CELT
Learning & Teaching
## Toolkit

COLLABORATE C
EMPOWER E
LEAD L
TRANSFORM T

This Learning & Teaching Toolkit has been developed as part of CELT's school improvement strategy

Closing the Gap: Excellence through Equity.

Our goal is to create a sustainable, evidence-based approach to developing powerful learning and teaching that improves outcomes for all pupils – in particular, those who are disadvantaged. We aim to secure an enduring and productive professional learning culture, providing guidance and support for all teachers at all stages, so that teachers across CELT can work together to develop excellence in classroom practice.

Achieving excellence is not about ensuring that all children receive the same thing: it is about ensuring that every child gets what he or she needs to develop their full potential and succeed in life.

www.celtrust.org

CORNWALL EDUCATION LEARNING TRUST
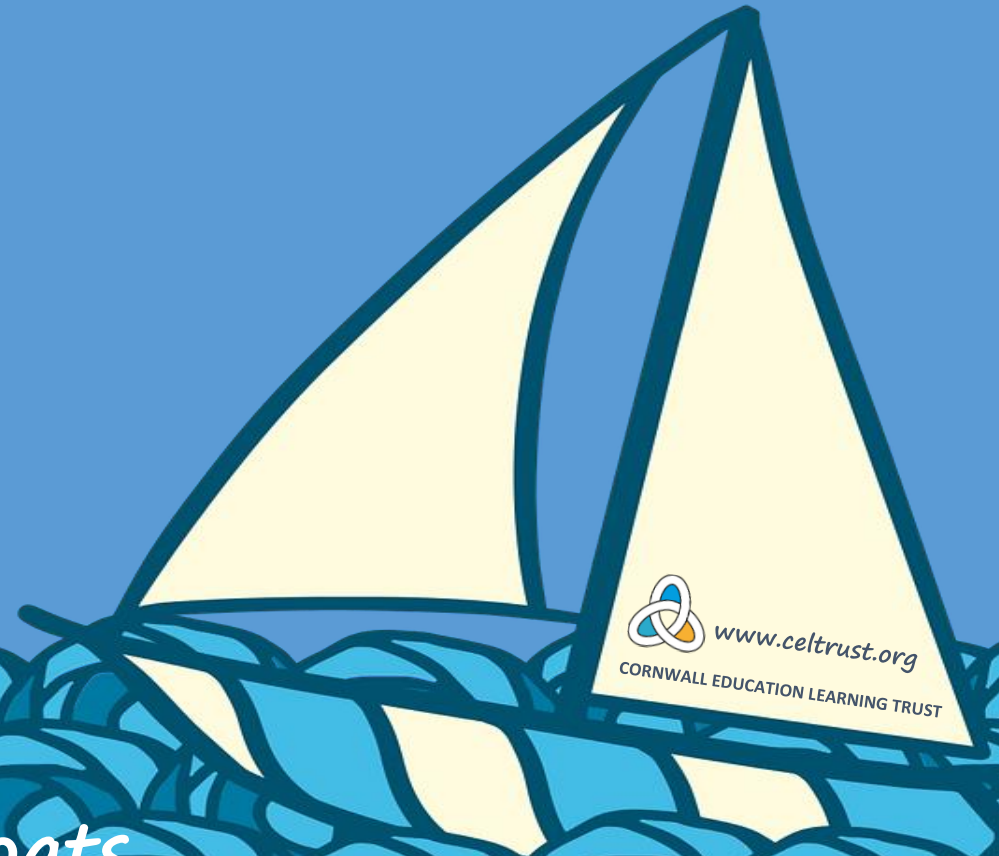
A Rising Tide Lifts All Boats

Vision for Learning

All learners are empowered to learn and achieve highly, developing a broad range of effective self-regulated strategies enabling them to become judicious learners.

All learners experience high quality teaching practice and learning conditions that promote independence and enhance their knowledge, skills, and the ability to communicate with confidence.

They are enabled to form positive relationships with others; to be understood; to grow in confidence and to access wider opportunities both now and in the future, which will equip them for life beyond school.

Introduction and Overview

The Learning & Teaching Toolkit is a developmental model for assisting CELT schools to identify, design, implement and evaluate teaching practices that expand the learner abilities of our pupils.

