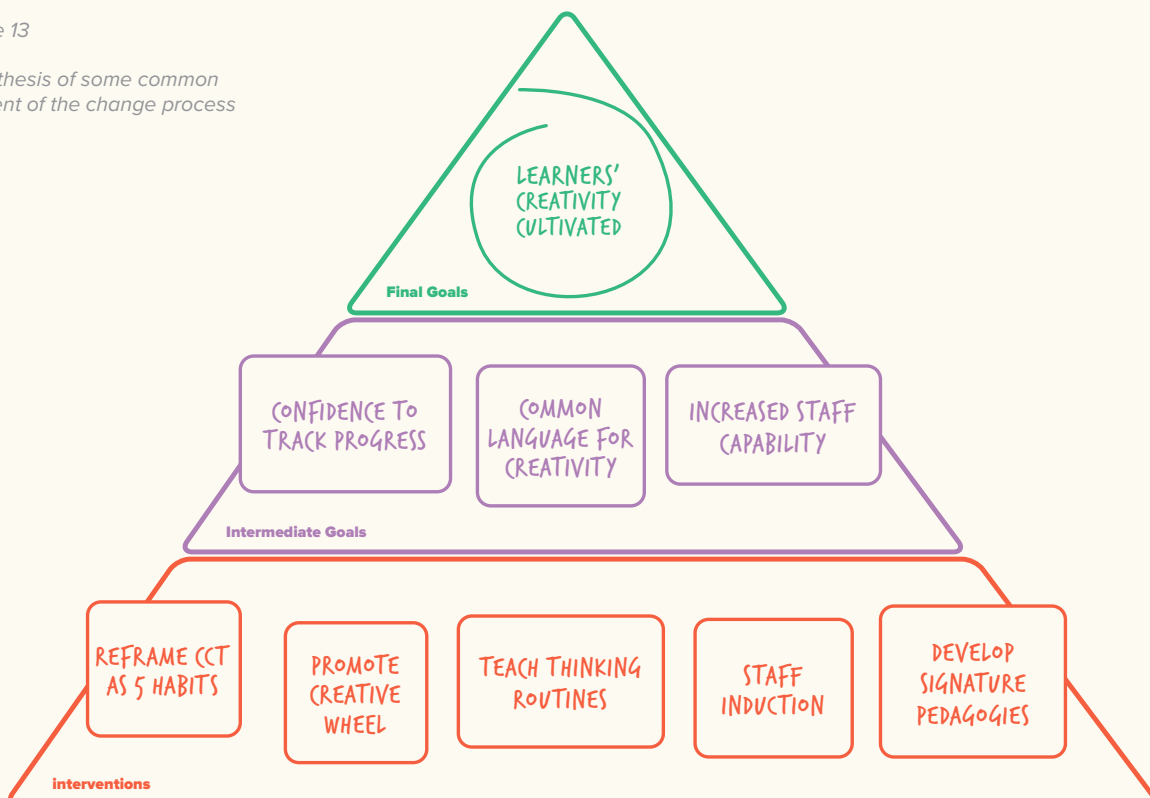
- Professional development, especially from Kath Murdoch and Bill Lucas
- Use of signature pedagogies such as Inquiry learning, interdisciplinary
- Development of a common language using CRL's 5 habits
- Time release for staff
- Links with community organisations
- Connection to STEM
- Use of creative practitioners
- Flexibility in timetabling
- Collaborative staff planning
- Trialling assessment methods
- Developing student-friendly creativity language.

In many cases the categories are permeable. So, for example, collaborative staff planning may be another way of acknowledging time release.

Figure 13 was developed as part of the professional learning sessions and summarises some of these suggestions visually.

Figure 13

A synthesis of some common element of the change process

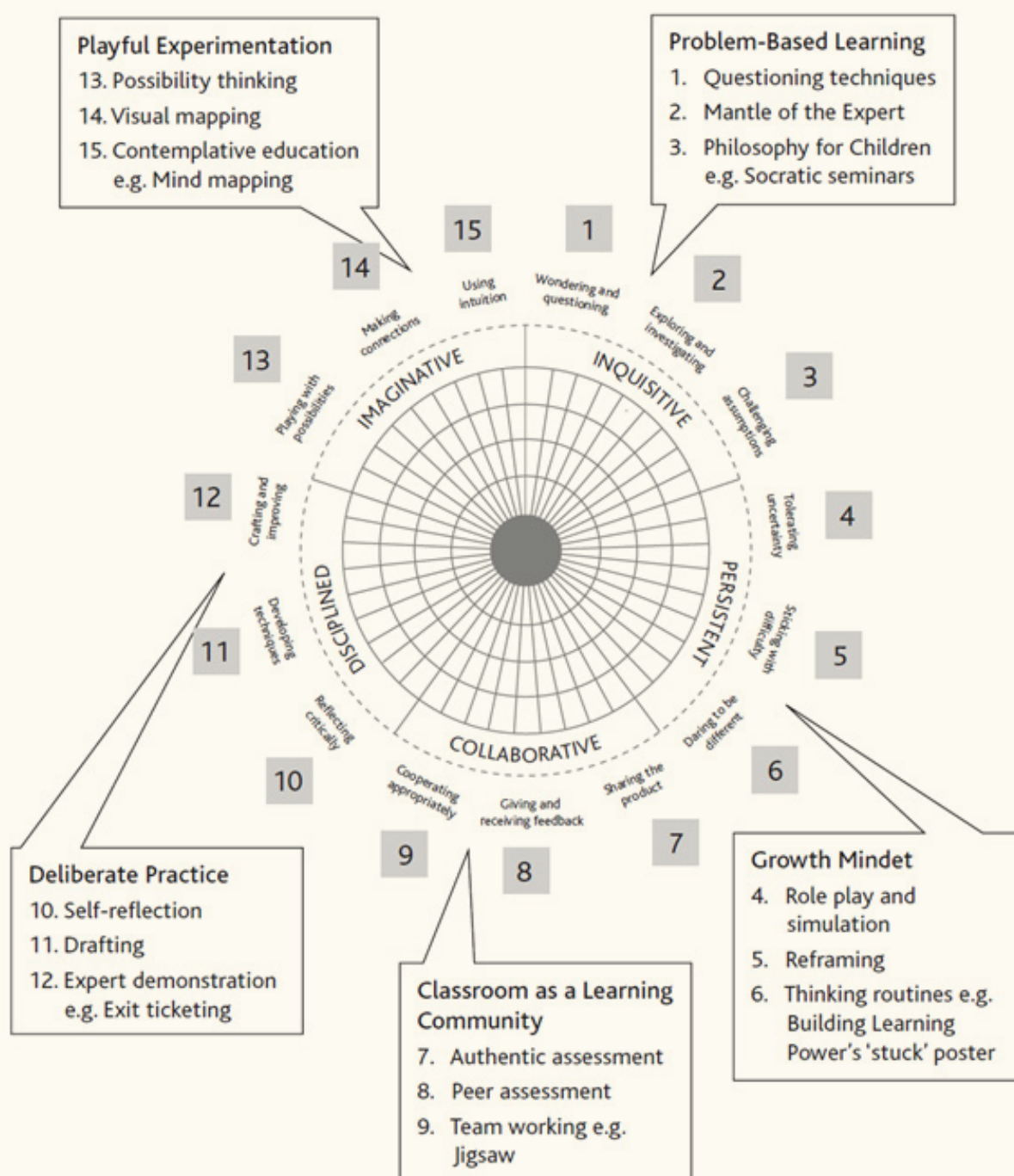


2.3.4 Focus on signature pedagogies for creativity

Decisions about the choice of teaching methods really matter. Teaching maths or history in ways which invite questions and inquiry is quite different from approaches which focus on correct answers. Either can be appropriate to deliver a syllabus but the former is likely also to encourage critical and creative thinking. In earlier research (Lucas and Spencer, 2017) we used the term signature pedagogy (Shulman 2005) and applied it to the five creative habits of mind and their attendant knowledge and skills in our model, Figure 14.