CELT school leaders have been working together and with the University of Bolton's International Centre for Educational Enhancement (ICEE) to develop a Learning & Teaching Toolkit. We have been identifying the high levels of professional practices that have a clear impact on pupils' learning and, through this process, we have created a 'common language' of what great learning and teaching looks like in our schools.

As a Trust we have identified Theories of Action drawn from instructional rounds conducted in several CELT schools. The instructional rounds have engaged teachers positively and it is important to keep this collaborative and supportive approach as we develop our use of the Toolkit.

A number of the Theories of Action are school-focused, and some are teacher-focused. It is for each school to build the relevant tactics and practices for their context. In line with the CELT Vision for Learning, a school may choose to identify several principles to invest in developing and supporting.

This toolkit is...	This toolkit is NOT...
☑ Embedded in the CELT vision for learning, practice principals and cycles of practice	☒ A stand-alone resource
☑ Focused on teacher practice as the main contributor to improved student learning outcomes	☒ A recipe for solving all challenges in learning and teaching
☑ Improvement-focussed to assist teachers with their professional learning, including designing their own professional development goals	☒ A tool for judging teacher/school performance
☑ Adaptive and can be modified to fit individual school contexts	☒ A prescriptive model
☑ Flexible, so teachers can focus in and out of different practice principles, depending on the context of their schools, and their individual context	☒ A linear model
☑ Evolving and will be expanded through the showcasing of best practice across CELT schools	☒ A static model

School Theories of Action

Five school-level Theories of Action have been drawn from instructional rounds conducted in CELT schools. We have found that we see real impact on pupils when we see these operating consistently at a school level. For each of these Theories of Action a rubric has been created so that teachers can have ambition and clarity about how to improve practice.

High Expectations and Authentic Relationships

WHEN THE SCHOOL and all the adults generate an inclusive culture that is values driven, based on mutual respect, trust and listening, and with a relentless pursuit of high expectations, (e.g. conduct, quality of work and ability to contribute),

THEN STUDENTS feel treated and recognised as individuals, then they are more confident, ambitious, secure in taking risks and able to challenge themselves to be powerful.

Instructional Leadership

WHEN THE SCHOOL leadership establish real clarity as to how the school can translate its moral purpose into a consistent language for teaching and learning and effective practice within the framework of a visible well-structured, interleaved and sequenced curriculum,

THEN STUDENTS understand the clear requirements and the expectations for their powerful and aspirational learning and the behaviours they need to develop.

Consistent Learning Strategies

WHEN THE SCHOOL and its adults develop clear routines and expectations for learning and help students explore a range of strategies and giving them space to explore and think to develop meaning,

THEN STUDENTS become more successful, self-regulated and aspirational learners developing a range of metacognitive strategies and having a higher rate of engagement and participation.

Consistent Teaching Protocols

WHEN THE SCHOOL develops and articulates a teaching framework and develops a repertoire of strategies, e.g., technical vocabulary, modelling, cognitive load, interleaving,

THEN STUDENTS' engagement and behaviour are enhanced, and they feel secure about the expectations of them.

Enquiry Focused Curriculum

WHEN THE SCHOOL and teachers promote a knowledge rich sequential, progressive but enquiry focused curriculum,

THEN STUDENTS will become more engaged and curious and develop deeper learning, are more independent and skilful.

Teacher-Focused Theories of Action

Seven teacher-focused Theories of Action have been identified. The process of instructional rounds is about appreciating the elements in schools and trusts that lead to powerful learning, and then articulating the strategies to be used and how these can then be adopted consistently across the school in all classrooms.

Harness Narrative and Intention

WHEN TEACHERS clearly outline the learning intentions and lesson narrative, scaffolding a set of success criteria that make the highest of expectations visible,

THEN STUDENTS can see what they can do to achieve the highest quality and they can critique their work and take self-regulated steps to improve

Scaffolding and Modelling

WHEN TEACHERS consistently use a well-structured and scaffolded approach to building knowledge (e.g., 'I do, we do, you do') emphasising and increasing the student ownership element,

THEN STUDENTS feel more confident in their learning, are clearer and increasingly secure about the learning steps, can engage and participate more and make more progress.

Higher Order Questioning

WHEN TEACHERS skilfully employ a range of questioning techniques that are differentiated address misconceptions and are democratic, sympathetic, and probing,

THEN STUDENTS are increasing engaged, develop deeper understanding and a more purposeful and learning culture is engendered.

Collaborative Learning

WHEN TEACHERS consistently and systematically use a range of collaborative approaches or group structures (e.g., Kagan) as part of the repertoire of their teaching strategies,

THEN STUDENTS' skills in enquiry and collaboration are increased, they increasingly trust one another, take risks, and extend their understanding through a peer reciprocal approach to learning.

Technical Vocabulary

WHEN TEACHERS clearly and consistently use technical vocabulary terminology and precise language, explaining clearly in order to reinforce definitions and understanding.

THEN STUDENTS have a clearer understanding of concepts, develop skills more rapidly, communicate in a more precise manner quickly preparing them for the next steps in learning and more able to articulate more complex ideas.

Assessment of Learning

WHEN TEACHERS use a variety of assessment for learning strategies including peer assessment and critique, provide rapid purposeful, personal, and process-driven feedback and appropriate praise, to inform them of the depth of understanding,

THEN STUDENTS see any mistakes or omissions as learning, become increasing independent and confident about their next steps and accelerate progress as powerful curious collaborative learners.

Differentiation of Tasks

WHEN TEACHERS construct and scaffold tasks, so they are within students' zone of proximal development, so they are clearly defined, purposeful yet challenging,

THEN STUDENTS will become increasingly involved and independent in their learning and experience more powerful and precise progress.

How do we make sure the Theories of Action can be used to impact on the quality of learning? They have been incorporated into the Trust's **Vision for Learning** and **5 Practice Principles**. The Vision for Learning is focused on articulating a common and consistent teaching and learning language. The five Practice Principles and associated rubrics will help form the narrative for school and Trust school improvement actions.

VISION FOR LEARNING				
All learners are empowered to learn and achieve highly, developing a broad range of effective self-regulated strategies enabling them to become judicious learners. All learners experience high quality teaching practice and learning conditions that promote independence and enhances their knowledge, skills, and the ability to communicate with confidence. They are enabled to form positive relationships with others; to be understood; to grow in confidence and to access wider opportunities both now and in the future, which will equip them for life beyond school.				