Figure 14

Signature pedagogies for teaching creative thinking (Lucas and Spencer, 2017, p. 49)



Research by the OECD's Centre for Educational Research and Innovation in 11 countries involving 800 teachers and 20,000 students in 320 primary and secondary schools explored the ways in which creativity and critical thinking can best be taught and assessed. Taking CRL's five-dimensional model as its starting point (Figures 2, 4 and 14) the OECD (Vincent-Lancrin et al., 2019) identified 11 signature pedagogies likely to be effective in cultivating creative dispositions in all subjects:

1. 'Creative Partnerships' – 'partnerships between creative practitioners and schools' (p. 101).
2. 'Design Thinking' – method adopted from business. Involves 'engaging students in learning experiences in which they think and act like designers' (p. 103).
3. Dialogic teaching – teaching method that 'fosters continuous and controlled dialogue between students and teachers' (p. 105).
4. Metacognitive pedagogy – 'an approach that makes teachers and students reflect on their teaching and learning' (p. 107).
5. 'Modern Band Movement' – its programmes 'draw upon a teaching method called 'Music as a Second Language' (p. 109).
6. 'Montessori' – a model with successive stages of development corresponding to 'periods of schooling with learning environments and curricula designed to respond to the needs and characteristics of each stage' (p. 111).
7. 'Orff Schulwerk' – a pedagogical model 'focused on creativity' where learners are 'led through a discovery learning process of exploring, experimenting, selecting and creating' (p. 113).
8. Project-Based learning – cross-disciplinary method of instruction' to 'develop learners' in-depth understanding of academic content along with a wide range of skills' (p. 115).
9. Research-based learning – an approach promoting 'a research project as part of a learning and teaching strategy' (p.117).
10. 'Studio Thinking' – a framework with four structures 'describing the interactions of time, space and relationships between teacher and students' and eight habits of mind for visual arts classrooms (p. 119).
11. 'Teaching for Artistic Behavior' – 'pedagogical approach based on student agency and choice' (p. 121)

The OECD report also lays out a framework to support teachers in designing classroom activities to teach these skills as part of the curriculum. It includes design criteria, and a 'portfolio of domain-general and domain-specific rubrics' (p. 129) to assist planning. Design criteria include:

1. Create students' interest to learn.
2. Be challenging.
3. Develop clear technical knowledge in one or more curriculum domains.
4. Include the development of a visible product or artefact.
5. Have students co-design part of the product or solution.
6. Deal with problems that can be looked at from different perspectives.
7. Leave room for the unexpected.
8. Include time and space for students to reflect and to give and receive feedback.

The eight design criteria identified by the OECD clearly complement the list describing conducive features of a school culture in 2.2.1.

A systematic review by Cremin and Chappell (2019) found seven features characterising creative pedagogical practices:

1. Generating and exploring ideas
2. Encouraging autonomy and agency
3. Playfulness
4. Problem-solving
5. Risk-taking
6. Co-constructing and collaborating
7. Teacher creativity.

Beghetto and Kaufman (2014) suggest that establishing a creativity supportive learning environment comes about by teachers:

- Incorporating creativity into their everyday teaching
- Providing opportunities for choice, imagination, and exploration
- Monitoring the motivational messages being sent by one's classroom practices
- Approaching creativity and academic learning as means to other ends.
- Modelling and supporting creativity in the classroom.

In Zest for Learning (Lucas and Spencer 2020) we describe how schools can develop students' creativity using a wide range of learning methods such as volunteering, performing, travelling away from home, engagement with the arts, researching, play and games. We call these 'signature learning experiences', the informal version of the signature pedagogies we explored earlier. The work of FORM's Creative Schools Programme is featured as an exemplar of these approaches which clearly recognise both formal and informal learning.

The use of signature pedagogies is seen as very important in Creative Schools, with a particular interest in inquiry-led, problem-based, play-based and inter-disciplinary

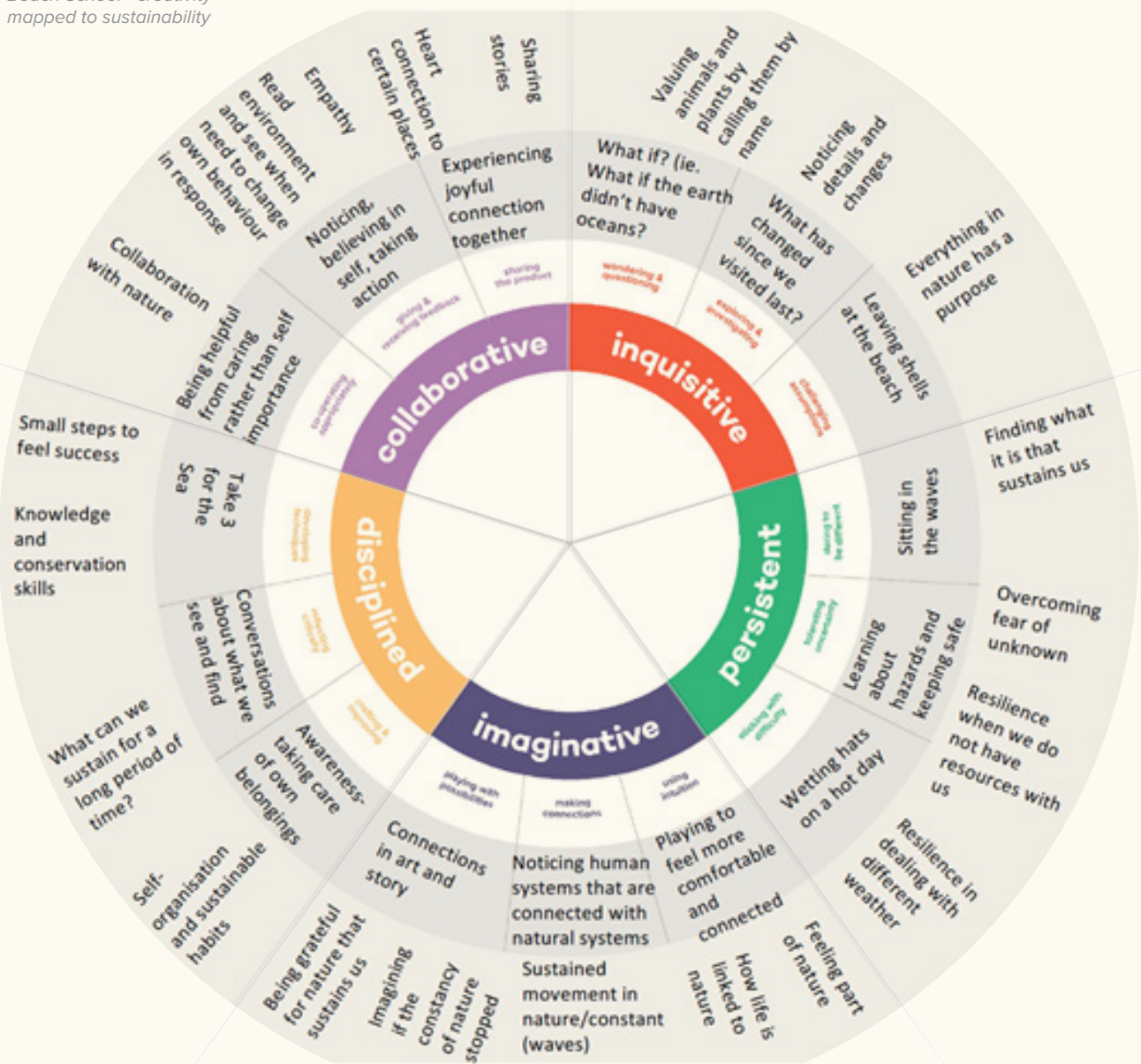
approaches, and, of course, on the creative partnership model developed by FORM with Paul Collard (CCE) and Paul Gorman (Hidden Giants).