PRACTICE PRINCIPLES					
	Building Knowledge & Skills…	**Facilitating Feedback & Progress…**	**Developing Confidence in Communication…**	**Promoting a Learning Culture…**	**Enabling 'Thinking hard'…**
When:	*Curricula are skilfully designed, knowledge-rich, ambitious, well-sequenced, skills-focused, and cultural capital is explicitly embedded.*	*Assessment is purposefully sequenced, feedback is timely, tasks are clearly defined, differentiated, and challenging.*	*Effective communication skills (in all forms, inc verbal & written) are identified, named, modelled, explicitly taught, expected, valued, analysed, discussed, and shared.*	*High expectations, consistent learning and teaching protocols, and enriching learning environments underpin the classroom culture.*	*Skilfully employ a range of questioning and techniques that are personalised, address misconceptions and are democratic, sympathetic and probing.*
Then:	*Learners can acquire, apply, and make authentic links between, knowledge and skills, improving fluency and progress over time.*	*Learners will use precise and purposeful feedback to identify gaps in learning; they will be empowered to make judicious learning choices and progress will accelerate.*	*Learners are empowered with the skills and confidence to express their own ideas, thoughts, opinions, and beliefs (and those of others) confidently and with clarity.*	*Learners are engaged fully, enthused, and curious about the curriculum, they feel safe, confident and are motivated to challenge themselves and take risks, and achieve highly.*	*Learners will build agency and ownership of their learning, will be committed and have a range of strategies to draw upon to set and achieve goals.*
Description:	Ensure clarity of curriculum narrative and direct instruction: Teachers plan and deliver knowledge-rich lessons, sequential and progressive and enquiry focused curricula, within and between schemes, years and key stages, to ensure that pupils can build on prior learning over time. The learning narrative should be 'visible' and the knowledge, skills and success criteria are explicitly specified. Teachers will share the purpose of the lesson and explain where in the learning narrative today's learning sits: what will happen in the lesson; making clear links between prior and future learning. The knowledge and skills and key concepts being learnt should be explicitly communicated, interleaved, and revisited. Learners understand the rationale and clear requirements of the tasks and are able to build upon and apply their knowledge and skills in new contexts. Learners are supported to understand and remember more, improve fluency, accumulate cultural capital and deepen progress.	Design purposeful assessment and implement responsive feedback to feed forward Teachers use all forms of assessment to provide appropriate, challenging, and specific goals for all learners and will assist learners to reach these through effective feedback. Feedback is based on success criteria that has been carefully constructed. Teachers facilitate peer to peer, learner to teacher, teacher to learner and self-reflection. Feedback and dialogue is of a consistently high quality and reflection time is prioritised. The teacher focuses on mastery, modelling and skill development as incremental and subject specific. The teacher elicits information from learners to inform lesson planning, next steps and can be flexible to meet the needs of the learner. Learners act upon the advice given, enabling a chronology of learning. Learners begin to be motivated by their own achievement. Learners know what they can do to achieve the highest quality and can critique their work and can take self-regulated steps to improve. Learners are confident about their next steps and progress is accelerated.	Enable students to communicate with confidence Teachers explicitly identify and model effective skills in all forms of communication, using deliberate and ambitious rhetoric. This should include the spoken word, written word, numerical data, art (in all forms) and the use of technology, so that pupils can communicate with clarity. Teachers provide broad and diverse opportunities for the use of communication within the classroom, as a tool for learning and sharing learning, so that pupils have opportunities to value, practise and refine their communication skills appropriately for different audiences and purposes. Teachers will encourage learners to learn how to use all forms of communication to reason, reflect, enquire and explain their thinking to others using disciplinary and technical vocabulary. Learners are able to identifying and use communication as a tool to build and repair social relationships, self-esteem and learning-power, so that they are empowered to be confident communicators with positive relationships, able to express their ideas, thoughts, feelings, needs and be understood. They are able to challenge and question the world around them.	Maximising engagement and curiosity through the learning environment Teachers have consistently high expectations and embed authentic relationships at the heart of the classroom learning culture, through highly engaging and well-structured learning activities, which are effectively sequenced. Teachers know their learners well and engage them in building supportive, inclusive, and stimulating learning environments, which motivate them to manage their own learning and develop independence. Teachers skilfully and clearly explain learning, tasks, and content so every child understands and engages. Teachers consistently adopt clear learning and teaching protocols, promoting respectful learning interactions, which enhance the learner's capacity to feel valued, take risks, and develop confidence and learning skills. The learning tasks are inclusive and personalised, ensuring all learners feel safe and are willing to take risks. Learners are engaged and curious about the curriculum through a rich variety of learning tasks, and ultimately are responsible for and proud of their learning community.	Encourage self-regulated learners who think hard Teachers expertly craft learning tasks which are purposefully designed to promote independence and encourage pupils to think hard and develop agency. Teachers present themselves as expert learners, encouraging all learners to think hard, through high order questioning, effective modelling and collaboration. Teachers model risk taking and resilience, creating inquisitive and curious learners, willing to grapple with challenging concepts. Teachers will facilitate the development of quality independent learning by providing sufficient and appropriate challenge and set their own learning goals, be reflective and hold themselves to account. Learners can explicitly link personal learning goals to curriculum outcomes and teachers facilitate the development of quality independent learning. Learners believe that they are 'teacher number one', in control and responsible for their own learning journey.

Rubric for Practice Principle 1
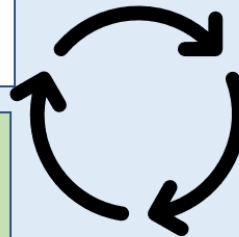# Building Knowledge and Skills

COMMENCING

- ❑ Most lesson plans clearly identify a learning narrative and success criteria.
- ❑ Success criteria are shared with learners when the lessons commence and are referred to at times during the lesson.
- ❑ To engage and enthuse learners the teacher uses a range of strategies that are mostly constructed to help learners achieve their success criteria.
- ❑ Lesson structure and pace is usually good though learners are occasionally unclear of the purpose and become off task.
- ❑ The teacher tracks individuals learning against the success criteria and sometimes gives feedback about progress and misconceptions.
- ❑ Usually, learners can monitor their progress and thinking against success criteria, though sometimes there is a lack of clarity about the lesson narrative, learning intentions, or connections to the key concepts.