As yet there is a relatively narrow range of pedagogies being used in although many of the words in Cremin and Chappell's (2019) review were mentioned in conversations and implicitly picked up in the Theories of Change developed by the schools.

Of particular interest, modelled on the approach developed by Rooty Hill High School (Figure 4), was the detailed focus on pedagogies for creativity and sustainability, Figure 15.

Figure 15

St Mary's Anglican Girls' Beach School - creativity mapped to sustainability



2.3.5 *Free up the curriculum and make time for teachers to plan*

Loosening the straight jacket of a subject-based timetable (particularly at High School) is key; making time for teachers to plan collaboratively is essential in all phases of education.

One consequence of most senior school timetables is that lessons are relatively short, something that evidence suggests is not necessarily conducive to the development of creativity. Davies et al. (2013), for example, argue that:

...extended time periods for creative activities, and notes the increased interest and commitment that time can give to the value of creative learning. p.86

The subject-based organisation of senior schools brings with it other challenges in terms of the relationships between teachers. Whereas at primary level teachers see themselves as teachers, at secondary their identity tends to be defined by their specialism so that they become teachers 'of geography' or 'of art' or 'of science'. Their focus is on what their syllabus requires and this inhibits attempts to plan to teach creativity across subjects. It need not always be so, as teachers who have been involved in projects to increase opportunities for teaching for creativity reflect in a study in secondary schools in from Australia, the United States, Canada and Singapore (deBruin et al., 2017):

...time to meet, develop and plan programs, exchange ideas and enact deeper critical and creative activities than what is already catered for was the most precious and rare of commodities. p.33

One strategy used by some secondary schools is block scheduling with fewer, longer lessons during any week:

Longer class periods give teachers more time to complete lesson plans, develop key concepts, increase the creativity of lessons. p.9

To accommodate many different subjects in classrooms and workshops many secondary schools find that their teaching spaces are small, something which can inhibit teachers' attempts to teach for creativity, (Davies et al., 2013):

There is reasonable evidence across a number of studies that the space within a classroom or workshop should be capable of being used flexibly to promote pupils' creativity. p.84

Bocconi et al. (2012) makes some helpful suggestions for schools as they think about organising their curricula:

- Introduce less extensive curricula covering fewer topics in more depth;
- Develop and assess not only factual knowledge and their associated skills, such as numeracy and literacy, but also the transversal habits/skill such as problem-finding, problem-solving and collaboration;
- Take seriously into account the prior knowledge, ideas, interests and skills that learners bring to 'creative classrooms';
- Re-arrange education practicalities (such as timetables, learners' allocation in classrooms, etc.) in order to give more time and opportunities for creative, personalized learning; and
- Make better use of already available ICT for innovative teaching and learning.

There was recognition of the importance of the need to free up and redesign the timetable from a number of Creative Schools and an overwhelming recognition of the power of creating time for teachers to plan and learn together.



2.3.6 Think about assessment

In schools what is assessed is, as the old adage has it, tends to get done.

The new PISA test of creative thinking planned for 2021 (OECD Directorate for Education and Skills, 2019) is already raising interest in the ways in which the creativity of young people can be assessed. Our own research has shown that there are many ways in which student progress can be acknowledged and tracked (Spencer et al., 2012; Lucas and Spencer, 2017), *Table 1*:

Table 1 - Approaches to assessing creativity, Lucas and Spencer, 2017 p.160

PUPIL	TEACHER	REAL-WORLD	ONLINE
Real-time feedback	Criterion-referenced grading	Expert reviews	Digital badges
Photographs	Rating of products and processes	Gallery critique	E-portfolios
Self-report questionnaires	Structured interviews	Authentic tests eg	
Logs/diaries/ journals	Performance tasks	displays	
Peer review	Capstone projects	presentations,	
Group critique		interviews	
Badges		podcasts	
Portfolios		films	
		Exhibitions	

Trends in this field include the growing use of digital portfolio, increased sophistication in developing student self-report questionnaires, wider engagement with real-world audiences through the use of exhibitions and performances, and the use of online tests. Often is it possible to integrate assessment into the process of creative learning as Thomson (2011) reminds us:

Creative learning approaches offer opportunities for students to record and also present their learning in multiple genres and media and to take some ownership of the processes of reflection. p.264

In earlier research Lucas et al. (2013) concluded that:

...the primary use of the [assessment] tool is in enabling teachers to become more precise and confident in their teaching of creativity and as a formative tool to enable learners to record and better develop their creativity. p.26

To date there are few examples of effective ways of reporting to parents on the development of student creativity. Elsewhere in Australia schools in some States are beginning to be given guidance on effective ways of reporting to parents on the development of their children's creativity (Victorian Curriculum and Assessment Authority, 2015).

From a school leadership perspective the issue of assessing creativity provides an opportunity for leaders to consider both the issues involved and their relevant practicalities. In terms of the issues leaders might like to:

- Be clear about the purpose of the assessment; will it be summative or formative?
- Look for examples of documentation and level descriptors from which they might consider what progression in creativity might look like in secondary education

A number of leaders in Creative Schools mentioned their wish to start to assess critical and creative thinking.

2.3.7 *Be creative with a wide range of partners*

Unleashing the creativity of a school community can't be done by the school alone.

One of the strongest lessons of the Creative Partnerships initiative in the UK (2002-2011) was its emphasis on partnership working with artists and cultural organisations (Parker, 2013):

The planning processes and partnership approach to delivering projects meant that teachers were engaged with new and different ways of thinking and delivering in relation to their pedagogy. (p. 96).

In research into the development of zest in schools (Lucas and Spencer, 2020) we have seen similar benefits in the ways staff and students learn when working with a broader range of partners than those in cultural organisations, for example those working in museums, environmental and scientific organisations and groups such as the Scouts. Benefits for students (and teachers) from these kinds of partnership working include the opportunity of spending time with adults with particular learning passions, being genuinely outward facing, encouraging deep research and scholarship, making space for activities which are authentic and extended in length, embracing novelty and leaving space for the unexpected.

The kind of partnership working which evolved from the Creative Partnership initiative in the UK was one of eleven signature pedagogies found to be useful in the study undertaken by the OECD (Vincent-Lancrin et al., 2019, p.77-78), explicitly when combined with the Centre for Real-World Learning's model of creativity.

The Creative Schools programme is an example of a schools initiative that is powerfully supported and evaluated by a critical partner, FORM, and all schools, some in their second year, acknowledged the huge benefits of this partnership.

Most schools explicitly work with local partners in general and specifically on aspects of creativity.

2.3.8 *Develop a school-wide creative professional learning community*

System change requires a serious focus on professional learning and this is most effective when the principal is actively involved.