DEVELOPING

- ❑ Learning intentions are mostly crafted so the lesson prepares learners to demonstrate their understanding of the key concepts and success criteria.
- ❑ The learning narrative, learning intentions and success criteria are coherent and links the series of lessons together.
- ❑ Structure and control of pace is good and there is little deviation from the lesson narrative.
- ❑ Teacher uses a range of strategies that engage and enthuse learners and activities align with learning intentions, are deployed at the correct time to drive progress.
- ❑ Teachers provide regular feedback that is personalised, enhances progress and learners are clear about where they are in relation to the learning intentions and success criteria.

TRANSFORMING

- ❑ Every lesson is coherently linked to the key concepts and prepares the learner for mastery.
- ❑ Clear learning intentions and success criteria means all learners know where they are going, how to monitor their progress and are curious about the next steps.
- ❑ The lesson narrative assists all leaners to know what they are learning to do and why.
- ❑ Feedback is used to make real-time changes in teaching, to check misconceptions and to fill gaps in understanding.
- ❑ Learners know and understand the key concepts, they identify the gaps in their thinking and decide how to plug those gaps and deepen their understanding further.
- ❑ Learners are able to apply their knowledge and skills in new contexts allowing them to remember more, improve fluency, accumulate cultural capital and deepen progress.

EMBEDDING

- ❑ Every aspect of the lesson is connected to the learning intentions and key concepts.
- ❑ The narrative is maintained because the sequence of lessons prepares learners for what comes next and connects prior learning and success criteria.
- ❑ Explicit learning intentions are explained and discussed making the learning visible, so they largely self-regulate with little deviation from the intentions.
- ❑ Structure and control of pace keeps the learning focused, and the range of tempo ensures engagement and challenge for all learners.
- ❑ Learning is enhanced by chunking the lesson into manageable and connected phases, with the teacher checking understanding at the end of each chunk, prior to moving the learning on.

Rubric for Practice Principle 2
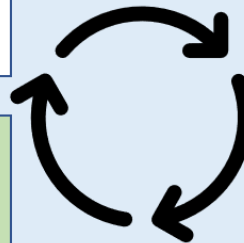## Facilitating Feedback and Progress

COMMENCING

- ❑ Teachers are able to use AfL strategies to illicit evidence on learners understanding and skills.
- ❑ Teachers are able to use evidence gathered through feedback to assist lesson planning and delivery.
- ❑ Teachers tend to adhere closely to the lesson plans rather than responding to learner feedback
- ❑ Teachers are able to partially define success so that learners are beginning to grasp where they are on their learning journey.
- ❑ Teacher clarity does not always lead to learners understanding the link between tasks, the learning intentions and key concepts.

DEVELOPING

- ❑ Teachers clearly describes what success criteria looks like, with each learning activity or task.
- ❑ Teachers often use AfL strategies to illicit clear evidence of learners understanding and skills.
- ❑ Teachers often use evidence gathered through feedback to assist lesson planning and delivery, leading to most learners making some progress.
- ❑ Teachers use a variety of AfL strategies, which leads to most learners understanding the links between tasks, learning intentions and key concepts.
- ❑ Teachers provide supported opportunities for peer review and critique
- ❑ Learners are partially able to define success and can articulate where they are on the learning journey, and identify some next steps.

TRANSFORMING

- ❑ Teachers ensure that all learners have multiple opportunities for drafting and re-drafting their constructed responses.
- ❑ Teachers focuses on mastery, modelling and skill development as incremental and subject specific.
- ❑ Learners actively maintain a classroom ethos in which they are a resource for one another.
- ❑ Learners can explain where they are going, describe their current performance and what they need to do to make rapid progress.
- ❑ Learners know how to review one another's work and how to construct appropriate helpful feedback.
- ❑ Learners share an detailed understanding of the success criteria and constantly review their progress against them.
- ❑ Learners act upon advice given, enabling a chronology of learning and are motivated by their own learning and progress is accelerated.

EMBEDDING

- ❑ Teacher actively cultivates a classroom ethos in which learners are an active resource for one another.
- ❑ Learners are familiar with their role as peer reviewers and welcome critique.
- ❑ Before moving on teachers consistently illicit feedback to ensure that understanding is consolidated.
- ❑ Teacher feedback and dialogue is of a consistently high quality and reflection time is prioritised.
- ❑ Teacher uses feedback from learners to enhance lesson planning and alter in real-time.
- ❑ All learners know where they are going and what they need to do to keep making progress.
- ❑ All learners set short-term goals to achieve success criteria linked to key concepts

Rubric for Practice Principle 3
Developing Confidence in Communication

COMMENCING

- ❑ Teachers occasionally use effective communication skills in all forms of communication including written & verbal, using a range of accessible vocabulary.
- ❑ Teachers use some techniques that encourage some learners to use all forms of communication, to explain their thinking.
- ❑ Teachers provide opportunities for learners to develop their oracy, literacy and written communication.
- ❑ Learners have the opportunities to practice their communication skills.