From a wider study of school leadership we know that the promotion and participation of school leaders in teacher learning and development is the single most important activity that they can undertake in terms of improving outcomes for young people. Robinson et al. (2015) found that this kind of intervention has an extremely large impact with an effect size of 0.84. Interestingly Robinson and colleagues reiterate one aspect of their finding:

The descriptor for this dimension includes the words 'and participating' to make it clear that the leader doesn't stop at supporting or sponsoring their staff in their learning; they actually participate in the learning themselves—as leader, learner, or both. p.101

It seems that, for school leaders, 'do as I say' is far less effective than 'do as I do' as an approach to achieve maximum impact. For secondary school leaders this finding is arguably both particularly important and rather challenging given the many calls on made on the time of senior leaders.

For the kind of changes required to embed creativity in schools, learning has to extend far beyond the students. In describing 'learning leadership', Istance and Stoll (2013) explain:

This is centrally focused on student learning but extends well beyond that. Learning leaders understand that designing and developing innovative learning environments requires everyone to keep learning, unlearning and relearning because continuous learning of all players and partners is a condition of successful implementation and sustainability. (p. 23).

School leaders play a key role in deciding the focus of professional learning – especially schoolwide professional learning – and, perhaps even more powerfully, how this will be experienced.

Regarding professional learning, Cochrane and Cockett (2007) propose that 'One of the first stages is for teachers to develop their own understanding of what is meant by creativity' (p. 14). Creative journeys are non-linear:

It is a world exploration rather than a two-week package holiday, more Columbus seeking a Western route to the Indies than a holiday flight to the Caribbean. (p. 79).

While there is little research, specifically focused on teacher leadership for creativity, results of a research and development project involving middle leaders from schools who belong to a voluntary school-to-school partnership, provide insights into how successful teacher leader change catalysts play an important role in changing teachers' practice within and across schools (Stoll et al, 2018). This is more likely to happen when they understand how to lead change, read and develop their knowledge of relevant research, use this and other evidence to identify issues, inform changes, develop and improve practice, and evaluate progress.

The COVID-19 pandemic has hugely impacted the educational landscape, with teachers and schools adapting quickly to remote and blended forms of teaching and learning and an associated need for these kinds of professional learning. A rapid evidence assessment of remote professional development in the UK (Education Endowment Foundation, 2020) concluded that:

1. Professional development can be supported effectively remotely
2. Remote coaching, mentoring and expert support can be effective alone or as part of broader PD programmes
3. The use of video can enhance remote PD
4. Interactive content and opportunities for collaboration hold promise for remote professional development
5. Remote professional development requires supportive school conditions.

Professional learning communities are a powerful means by which leaders organise and create the culture for collaborative professional development. Broadly, professional learning communities are groups of people who, as a collective, share and critically interrogate their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way (Research by Stoll et al, 2006).

A school that is a learning organisation (see Figure 6) is a creative professional learning community that is clear about its vision for student learning and wellbeing (creativity in this case) but is able to flexibly adapt and learning its way into the future. This is done through: ensuring that the vision is jointly developed, shared and that curriculum, pedagogy and assessment are developed and aligned; an orientation to practice-related inquiry, exploration and innovation; extensive and ongoing individual and collaborative professional learning; an emphasis on trusting, fearless but challenging team work; systems (eg time, space, technology, plans, theories of change etc) and dialogic processes that enable it to collect and process evidence, exchange and move around knowledge and practice as colleagues 'think together'; and that the learning leaders both model this and grow other learning leaders.

Schools as learning organisations are not isolated. They, and their learning leaders, are acutely attuned to their external environment and critically, learn with and from the many networks in their wider eco-system, which is the next thing creative leaders do or need to do.

Creative Schools form a powerful professional learning community supported by FORM, WA school leaders and educators and educators in the UK and working globally to support creative learning. Professional development for staff was seen by school leaders as the single most important intervention they could make to embed creativity in their schools.

2.3.9 Model the change you want to see

Modelling is essential in all aspects of leadership and teaching. It's especially so with leadership for creativity where the values and attitudes being promoted can sometimes seem counter to the performativity which is widely seen in schools.

Stoll and Temperley (2009) is helpful here, identifying nine conditions 'that creative leaders appear to need to work towards in their school to promote and nurture creativity in others' (with 'others' being 'colleagues'):

1. Model creativity and risk-taking
2. Stimulate a sense of urgency – if necessary, generate a 'crisis'! – 'it often takes a crisis to promote action where there is inertia.' (p.70)
3. Expose colleagues to new thinking and experiences
4. Self-consciously relinquish control – 'creating an ethos that it's acceptable to take risks, and being given the freedom to explore without constraints' (p.71)
5. Provide time and space and facilitate the practicalities
6. Promote individual and collaborative creative thinking and design
7. Set high expectations about the degree of creativity – 'By setting the bar high and pushing people to be imaginative and to think originally, leaders appear to create a bigger space for colleagues to grow into.' (p.73)
8. Use failure as a learning opportunity
9. Keep referring back to core values.

The Creative Schools leaders in this project are an impressive, values-driven group. In different ways each one is finding ways of modelling the creative changes they want to see.

Appendix 1

Creative Schools and their leaders

Creative Schools 2020

SCHOOL	PRINCIPAL	PROGRAM COORDINATOR
Bob Hawke College	John Burke	Cherie Mcelhinney
Boyare Primary School	Glenn Murray	Sarah Hanlon
Brookman Primary School	Hans Geers	Tania Rennie
Donnybrook District High School	James Milne	Renee Reid and James Duncan
Ellenbrook Christian College	Mike Pitman	Pam Tyrrell and Liana Luyt
Glencoe Primary School	Karl Palinkas	Daniel Moore
Glendale Primary School	Helen Fiebig	Jennifer Graham
Governor Stirling SHS	Dr Pasco Putrino	Leonie Squire and Elizabeth Phillips
Melville Primary School	Betty McNeil	
Merriwa Primary School	Sue Waterhouse	
Mosman Park Primary	Alison Robb	
North Fremantle Primary School	Linda Chandler	
Scotch College	Dr Alec O'Connell	Cara Fugill
Spearwood Alternative School	Denise Stone	
St Mary's Anglican Girls School	Judith Tudball	Geraldine Drabble
Wembley Primary School	Donna Snow	Tamara Doig