DEVELOPING

- ❑ Teachers can identify and model effective skills in all forms of communication, using accessible vocabulary.
- ❑ Teachers use some techniques that encourage most learners to use all forms of communication, to reason, reflect, enquire and explain their thinking.
- ❑ Teachers provide pertinent opportunities for learners to develop their oracy, literacy and written communication.
- ❑ Learners have the opportunity to practice their communication skills, appropriate for different audiences and purposes.

TRANSFORMING

- ❑ Learners can effectively identify and model effective skills in all forms of communication.
- ❑ Learners confidently use all forms of communication, to reason, reflect, enquire and explain their thinking, using disciplinary and technical vocabulary.
- ❑ Learners have the opportunity to value, refine and practice their communication skills, appropriate for different audiences and purposes.
- ❑ Learners are confident communicators and able to challenge and question the world around them, using and defining disciplinary vocabulary, whilst expressing their ideas with empathy.

EMBEDDING

- ❑ Teachers explicitly identify and model effective skills in all forms of communication, using deliberate and ambitious rhetoric.
- ❑ Teachers use a variety of techniques that encourage all learners to use all forms of communication, to reason, reflect, enquire and explain their thinking, using disciplinary and technical vocabulary.
- ❑ Teachers provide an effective range of opportunities for learners to develop their oracy, literacy and written communication.
- ❑ Learners have the opportunity to value, refine and practice their communication skills, appropriate for different audiences and purposes.

Rubric for Practice Principle 4
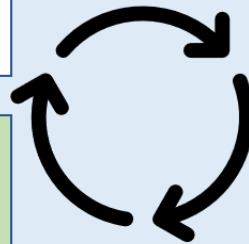## Promoting a Learning Culture

COMMENCING

- ❑ Teacher is working towards creating an effective use of group structures for learners to address challenging tasks and learning intentions.
- ❑ Teacher plans a range of collaborative approaches and group structures that encourage participation and discussion by most learners.
- ❑ Teachers at times use a range of collaborative techniques and set clear expectations for engagement and participation.
- ❑ Teachers increasingly know the individuals and construct groupings according to their knowledge of them as individual learners
- ❑ Learners are encouraged to listen to the views of others, to enhance their understanding.

DEVELOPING

- ❑ Teacher typically has a coherent plan that matches collaborative group work with the learning intentions.
- ❑ Teachers structure group work and tasks requiring learners to explain their thinking and communicate their resolutions to the problem.
- ❑ Teachers commonly plan activities that ensure all learners work together so that all learners actively participate.
- ❑ Teacher effectively plan the nature of groups so that it promotes respectful learning interactions, enhancing the learners capacity to engage and take risks.

TRANSFORMING

- ❑ Teacher and learners co-construct the learning tasks enhancing the effectiveness of the learning intentions.
- ❑ Teacher uses collaborative structures as a tool that enables learners to develop more sophisticated levels of thinking, once they have collected and interpreted the data needed to solve tasks.
- ❑ Learners are clear about the learning narrative and are able to select the most effective strategies to explore the key concepts.
- ❑ Learners are motivated and are prepared to share their ideas for critique and discussion, enhancing the learning for all.
- ❑ Learners take responsibility for the learning activities and reflect on the effectiveness of the group and are able to coach and support peers to enhance progress for all.

EMBEDDING

- ❑ Teacher plans effectively so that group structures enable all learners to make rapid progress in their understanding.
- ❑ Teacher creates a context to learning that supports diverse learning abilities on the activity.
- ❑ Collaborative approaches are used at the right time in the learning narrative to build on prior learning and prepare learners for the next steps.
- ❑ Teacher uses cooperative group work to enable learners dialogue and discussion, incorporating everyday and disciplinary language.
- ❑ Learners skilfully adopt a variety of roles enabling them to enhance cooperation and deepen the learning of all.
- ❑ Learners take responsibility for the learning activities and reflect on the effectiveness of the group.

Rubric for Practice Principle 5
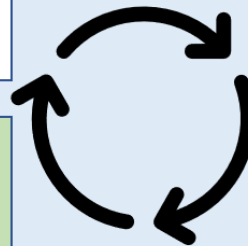## Enabling 'Thinking Hard' through Higher Order Questioning

COMMENCING

- ❑ Teacher questions are low order, relating to task compliance, knowledge acquisition, and comprehension.
- ❑ Some questions are directed at developing thinking skills and knowledge application.
- ❑ Teacher responses to learner contributions is often 'yes/no' or praise for correct answers, but not focused on effort or recognising learner strategies.
- ❑ Teacher questioning does not challenge learners, and timing does not always contribute to progress. Response and thinking time is sometimes evident.
- ❑ Learner responses occasionally inform the pace and direction of a lesson.

DEVELOPING

- ❑ Teacher questions are an equal mixture of low order/high order enabling most learners to develop their knowledge and comprehension.
- ❑ Teacher questions are mostly linked to the key concepts, learning intentions and at times lead learners towards the success criteria.
- ❑ Teacher uses effective questioning to draw out evidence of learner thinking.
- ❑ Teacher uses a variety of questioning strategies to enable most leaners to engage in the lesson.
- ❑ Learners are given opportunities to think about the questioning and encouraged to openly discuss and share their thinking process.
- ❑ Learner responses are acknowledged and validated but not always developed by the teacher.

TRANSFORMING

- ❑ Teachers precise and open questioning drives learning and develops independent learning.
- ❑ Teacher poses key concept questions that require learners to apply their knowledge and to think in complex ways.
- ❑ Teachers skilfully employ a range of questioning techniques that address misconceptions and are democratic, sympathetic and probing.
- ❑ Questions are explicitly focused on learning intentions and deeper understanding of the learning narrative.
- ❑ Learners are encouraged to be inquisitive, take risks, share ideas and grapple with challenging concepts.
- ❑ Learner questions directly influence the lessons direction and pace.

EMBEDDING

- ❑ Teacher consistently uses a range of strategies to ensure learners demonstrate thinking skills in their responses.
- ❑ Teacher is able to adapt the direction of the lesson by utilising learner responses and questions.
- ❑ Teacher consistently uses high order questions to identify and address misconceptions and gaps in understanding.
- ❑ Teachers utilises questioning techniques to determine how ready learners are to move more deeply into an idea and to judge the pace of escalation and the level of complexity.
- ❑ All learners are encouraged to respond to questions, collaboratively developing responses, analysis and explanations.

Putting it all Together

In order to achieve our CELT Vision for Learning, instructional leaders should be able to identify teaching practices for each Theory of Action that could lead to successful and powerful learning. For example, a school focusing on the Collaborative Learning Theory of Action could find a repertoire of tools and techniques from a range of sources - such as Kagan, or from the work that David Hopkins developed in his *Powerful Learning and Curiosity* work. The success rubrics for the Practice Principles should also be used to provide clarity on how to improve practice. The sequence for putting it all together is illustrated below:

Theory of Action

Collaborative Learning

When teachers consistently and systematically use a range of collaborative approaches or group structures (e.g., Kagan) as part of the repertoire of their teaching strategies,

then students' skills in enquiry and collaboration are increased, they increasingly trust one another, take risks, and extend their understanding through a peer reciprocal approach to learning.

ELABORATION

Working in cooperative groups is a powerful way to raise learning achievement. It develops social and academic skills by encouraging collaborative behaviour and active participation in learning.

Cooperative group work is a flexible teaching strategy. It integrates into one powerful teaching tool a range of methods: individual research, collaborative inquiry, and plenary activities. It is commonly used in Direct Instruction and many other teaching models, both as part of teacher instruction and for structuring group activities. We can also use cooperative groups to structure a whole lesson or a series of lessons.

Cooperative group work requires our students to practice and refine negotiating, organising, and communication skills. It asks them to define issues and problems. It asks them to develop ways of solving problems, including collecting and interpreting evidence, hypothesising, testing, and re-evaluating.

SPECIFICATION

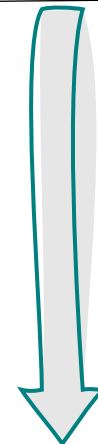We apply five principles when using cooperative group work.