Appendix 2

Critical & Creative Thinking, ACARA

Critical and Creative Thinking learning continuum

Sub-element	Level 1 Typically, by the end of Foundation Year, students:	Level 2 Typically, by the end of Year 2, students:	Level 3 Typically, by the end of Year 4, students:	Level 4 Typically, by the end of Year 6, students:	Level 5 Typically, by the end of Year 8, students:	Level 6 Typically, by the end of Year 10, students:
Inquiring – identifying, exploring and organising information and ideas element						
Pose questions	pose factual and exploratory questions based on personal interests and experiences	pose questions to identify and clarify issues, and compare information in their world	pose questions to expand their knowledge about the world	pose questions to clarify and interpret information and probe for causes and consequences	pose questions to probe assumptions and investigate complex issues	pose questions to critically analyse complex issues and abstract ideas
Identify and clarify information and ideas	identify and describe familiar information and ideas during a discussion or investigation	identify and explore information and ideas from source materials	identify main ideas and select and clarify information from a range of sources	identify and clarify relevant information and prioritise ideas	clarify information and ideas from texts or images when exploring challenging issues	clarify complex information and ideas drawn from a range of sources
Organise and process information	gather similar information or depictions from given sources	organise information based on similar or relevant ideas from several sources	collect, compare and categorise facts and opinions found in a widening range of sources	analyse, condense and combine relevant information from multiple sources	critically analyse information and evidence according to criteria such as validity and relevance	critically analyse independently sourced information to determine bias and reliability
Generating ideas, possibilities and actions element						
Imagine possibilities and connect ideas	use imagination to view or create things in new ways and connect two things that seem different	build on what they know to create ideas and possibilities in ways that are new to them	expand on known ideas to create new and imaginative combinations	combine ideas in a variety of ways and from a range of sources to create new possibilities	draw parallels between known and new ideas to create new ways of achieving goals	create and connect complex ideas using imagery, analogies and symbolism
Consider alternatives	suggest alternative and creative ways to approach a given situation or task	identify and compare creative ideas to think broadly about a given situation or problem	explore situations using creative thinking strategies to propose a range of alternatives	identify situations where current approaches do not work, challenge existing ideas and generate alternative solutions	generate alternatives and innovative solutions, and adapt ideas, including when information is limited or conflicting	speculate on creative options to modify ideas when circumstances change
Seek solutions and put ideas into action	predict what might happen in a given situation and when putting ideas into action	investigate options and predict possible outcomes when putting ideas into action	experiment with a range of options when seeking solutions and putting ideas into action	assess and test options to identify the most effective solution and to put ideas into action	predict possibilities, and identify and test consequences when seeking solutions and putting ideas into action	assess risks and explain contingencies, taking account of a range of perspectives, when seeking solutions and putting complex ideas into action

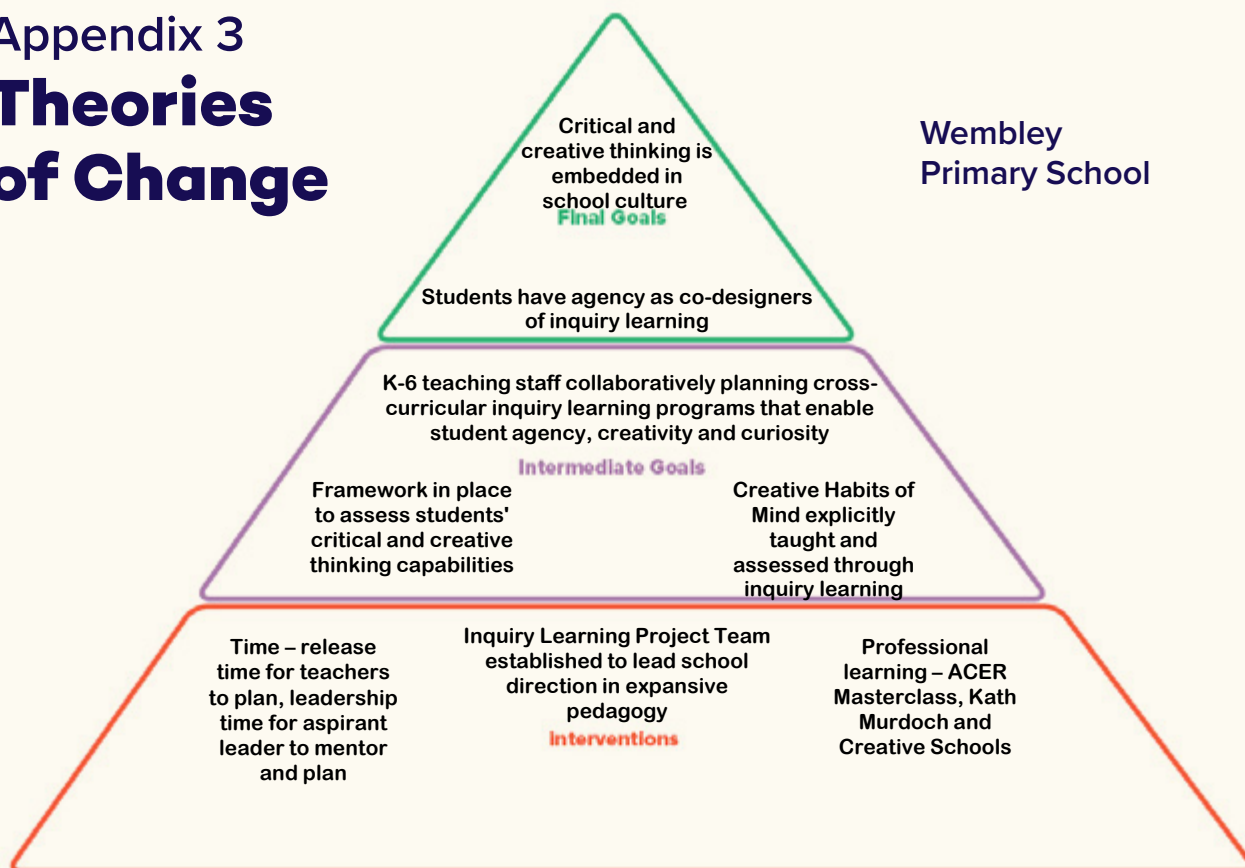
Critical and Creative Thinking learning continuum

Sub-element	Level 1 Typically, by the end of Foundation Year, students:	Level 2 Typically, by the end of Year 2, students:	Level 3 Typically, by the end of Year 4, students:	Level 4 Typically, by the end of Year 6, students:	Level 5 Typically, by the end of Year 8, students:	Level 6 Typically, by the end of Year 10, students:
Reflecting on thinking and processes element						
Think about thinking (metacognition)	describe what they are thinking and give reasons why	describe the thinking strategies used in given situations and tasks	reflect on, explain and check the processes used to come to conclusions	reflect on assumptions made, consider reasonable criticism and adjust their thinking if necessary	assess assumptions in their thinking and invite alternative opinions	give reasons to support their thinking, and address opposing viewpoints and possible weaknesses in their own positions
Reflect on processes	identify the main elements of the steps in a thinking process	outline the details and sequence in a whole task and separate it into workable parts	identify pertinent information in an investigation and separate into smaller parts or ideas	identify and justify the thinking behind choices they have made	evaluate and justify the reasons behind choosing a particular problem-solving strategy	balance rational and irrational components of a complex or ambiguous problem to evaluate evidence
Transfer knowledge into new contexts	connect information from one setting to another	use information from a previous experience to inform a new idea	transfer and apply information in one setting to enrich another	apply knowledge gained from one context to another unrelated context and identify new meaning	justify reasons for decisions when transferring information to similar and different contexts	identify, plan and justify transference of knowledge to new contexts
Analysing, synthesising and evaluating reasoning and procedures element						
Apply logic and reasoning	identify the thinking used to solve problems in given situations	identify reasoning used in choices or actions in specific situations	identify and apply appropriate reasoning and thinking strategies for particular outcomes	assess whether there is adequate reasoning and evidence to justify a claim, conclusion or outcome	identify gaps in reasoning and missing elements in information	analyse reasoning used in finding and applying solutions, and in choice of resources
Draw conclusions and design a course of action	share their thinking about possible courses of action	identify alternative courses of action or possible conclusions when presented with new information	draw on prior knowledge and use evidence when choosing a course of action or drawing a conclusion	scrutinise ideas or concepts, test conclusions and modify actions when designing a course of action	differentiate the components of a designed course of action and tolerate ambiguities when drawing conclusions	use logical and abstract thinking to analyse and synthesise complex information to inform a course of action
Evaluate procedures and outcomes	check whether they are satisfied with the outcome of tasks or actions	evaluate whether they have accomplished what they set out to achieve	explain and justify ideas and outcomes	evaluate the effectiveness of ideas, products, performances, methods and courses of action against given criteria	explain intentions and justify ideas, methods and courses of action, and account for expected and unexpected outcomes against criteria they have identified	evaluate the effectiveness of ideas, products and performances and implement courses of action to achieve desired outcomes against criteria they have identified