Positive interdependence	For the group to succeed, all students in the group must succeed
Individual accountability	Every group member is responsible for demonstrating accomplishment of the learning
Face-to-face interaction	Continued progress is promoted through group members being in close proximity, and entering into dialogue with each other
Developing social skills	Cooperative group work enhances communication, trust, leadership, decision making, and conflict management
Processing	Group members assess their collaborative efforts and set shared targets

EFFECT SIZE

0.58 -0.70 Effect size for cooperative learning in comparison to competitive and individualistic learning ranges from 0.58 to 0.70.
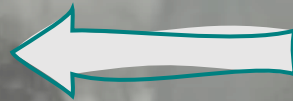– Johnson and Johnson, 2002.

+5 mths ★★★★ $ Collaborative or cooperative learning appears to work well for all ages if activities are suitably structured for learners' capabilities. Positive evidence has been found across the curriculum.
– Education Endowment Fund *Toolkit*, 2014

Identify tools, techniques, and potential impact

Apply Practice Principles (Success Rubric)

Agree protocols defining teaching and learning

COMMENCING

- ❑ Teacher questions are low order, relating to task compliance, knowledge acquisition, and comprehension.
- ❑ Some questions are directed at developing thinking skills and knowledge application.
- ❑ Teacher responses to learner contributions is often 'yes/no' or praise for correct answers, but not focused on effort or recognising learner strategies.
- ❑ Teacher questioning does not challenge learners, and timing does not always contribute to progress. Response and thinking time is sometimes evident.
- ❑ Learner responses occasionally inform the pace and direction of a lesson.

TRANSFORMING

- ❑ Teachers precise and open questioning drives learning and develops independent learning.
- ❑ Teacher poses key concept questions that require learners to apply their knowledge and to think in complex ways.
- ❑ Teachers skilfully employ a range of questioning techniques that address misconceptions and are democratic, sympathetic and probing.
- ❑ Questions are explicitly focused on learning intentions and deeper understanding of the learning narrative.
- ❑ Learners are encouraged to be inquisitive, take risks, share ideas and grapple with challenging concepts.
- ❑ Learner questions directly influence the lessons direction and pace.

DEVELOPING

- ❑ Teacher questions are an equal mixture of low order/high order enabling most learners to develop their knowledge and comprehension.
- ❑ Teacher questions are mostly linked to the key concepts, learning intentions and at times lead learners towards the success criteria.
- ❑ Teacher uses effective questioning to draw out evidence of learner thinking.
- ❑ Teacher uses a variety of questioning strategies to enable most learners to engage in the lesson.
- ❑ Learners are given opportunities to think about the questioning and encouraged to openly discuss and share their thinking process.
- ❑ Learner responses are acknowledged and validated but not always developed by the teacher.

EMBEDDING

- ❑ Teacher consistently uses a range of strategies to ensure learners demonstrate thinking skills in their responses.
- ❑ Teacher is able to adapt the direction of the lesson by utilising learner responses and questions.
- ❑ Teacher consistently uses high order questions to identify and address misconceptions and gaps in understanding.
- ❑ Teachers utilises questioning techniques to determine how ready learners are to move more deeply into an idea and to judge the pace of escalation and the level of complexity.
- ❑ All learners are encouraged to respond to questions, collaboratively developing responses, analysis and explanations.

## Enabling 'Thinking Hard' through Higher Order Questioning

Achieve Vision for Learning

All learners are empowered to learn and achieve highly, developing a broad range of effective self-regulated strategies enabling them to become judicious learners.

All learners experience high quality teaching practice and learning conditions that promote independence and enhance their knowledge, skills, and the ability to communicate with confidence.

They are enabled to form positive relationships with others; to be understood; to grow in confidence and to access wider opportunities both now and in the future, which will equip them for life beyond school.

Collaborate C Empower E Lead L Transform T
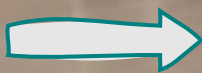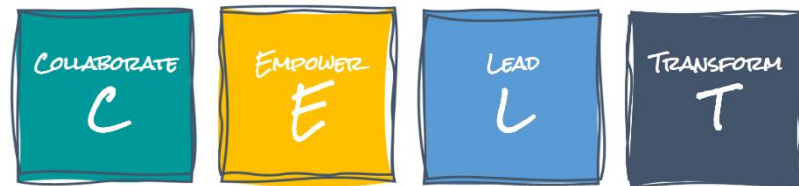
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