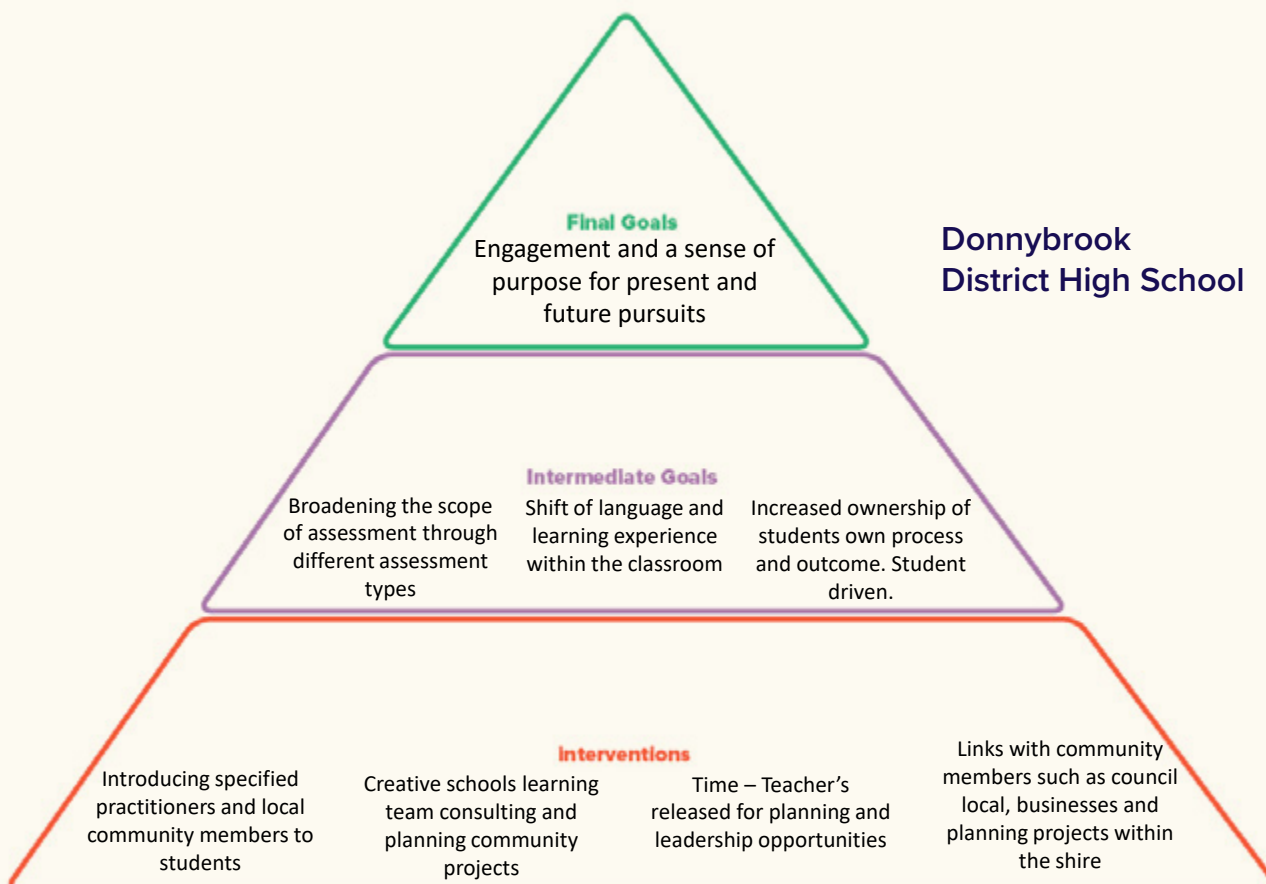
Appendix 3

Theories of Change

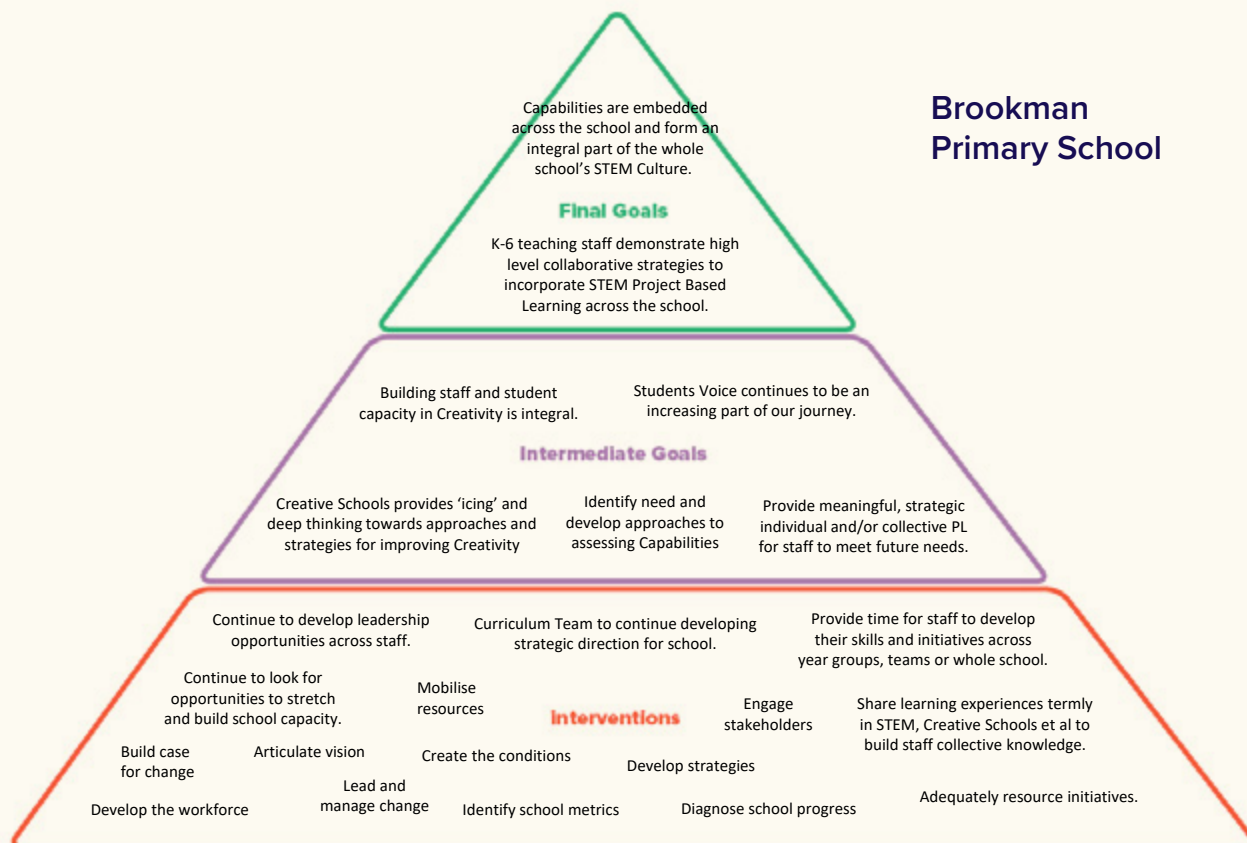
Wembley
Primary School



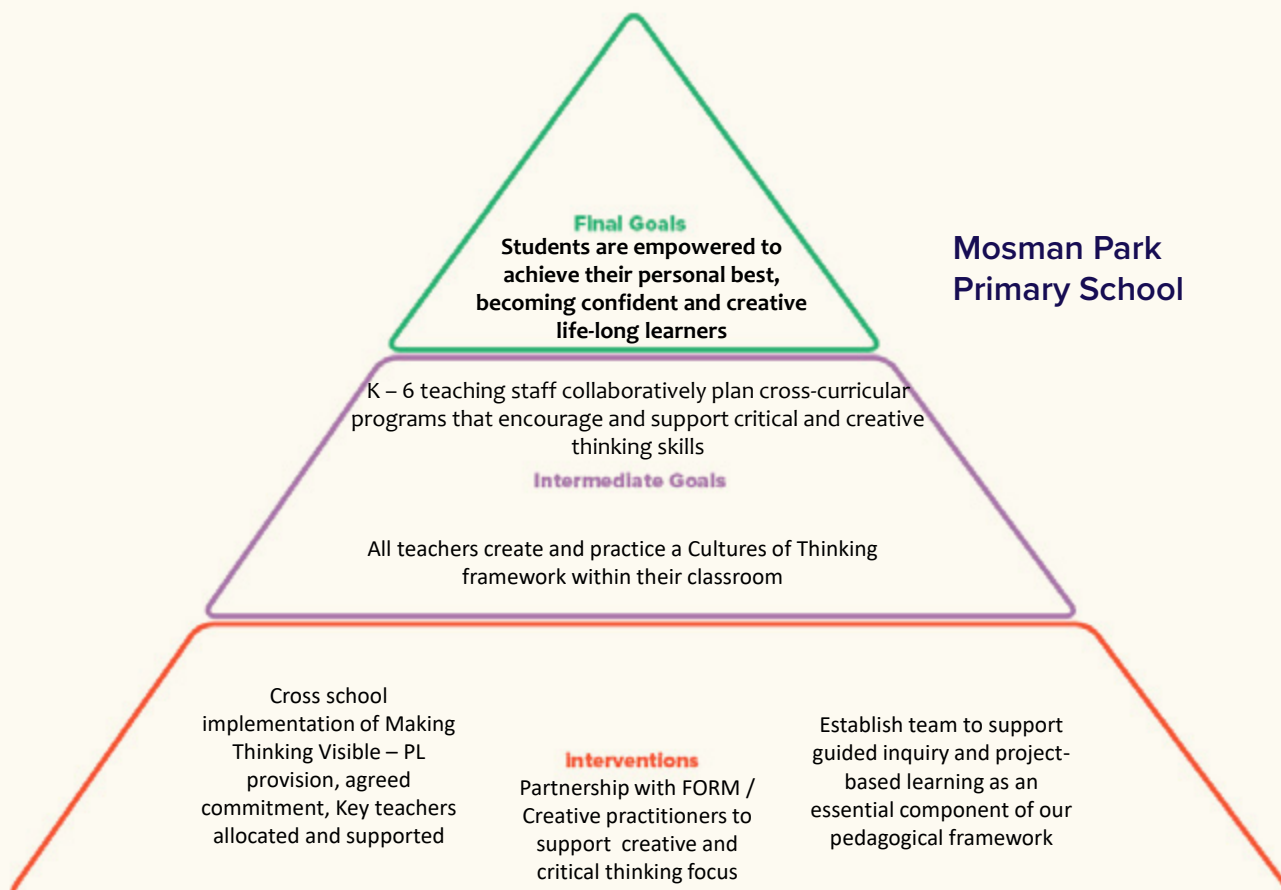
Donnybrook
District High School



Brookman Primary School



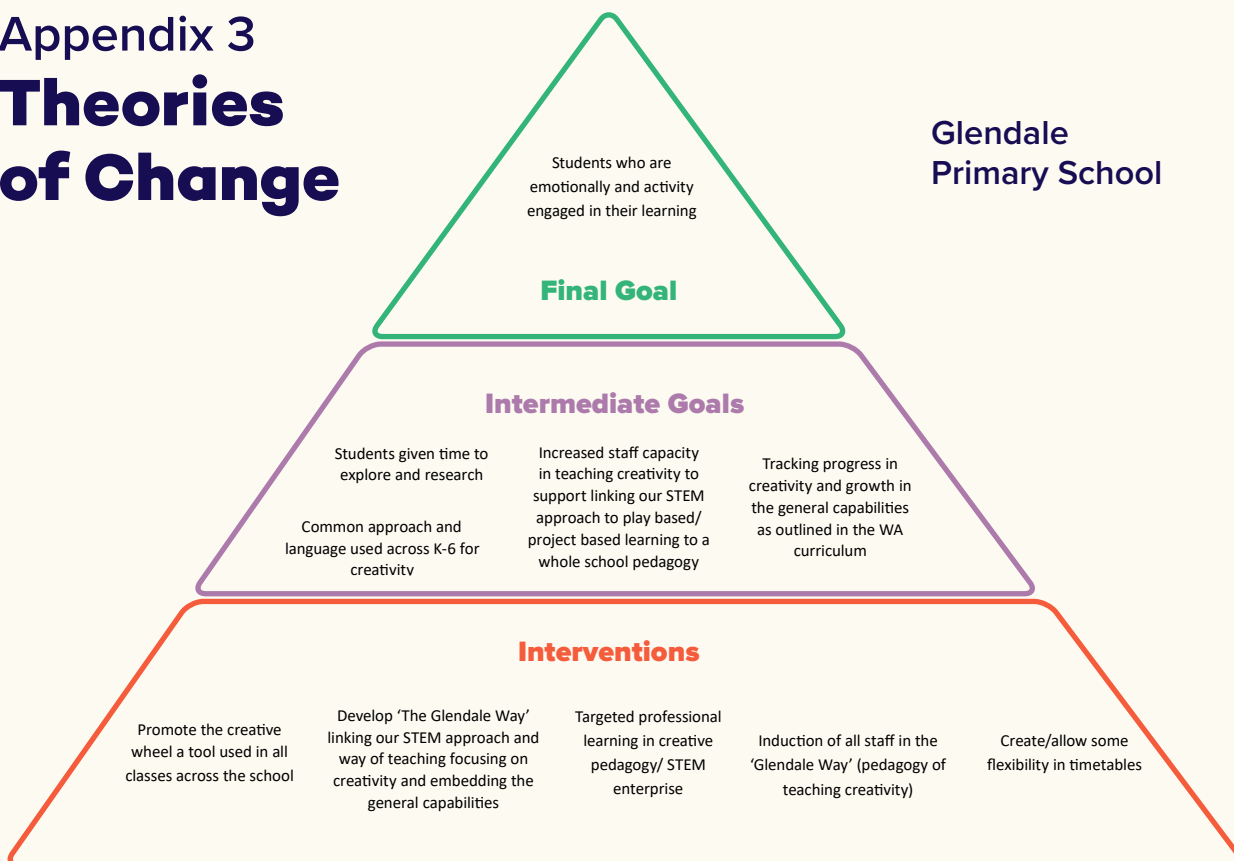
Mosman Park Primary School



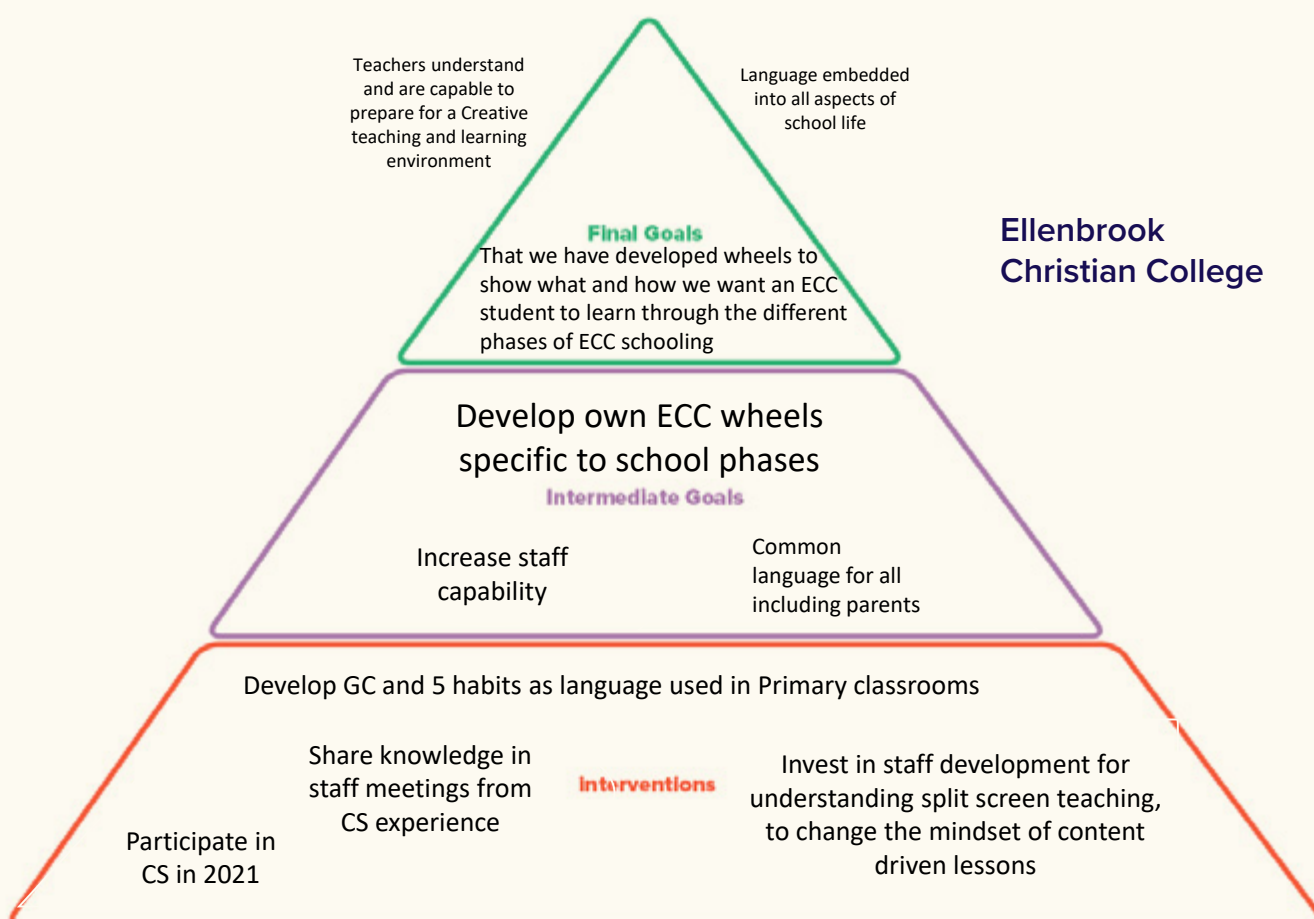
Appendix 3

Theories of Change

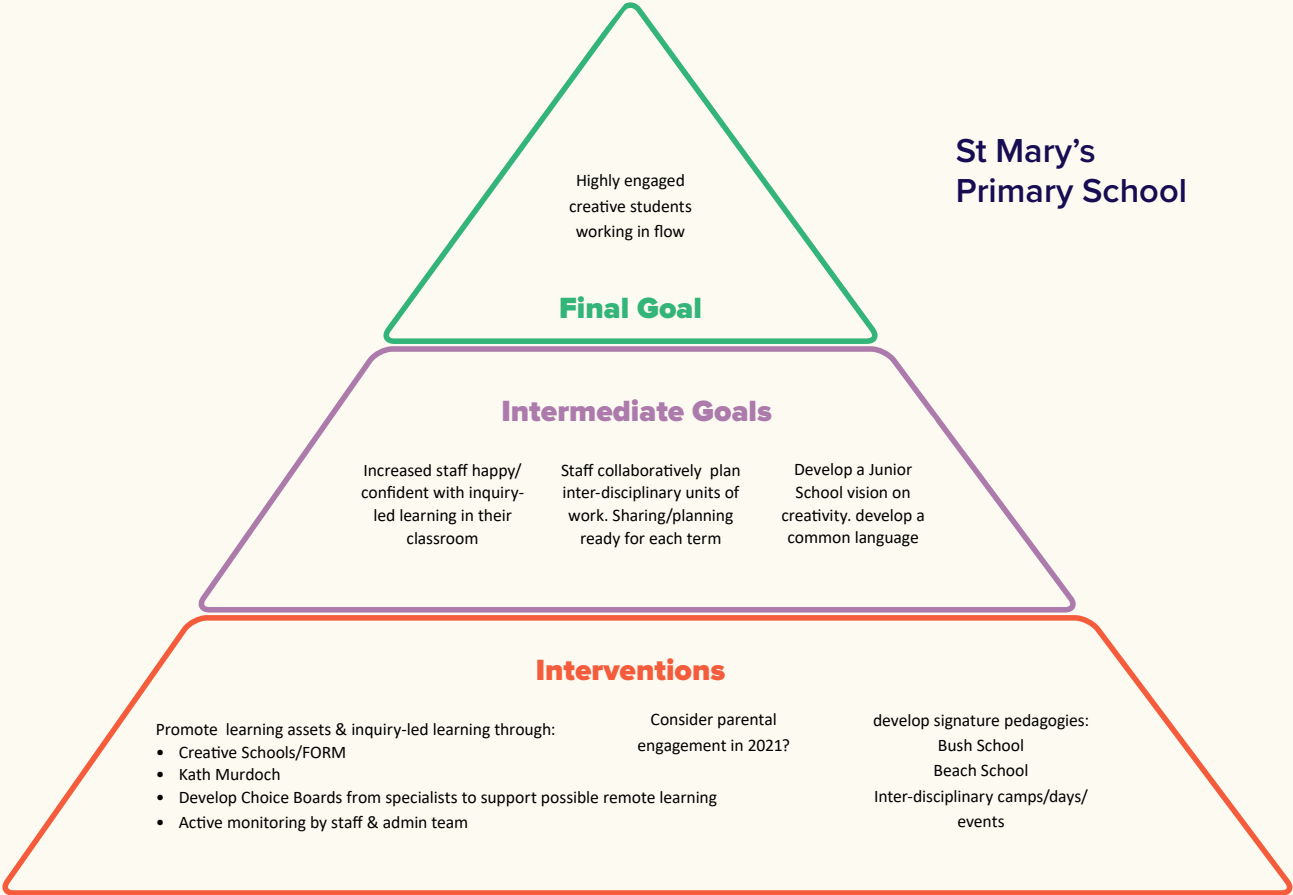
Glendale
Primary School



Ellenbrook
Christian College



St Mary's
Primary School



St Mary's Anglican Girls School





Glendale Primary School

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